

FINAL

RECORD OF DECISION (ROD)

INSTALLATION RESTORATION SITE 7 OPERABLE UNIT 3 FORMER LONG BEACH NAVAL COMPLEX Long Beach, California

September 2007

Prepared for:

Base Realignment and Closure Program Management Office West San Diego, California

Prepared under:

Naval Facilities Engineering Command Contract Number N68711-00-D-0004 Delivery Order Number 0087 DCN: CDM-0004-0087-0111

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ACRONYMS/ABBREVIATIONS

Agencies/Trustees AOEC ARAR	group of regulatory agencies and national resources trustees area of ecological concern applicable or relevant and appropriate requirement
Basin Plan BRAC	Water Quality Control Plan, Los Angeles Region Base Realignment and Closure
Cal. Civ. Code	California Civil Code
Cal. Code Regs.	California Code of Regulations
Cal/EPA	California Environmental Protection Agency
Cal. Fish & Game Code	California Fish and Game Code
Cal. Health & Safety Code	California Health and Safety Code
Cal. Pub. Res. Code	California Public Resources Code
Cal. Water Code	California Water Code
CDFG	California Department of Fish and Game
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
C.F.R.	Code of Federal Regulations
ch.	chapter
City	City of Long Beach
COEC	chemical of ecological concern
CRP	Community Relations Plan
CTR	California Toxics Rule
CWA	Clean Water Act
су	cubic yard
CZMA	Coastal Zone Management Act
DDT	dichlorodiphenyltrichloroethane
DHS	(California) Department of Health Services
div.	division
DON	Department of the Navy
DTSC	(Cal/EPA) Department of Toxic Substances Control
ERL	effects-range low
Fed. Reg.	Federal Register
FFSRA	Federal Facility Site Remediation Agreement
FS	feasibility study
ft/s	foot per second
HQ	hazard quotient
IAS	initial assessment study
IC	institutional control

IR IWS	Installation Restoration industrial waste study
LA/LB	Los Angeles and Long Beach
LBNC	Long Beach Naval Complex
LBNSY	Long Beach Naval Shipyard
MLLW	mean lower low water
µg/kg	microgram per kilogram
NAVFAC Southwest	Nevel Essilities Engineering Command Southwest
NAVFAC Southwest NAVSTA	Naval Facilities Engineering Command Southwest Naval Station
NCP	
INCE	National Oil and Hazardous Substances Pollution Contingency Plan
NFA	no further action
NOAA	National Oceanic and Atmospheric Administration
NPL	National Priorities List
NTR	National Toxics Rule
NTU	nephelometric turbidity unit
ОЕННА	(California) Office of Environmental Health Hazard Assessment
O&M	operation and maintenance
OU	operable unit
РА	preliminary assessment
РАН	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
POLB	Port of Long Beach
PPE	personal protective equipment
RAB	Restoration Advisory Board
RAO	remedial action objective
RAP	remedial action plan
RCRA	Resource Conservation and Recovery Act
Res.	resolution
RFA	RCRA Facility Assessment
RI	remedial investigation
ROD	record of decision
RWQCB	(California) Regional Water Quality Control Board
ş	section
\$ \$\$	sections
SARA	Superfund Amendments and Reauthorization Act

Acronyms/Abbreviations

SI	site inspection
SMO	sediment management objective
SSHP	site-specific safety and health plan
SWMU	solid waste management unit
SWRCB	(California) State Water Resources Control Board
tit.	title
TOC	total organic carbon
TRC	Technical Review Committee
UIC	Unit Identification Code
USACE	United States Army Corps of Engineers
U.S.C.	<i>United States Code</i>
U.S. EPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
Water Board WDR WQCP WQO	California Regional Water Quality Control Board, Los Angeles Region waste discharge requirement water quality control plan water quality objective

Acronyms/Abbreviations

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DECLARATION

SITE NAME AND LOCATION

This Record of Decision (ROD) addresses the chemically impacted sediments of Installation Restoration (IR) Site 7, designated as Operable Unit (OU) 3, located at the former Long Beach Naval Complex (LBNC), in Long Beach, Los Angeles County, California.

IR Site 7 comprises the West Basin of Long Beach Harbor. The former LBNC consists of the former Long Beach Naval Shipyard (LBNSY) and the former Naval Station (NAVSTA) Long Beach.

The Department of the Navy (DON) Unit Identification Code (UIC) for the former LBNC is N68311. The United States Environmental Protection Agency (U.S. EPA) identification number for this facility, during the time of its operation, was CA6170023109 (BEI 2003).

STATEMENT OF BASIS AND PURPOSE

This ROD presents the remedies selected to address potential risks posed by chemically impacted sediments at IR Site 7. The remedies were selected based on evaluations of physical, chemical, and biological data at areas of ecological concern (AOECs) identified within IR Site 7. These remedies were selected 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* [U.S.C.] Section (§) 9601 *et seq.*), and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 *Code of Federal Regulations* (C.F.R.) Part 300 *et seq.* IR Site 7 is not on the U.S. EPA's National Priorities List.

Decisions for the IR Site 7 AOECs were based on information contained in the Administrative Record. The Administrative Record Index for IR Site 7 is provided as Attachment A to this ROD.

The remedial responses documented in this decision document for IR Site 7 will be implemented by the Port of Long Beach (POLB) with the exception of the submerged lands beneath Pier 12. Pier 12 and the submerged lands beneath Pier 12 will remain part of an active military facility; the DON will implement the remedial response actions for the submerged lands beneath Pier 12.

ASSESSMENT OF THE SITE

IR Site 7 was assessed based on the results of several investigations, which included a remedial investigation (RI) (BNI 1997) and a feasibility study (FS) (BEI 2003). During these investigations, the physical, chemical, and biological characteristics at IR Site 7 were evaluated. The medium of interest was identified as the chemically impacted sediments. Metals, polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and pesticides (e.g., dichlorodiphenyltrichloroethane [DDT]) were identified as the chemically of ecological concern (COECs) within the chemically

impacted sediments. The potential receptor of these COECs is the benthic community. In addition, the evaluations indicated variable conditions across IR Site 7 that may require different remedial alternatives to address site contaminants. To account for the variable conditions, seven AOECs (A, B, C, D, E, F, and G) were designated within IR Site 7.

AOEC A comprises the chemically impacted sediments located between existing Pier E and former Pier 1. At AOEC A, elevated concentrations of chemical compounds, but no sediment toxicity and no adverse benthic community effects, were reported for the surface sediments. Elevated concentrations of chemical compounds were reported for subsurface sediments. It was considered that these subsurface sediments, if released or exposed to the environment, represented a probable exposure of the benthic community to unacceptable levels of chemical concentrations. The depth of ecological concern for AOEC A was estimated to extend to about 4.3 feet below the mudline.

AOEC B comprises non-pier sediments located between former Pier 9 and existing Pier 10. Elevated concentrations of chemical compounds, but no sediment toxicity and no adverse benthic community effects, were reported for surface sediments. No elevated concentrations of chemical compounds, no sediment toxicity, and no adverse benthic community effects were reported for subsurface sediments.

AOEC C comprises the chemically impacted sediments located between existing Pier 10 and existing Pier 15. At AOEC C, elevated concentrations of chemical compounds, sediment toxicity, and adverse benthic community effects were reported for surface sediments. No elevated concentrations of chemical compounds, no sediment toxicity, and no adverse benthic community effects were reported for subsurface sediments. The depth of ecological concern for AOEC C was estimated to extend to about 1.3 feet below the mudline.

AOEC D comprises non-pier sediments located in the area offshore of the tip of the Navy Mole, in the entrance to IR Site 7, and essentially in the Long Beach Shipping Channel. The sediments of AOEC D were found to represent low ecological risk. Concentrations of chemical compounds in the sediments were generally low. Sediment toxicity was not indicated to be an issue. No adverse benthic community effects were apparent. Sediment accumulation in the general area of AOEC D is expected to be minimal as there are no significant sources of sediment discharge into this area. Routine port activities were considered likely to continue contributing to ecological disturbance of this area.

AOEC E comprises the chemically impacted sediments located beneath existing Pier 12 (Fuel Pier), i.e., the submerged lands beneath Pier 12. Elevated concentrations of chemical compounds and sediment toxicity, but no adverse benthic community effects, were reported for these beneath-pier surface sediments. It was considered that the chemically impacted subsurface sediments located beneath Pier 12 would represent potential ecological risk if these sediments were to be disturbed and the benthic community was exposed to them. The chemically impacted sediments beneath Pier 12 could extend to about 9 feet below the mudline beneath Pier 12. Pier 12 is still in use; fuel delivery ships

dock here regularly and discharge various types of fuel. A buried pipeline system continues to deliver fuel from Pier 12 to the Defense Fuel Support Point in San Pedro.

AOEC F comprises the chemically impacted sediments located beneath existing Pier 15, i.e., the submerged lands beneath Pier 15. Elevated concentrations of chemical compounds, but no sediment toxicity and no adverse benthic community effects, were reported for these beneath-pier surface sediments. It was considered that the chemically impacted subsurface sediments located beneath Pier 15 would represent potential ecological risk if these sediments were to be disturbed and the benthic community was exposed to them. The chemically impacted sediments beneath Pier 15 could extend to about 9 feet below the mudline beneath the pier, which is currently in use by tenants of the POLB.

AOEC G comprises the chemically impacted sediments located beneath existing Pier 16, i.e., the submerged lands beneath Pier 16. Elevated concentrations of chemical compounds and some sediment toxicity, but no adverse benthic community effects, were reported for these beneath-pier surface sediments. It was considered that the chemically impacted subsurface sediments located beneath Pier 16 would represent potential ecological risk if these sediments were to be disturbed and the benthic community was exposed to them. The chemically impacted sediments beneath Pier 16 could extend to about 9 feet below the mulline beneath the pier, which is currently in use by tenants of the POLB.

DESCRIPTIONS OF THE SELECTED REMEDIES

Remedies for the chemically impacted sediments of IR Site 7 AOECs were selected to support the presence of an ecologically productive and diverse benthic community within these AOECs. In addition, these remedies are compatible with existing and future land use (port-related and industrial) at IR Site 7. Remedies were chosen for each AOEC based on the site conditions and contaminant levels specific to each AOEC.

AOEC D received a no further action (NFA) decision prior to the completion of the Final FS based on the 1994 RI sampling results and the 1998 FS sampling results. The DON, POLB, and a group of regulatory agencies and natural resources trustees (Agencies/Trustees) agreed to the NFA decision because the results indicated that the sediments of AOEC D pose very little ecological risk. AOEC D was briefly discussed in the FS (BEI 2003) and Proposed Plan (DON 2006) but was not evaluated further in those documents.

AOEC A and AOEC C. Primary and secondary remedies were selected for AOECs A and C to provide flexibility to the POLB during remedy implementation. The primary remedy for chemically impacted sediments of AOECs A and C is removal and discharge of AOEC sediments at off-site (outside IR Site 7) projects. This primary remedy will include dredging AOEC sediments and reusing the sediments at POLB projects, thereby creating a clean substrate supporting the presence of an ecologically productive and diverse benthic community. Major components of this primary remedy are as follows:

• preparation of site-specific plans for project activities (dredging; sediment transport; sediment placement);

- sediment dredging (clamshell and/or hydraulic dredges; monitoring dredge area for turbidity; use of silt screens when warranted);
- transport of dredged sediments (pipeline and/or barge);
- placement of sediment at target project area (outside IR Site 7); and
- confirmation of successful chemically impacted sediment dredging.

The POLB or its assignees would be responsible for implementing the primary remedy at AOECs A and C.

In addition to the above-mentioned primary remedy, the DON has identified a secondary remedy for AOECs A and C. This secondary remedy was added to provide the POLB, representing the City of Long Beach (City), with flexibility in implementation of this ROD. It provides an alternate remedial option in case the primary remedy at AOECs A and C is not implementable because appropriate POLB projects are not available. The secondary remedy was selected in accordance with the same regulatory basis under which the primary remedy for AOECs A and C was selected. The secondary remedy for chemically impacted sediments of AOECs A and C is removal and on-site (inside IR Site 7) containment of AOEC sediments with discharge of dredged sediments inside the Navy Mole. This secondary remedy will also create a clean substrate supporting the presence of an ecologically productive and diverse benthic community. Major components of the secondary remedy are as follows:

- preparation of site-specific plans for project activities (dredging; sediment transport; sediment placement);
- sediment dredging (clamshell and/or hydraulic dredges; monitoring dredge area for turbidity; use of silt screens when warranted);
- transport of dredged sediments (pipeline and/or barge);
- placement of sediment at the containment to be constructed for this purpose (inside IR Site 7);
- confirmation of successful chemically impacted sediment dredging; and
- implementation of ICs to minimize the disturbance of the containment structure and CERCLA statutory five-year reviews of the remedy for as long as the containment is in service.

The POLB or its assignees would be responsible for implementing the secondary remedy at AOECs A and C.

Both the primary and secondary remedies for AOECs A and C were evaluated against the nine NCP criteria in the FS.

AOEC B. The selected remedy for AOEC B sediments is no remedial action.

AOEC E. The selected remedy for AOEC E, the submerged lands beneath Pier 12, is limited action – institutional controls (ICs) to prevent unauthorized or uncontrolled

disturbance and/or exposure of these sediments while allowing the continued use of Pier 12. Major components of this selected remedy are as follows:

- implementation of ICs in the form of administrative mechanisms; and
- CERCLA statutory five-year reviews of the ICs remedy in perpetuity or until ICs have been released or terminated when ecological risk no longer exists.

The DON or its assignees would be responsible for implementing this selected remedy at AOEC E.

AOEC F and AOEC G. The selected remedy for AOEC F, the submerged lands beneath Pier 15, and AOEC G, the submerged lands beneath Pier 16, is limited action – ICs to prevent unauthorized or uncontrolled disturbance and/or exposure of these sediments while allowing the continued use of these piers. Major components of this selected remedy are as follows:

- (implementation of ICs in the form of legal mechanisms;
- land-use control covenants to restrict use of property (environmental restrictions) to port-related and industrial uses to be executed between the POLB, California Environmental Protection Agency (Cal/EPA)
 Department of Toxic Substances Control (DTSC), and the California
 Regional Water Quality Control Board, Los Angeles Region (Water Board), and enforced as applicable on future real property owners; and
- CERCLA statutory five-year reviews of the ICs remedy in perpetuity or until ICs have been released or terminated when ecological risk no longer exists.

The POLB or its assignees would be responsible for implementing this selected remedy at AOECs F and G.

STATUTORY DETERMINATIONS

The selected remedies, as presented in this ROD, are considered to be protective of the IR Site 7 benthic community. These remedies would be expected to achieve the remedial action objective (RAO) for IR Site 7 sediments and provide long-term effectiveness and permanence. They are easily implementable, comply with federal and state requirements that are legally applicable or relevant and appropriate to the remedial actions, are considered to be cost effective, and make use of permanent solutions to the maximum extent possible.

The remedies presented in this ROD comprise well-known, time-proven and cost effective remedial technologies that can be applied to chemically impacted marine sediments. The selected remedies, however, do not satisfy the preference to reduce toxicity, mobility, or volume. In general, concentrations of chemicals in benthic sediments at IR Site 7 are below levels at which treatment technologies are typically most efficient. In addition, the physical properties of the IR Site 7 sediments, in particular

their particle size, would have necessitated the application of one or more pre-treatment technologies before processing the sediments through treatment units. As such, the remedies presented in this ROD were preferred over treatment technologies for the sediments of IR Site 7 AOECs.

The ICs remedy selected for AOECs E, F, and G will result in chemically impacted sediments remaining beneath Piers 12, 15, and 16, respectively. Therefore, there is a potential for toxicity to the benthic community if these sediments are disturbed and the benthic community is exposed to them. CERCLA statutory five-year reviews will be required at AOECs E, F, and G to monitor whether the ICs as implemented are effective in preventing the disturbance of the beneath-pier sediments and thereby continuing to adequately protect the benthic community and achieving the RAO for IR Site 7 sediments. CERCLA five-year reviews will not be required at AOECs A, B, and C.

DATA CERTIFICATION CHECKLIST

This ROD contains the following key remedy selection information in its Decision Summary:

- biological analyses involving benthic community and toxicity bioassays;
- chemicals of ecological concern, their respective concentrations and toxicity to the benthic community;
- potential ecological risk posed by the chemicals of ecological concern, and depths of ecological concern;
- remediation strategies established for the chemicals of ecological concern;
- discussion of principal threat wastes;
- current and reasonably anticipated future land use assumptions used in the ecological risk assessments;
- estimated costs of the selected remedies; and
- key factors that led to selecting the remedies.

Declaration

AUTHORIZING SIGNATURES

For IR Site 7, except AOEC E

For the United States Department of the Navy, Long Beach Naval Complex, Long Beach, California:

Signature:

Date: <u>9-19-07</u>

John M. Hill BRAC Environmental Coordinator

For AOEC E

Signature:

J. D. Kurtz Captain, U.S. Navy Commanding Officer Date: 9-18-07

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DECISION SUMMARY

Section 1 SITE NAME, LOCATION, AND DESCRIPTION

This Record of Decision (ROD) provides an overview of Installation Restoration (IR) Site 7 characteristics, a review of remedial alternatives evaluation, presents the selected remedies for chemically impacted sediments in IR Site 7 Areas of Ecological Concern (AOECs) at the former Long Beach Naval Complex (LBNC), and explains how these remedies fulfill statutory requirements. The former LBNC comprises the former Long Beach Naval Shipyard (LBNSY) and the former Naval Station (NAVSTA) Long Beach.

This ROD presents the selected remedies for the chemically impacted sediments of IR Site 7 AOECs A, B, C, E, F, and G. These remedies were selected 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* [U.S.C.] Section (§) 9601 *et seq.*), and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 *Code of Federal Regulations* (C.F.R.) Part 300 *et seq.* The former LBNC, including IR Site 7, is not on the United States Environmental Protection Agency's (U.S. EPA's) National Priorities List (NPL).

1.1 SITE NAME

IR Site 7, which was also designated as Operable Unit (OU) 3, is the harbor once used jointly by the former LBNSY and the former NAVSTA Long Beach. IR Site 7 also comprises the West Basin of Long Beach Harbor.

The Department of the Navy (DON) Unit Identification Code (UIC) for the former LBNC is N68311. The U.S. EPA identification number for this facility, during the time of its operation, was CA6170023109 (BEI 2003).

1.2 SITE LOCATION

The former LBNC is located on the south side of Terminal Island within the Los Angeles and Long Beach (LA/LB) Harbor Districts, approximately three miles west of downtown Long Beach, Los Angeles County, California (BNI 1997).

IR Site 7 is bounded on its west and south by the Navy Mole (a part of the former NAVSTA Long Beach); on its north by the former NAVSTA Long Beach and the former LBNSY; and on its east by a ship turning basin, which is part of the Port of Long Beach (POLB) complex (Figure 1-1). The north side of IR Site 7 has been converted for use as a cargo terminal by the POLB. The east side of IR Site 7 is open to Long Beach Harbor.

1.3 LEAD AND SUPPORT AGENCIES

The lead federal agency for the CERCLA process at IR Site 7 is the DON, and the lead state regulatory agency is the California Environmental Protection Agency (Cal/EPA) Department of Toxic Substances Control (DTSC). In addition to the DON and the DTSC, a group of regulatory agencies and national resources trustees (Agencies/Trustees) participated in and contributed to the strategic planning and implementation of the overall CERCLA process at IR Site 7, and to the identification, evaluation, and selection of remedies for IR Site 7. This group also provided technical

review and oversight of environmental investigations conducted and documents developed for IR Site 7. These Agencies/Trustees include the following:

- California Regional Water Quality Control Board, Los Angeles Region (Water Board);
- U.S. EPA Region 9;
- California Department of Fish and Game (CDFG);
- National Oceanic and Atmospheric Administration (NOAA); and
- United States Fish and Wildlife Service (USFWS).

The POLB also participated in the planning and undertaking of the CERCLA process for IR Site 7 (BEI 2003).

1.4 SITE DESCRIPTION

IR Site 7 comprises approximately 700 acres, with water depths of about 45 feet (BNI 1997). During the operation of the former LBNC, NAVSTA Long Beach provided coordination and support to ships and other naval activities in the area, and LBNSY provided logistical support for assigned ships and performed work in connection with conversion, overhaul, repair, alteration, dry-docking, and outfitting of ships.

There were 11 piers at IR Site 7, five of which remain including Pier 12, the fuel pier. A small-craft marina was located along the western shoreline of IR Site 7. The piers, constructed of wooden and concrete pilings, ranged from approximately 30 to 125 feet in width and 250 to 1,200 feet in length. Ships were docked at these piers for maintenance and loading as part of the former LBNC operations (Figure 1-2).

In August 1998, title to all of the West Basin of the Long Beach Harbor (IR Site 7) reverted to the City of Long Beach (City) except the submerged lands of the upland parcel fronting the harbor (100 foot wide annulus) and submerged lands underlying then existing Piers 1, 2, 3, 6, 7, 9, 10, 11, 12, 15, and 16, all of which land remains under federal ownership (Figure 1-3).

Concurrent with the reversion of the majority of IR Site 7, the DON issued a lease to the City for properties which included, among others, the 100 foot wide annulus and submerged lands underlying then existing piers with the exception of the submerged lands underlying Pier 12.

Pier 12 and its submerged lands remain in use by the DON, under its custody and control, as an active fuel facility. Under the City's lease, the POLB demolished and removed the physical Piers 1, 2, 3, 6, 7, and 9 along the northern shoreline of IR Site 7 and constructed a new seawall and new docking facilities in this area. The POLB also widened the Navy Mole along the western shoreline of IR Site 7, and dismantled and removed the small-craft marina (BEI 2003).

Section 2 SITE HISTORY AND ENFORCEMENT ACTIVITIES

This section provides an overview of the history of IR Site 7, summarizes environmental investigative activities that have taken place at the facility, and provides an insight to the numerous environmental reports published for the site and its environs.

2.1 SITE HISTORY

In 1938, a strip of coastline along the southern portion of Terminal Island was acquired by the DON from the cities of Long Beach and Los Angeles. This land was then expanded through hydraulic fill operations conducted between 1938 and the early 1940s. A seawall was constructed along its southern shoreline in the early 1940s, and the area between the seawall and the former shoreline was filled with dredged and imported fill materials. During this period, piers and dry docks were constructed along this seawall, which formed the northern boundary of IR Site 7 (BNI 1997).

The Navy Mole, which formed the western and southern boundaries of IR Site 7, was constructed in late 1944 through early 1945 using imported rock, and sediments dredged from its near vicinity, including from the area that is now IR Site 7. Completion of LBNSY and NAVSTA Long Beach and construction of the Navy Mole created IR Site 7 in its present form. Additional piers were constructed between the 1940s to late 1980s. A small-craft marina was constructed within IR Site 7, along the western inboard face of the Navy Mole in the 1970s to early 1980s (BNI 1997).

By 1946, NAVSTA Long Beach had begun maintaining facilities for the operation and berthing of tugboats, barges, and similar vessels. In 1948, NAVSTA Long Beach began providing support for active service ships and inactive ships of the Reserve Fleet. LBNSY provided logistical support for assigned ships, and performed work in connection with conversion, overhaul, repair, alteration, dry-docking, and outfitting of ships. During the time when both NAVSTA Long Beach and LBNSY were in operation, IR Site 7 harbored an active berthing and repair shipyard (BNI 1997).

From the early 1940s to the mid-1970s, wastes from various industrial areas and from cleaning of process tanks on the former LBNC were discharged into IR Site 7. Wastes were also discharged into IR Site 7 through the storm drain system and from flushing of dry docks. Primary sources of discharges into IR Site 7 were found to occur from numerous land- and ship-based activities that have included lead caulking, painting or paint removal, boiler cleaning, and pipe-flushing operations. Stormwater discharge and flushing of dry docks represent historical primary release mechanisms and potential sources of chemicals in IR Site 7 sediments. Dredging has been conducted at IR Site 7 for construction or relocation of piers and for maintenance between the piers (BNI 1997).

NAVSTA Long Beach was operationally closed on 30 September 1994 pursuant to round II of the Base Realignment and Closure (BRAC) Act of 1990, as amended. LBNSY was operationally closed on 30 September 1997 pursuant to round IV of the BRAC Act of 1990, as amended. In August 1998, ownership of much of IR Site 7 reverted to the City when the City exercised its rights to automatically reacquire the harbor after the majority

of federal uses ceased. The 100 foot wide annulus and submerged lands underlying then existing Piers 1, 2, 3, 6, 7, 9, 10, 11, 12, 15, and 16 remain under federal ownership, and the custody and control of the DON (Figure 1-3). Since 1998, the POLB has conducted the following activities affecting IR Site 7:

- demolished and removed Piers 1, 2, 3, 6, 7, and 9;
- demolished and removed the seawall located along the northern perimeter of IR Site 7;
- constructed a new seawall and new docking facilities in its place (current Pier T);
- dredged and deepened the central and northern portions of IR Site 7 to facilitate use of deep-draft container-carrying vessels;
- widened the section of the Navy Mole forming the western boundary of IR Site 7; and
- dismantled and removed the small-craft marina.

Currently, the POLB is using IR Site 7 in support of the shipping operations of its tenants who lease cargo container terminal space (BEI 2003).

2.2 ENVIRONMENTAL INVESTIGATIONS

There are no enforcement activities related to IR Site 7. The former LBNC, including IR Site 7 are not on the National Priorities List. Environmental investigation and remediation activities associated with the site are implemented under the DON's IR Program, which is administered in accordance with CERCLA, as amended by the SARA of 1986; the NCP; the Resource Conservation and Recovery Act (RCRA); and the *California Health and Safety Code* (Cal. Health & Safety Code) for sites located in the state of California.

The following subsections provide a brief review of environmental investigations and studies performed at IR Site 7.

2.2.1 General Facility Investigations

<u>Industrial Waste Study (IWS)</u>. In 1969, Naval Facilities Engineering Command Southwest (NAVFAC Southwest) conducted an IWS at the former LBNC (SWDIV 1969). The objectives of the IWS included assessing the nature and quantity of liquid and solid industrial wastes, which may have been discharged into either IR Site 7 or the former LBNC storm drain system or may have been buried underground. The IWS reported its findings on the discharge of industrial wastewater into IR Site 7.

<u>Initial Assessment Study (IAS)</u>. In 1983, an IAS was completed for the former LBNC (NEESA 1983). The IAS is similar to a preliminary assessment (PA) conducted under the CERCLA process. The purpose was to identify and assess potential threats to human health and the environment posed by past hazardous materials storage, handling, or disposal practices at naval installations.

Twelve potentially contaminated sites were identified in the IAS, and each of these sites was assessed with regard to contamination characteristics, migration pathways, and potential receptors. The study concluded that none of the 12 sites posed a sufficient threat to human health or the environment to warrant a confirmation study. However, it recommended various precautionary measures, such as the use of protective clothing and equipment for excavation or construction at the sites (JEG 1993a). IR Site 7 was one of the sites identified in the IAS.

<u>RCRA Facility Assessment (RFA)</u>. In 1989, an RFA for the former LBNC was prepared by the DTSC, formerly the California Department of Health Services [DHS]). The RFA identified and evaluated solid waste management units (SWMUs) and other areas of concern at the former LBNC. A records review, evaluation of existing data, personnel interviews, and visual site inspection were conducted to assist in the evaluation of the potential for release of hazardous constituents from identified SWMUs. The RFA recommended further action at all the sites identified in the IAS, including IR Site 7 (DHS 1989).

<u>Site Inspections (SIs).</u> During 1991 and 1992 SIs were conducted concurrently at NAVSTA Long Beach and LBNSY (JEG 1992a,b).

The NAVSTA Long Beach SI addressed IR Sites 1 through 7A, which were located within NAVSTA Long Beach boundaries, and the LBNSY SI addressed IR Sites 7B through 12, which were located within LBNSY boundaries. Since IR Site 7 was shared by both NAVSTA Long Beach and LBNSY, portions of IR Site 7 contiguous with NAVSTA Long Beach and with LBNSY were designated as Sites 7A and 7B, respectively, and were addressed in separate SI reports.

Field data collected and analyzed during the SIs resulted in the identification of chemicals of ecological concern (COECs) in IR Site 7 sediments, in particular polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), pesticides (e.g., dichlorodiphenyltrichloroethane [DDT]), arsenic, copper, lead, mercury, and zinc. The SI results indicated that concentrations of these chemicals in IR Site 7 sediments exceeded sediment screening-level criteria. As a result of the screening evaluation, it was determined that further evaluation of sediment toxicity would be required prior to specifying potential remedial actions for the sediments. Because of the limited number of samples collected during the SIs and the restricted spatial coverage, further investigation was recommended for IR Site 7.

2.2.2 Sampling for the Pier T Marine Terminal

In 1996 the POLB announced plans to construct a container terminal on Pier T, comprising portions of the former LBNC, for additional cargo-handling terminal capacity. To implement this plan, a berthing and approach area was planned to be created in the area along the seawall between Pier 1 and the Navy Mole (northern shores of IR Site 7; Figure 2-1). More than 100 sediment core samples were collected from the proposed dredge areas. POLB, using the findings of this sampling program, successfully acquired the requisite regulatory permits and completed its work for the development of Pier T (BEI 2003).

2.2.3 Remedial Investigation for IR Site 7

The Remedial Investigation (RI)/Feasibility Study (FS) Work Plan for the former LBNC (JEG 1993a) identified IR Site 7 as OU 3, and presented an approach for characterizing ecological risk associated with chemically impacted sediments.

Sampling for the RI at IR Site 7 began in 1994. In 1997, the final RI Report for IR Site 7 was issued (BNI 1997). The RI characterized toxicity of IR Site 7 sediments and fish. Site characterization methods included acquiring data for use in conducting a human health risk assessment, which focused on ingestion of fish caught within IR Site 7 by recreational and subsistence anglers, and an ecological risk assessment which focused on harbor sediments and ingestion of IR Site 7 fish by the harbor seal.

Reference stations outside of IR Site 7 were selected to represent fish and sediments that were exposed to normal port activities of the LA/LB Harbors, but were not at locations used by the former LBNC. Fish and sediment samples were collected from both IR Site 7 and the reference stations. Fish samples included whole body, fillet, and gall bladder bile. Samples were collected from both surface sediment (from the uppermost 10 centimeters of the sediment bed) and subsurface sediment (from within 5 meters below the mulline). Benthic community samples were collected from the uppermost 10 centimeters of the sediment bed. The benthic community is a term used to describe the various invertebrate organisms living in or on the surface of the sediment bed.

Each IR Site 7 sediment sampling station was evaluated by comparing its chemical concentrations, sediment toxicity, and benthic community characteristics to those of the reference stations. Sediments were analyzed for physical, chemical, and biological parameters. Biological analyses included toxicity bioassays and benthic community analyses. Laboratory tests were conducted on clam and fish tissue samples to determine whether certain chemicals would accumulate in tissues.

The RI concluded that its human health risk assessment did not show an appreciable difference in cancer and noncancer risks between recreational and subsistence anglers consuming California halibut and white croaker taken from IR Site 7 and from the reference stations.

Potential risk to the harbor seal (an aquatic predator) exposed to chemical analytes in benthic feeding prey species (California halibut and white croaker) was evaluated using the hazard quotient (HQ) method. The assessment resulted in the finding that risk due to arsenic existed for the harbor seal feeding exclusively on IR Site 7 fish; however, the risk was deemed to probably be similar to the risk posed to the harbor seal feeding on fish from the reference stations and from other LA/LB Harbor areas, based on fish tissue residue data reported by other studies.

The ecological risk assessment suggested that there were AOECs within IR Site 7, with associated COECs. The most prevalent COECs were PAHs, PCBs, and seven metals (beryllium, chromium, copper, lead, mercury, silver and zinc). At a few AOECs, pesticides, phthalates, and phenol were also identified as COECs (BNI 1997). The RI (BNI 1997) identified the medium of concern as sediments, and the ecosystem of interest as the benthic community. The RI recommended that the CERCLA process for IR Site 7

be continued by conducting a FS of potential remedial alternatives that would focus on reducing the risk posed by the COECs in sediments on the benthic community at locations identified as AOECs.

2.2.4 Feasibility Study for IR Site 7

The final FS Report for IR Site 7 was issued in 2003 (BEI 2003). Based on the findings of the RI, the FS was conducted with the objective of developing and evaluating a series of remedial action alternatives that would provide a means for mitigating the adverse biological effects observed on the benthic community living in the chemically impacted sediments of the IR Site 7 AOECs.

As part of the FS, additional samples of surface sediment and benthic community were collected from within the nonpier portions of the IR Site 7 in 1998. Sediment samples were collected from locations that had been previously sampled during the RI and from new surface and subsurface locations.

The results from these additional samples were generally consistent with the RI results and were used to establish seven distinct AOECs within IR Site 7. These seven individual AOECs are four nonpier AOECs (A through D) comprising open harbor areas, and three pier AOECs (E, F, and G) comprising the sediments beneath the piers (Figure 2-1).

The DON, POLB, and Agencies/Trustees agreed to a NFA decision for AOEC D because the 1994 RI sampling results and the 1998 FS sampling results indicated that the sediments of AOEC D pose very little ecological risk. AOEC D was briefly discussed in the FS, but not evaluated further (BEI 2003).

The FS developed, screened, and assessed the following remedial action alternatives individually for AOECs A, B, C, E, F, and G (BEI 2003):

- no remedial action (as required by CERCLA);
- limited action periodic sediment quality monitoring;
- limited action institutional controls (ICs);
- *in situ* capping of AOECs with "clean" imported sediments (for AOECs B and C only);
- removal and on-site (inside IR Site 7) containment of AOEC sediments through discharge of dredged sediments along the inboard face of the Navy Mole;
- removal and off-site (outside IR Site 7) containment of AOEC sediments through discharge of dredged sediments along the outboard face of the Navy Mole; and
- removal and discharge of AOEC sediments at off-site (outside IR Site 7) projects.

The FS also further refined the COECs and several were not considered significant for further evaluation because of their low and narrow range of concentrations. The COECs retained in the FS were (BEI 2003):

- Copper exceeded reference station values by a factor of 2;
- Lead exceeded reference station values by a factor of 5;
- Mercury exceeded reference station values by a factor of 8;
- Silver exceeded reference station values by a factor of 1.4;
- Zinc- exceeded reference station values by a factor of 1.3;
- PAHs exceeded reference station values by a factor of 13;
- PCBs exceeded reference station values by a factor of 20; and
- DDTs exceeded reference station values by a factor of 34.

2.2.5 Feasibility Study Addendum for IR Site 7

In 2006, a final FS Addendum for IR Site 7 was issued (CDM 2006). The FS Addendum further developed and evaluated the ICs remedy for chemically impacted sediments of AOECs A, B, C, E, F, and G.

2.2.6 Proposed Plan for IR Site 7

A Proposed Plan (DON 2006) was prepared in October 2006 and issued for 30-day public review and comment. The preferred remedial alternatives presented in the Proposed Plan are as follows:

- AOECs A and C: removal and discharge of the AOEC sediments at offsite (outside IR Site 7) projects, thereby creating a clean substrate supporting the presence of an ecologically productive and diverse benthic community;
- AOEC B: no remedial action necessary to protect the environment, as chemical concentrations have not resulted in sediment toxicity or adverse effects on the benthic community; and
- AOECs E, F, and G (Pier AOECs): Limited action ICs to be implemented for the purpose of preventing unauthorized or uncontrolled disturbance and/or exposure of beneath-pier chemically impacted sediments.

The Proposed Plan also documented the NFA decision of the DON, POLB, and Agencies/Trustees for AOEC D.

Section 3 HIGHLIGHTS OF COMMUNITY PARTICIPATION

The community was invited and encouraged to participate in environmental investigations and remedial planning efforts conducted at IR Site 7 under the IR Program and under CERCLA, in the review of reports and documents issued and in the remedy selection process.

DON's community outreach included partnering activities such as the following:

- conducting community interviews for the former LBNC Community Relations Plan (CRP), which included eliciting information on the IR Program and IR Site 7;
- holding public meetings, including Restoration Advisory Board (RAB) meetings at which presentations on the IR sites were given;
- issuing fact sheets on the IR Program to provide updates on current cleanup activities;
- maintaining an information repository where the public can access technical documents and program information;
- disseminating information to local and regional media; and
- making presentations to local groups about the DON's IR Program at the former LBNC.

Major community involvement and participation are briefly discussed below.

3.1 TECHNICAL REVIEW COMMITTEE

A Technical Review Committee (TRC) was formed in April 1992. The TRC included the DON and the Agencies/Trustees listed in Section 1 of this ROD. The TRC reviewed IR Program documents developed for IR Site 7 and provided technical and regulatory comments. The TRC later developed into and became the RAB.

3.2 COMMUNITY RELATIONS PLAN

In August 1993, a CRP (JEG 1993b) was developed and implemented concurrently with the RI/FS work being performed at IR Site 7, for the following purposes:

- documenting concerns that may be identified during community interviews;
- providing detailed descriptions of community relations activities planned in response to information received from updates of community issues and concerns; and
- identifying information needs associated with the RI/FS-related environmental investigations at IR Site 7.

3.3 RESTORATION ADVISORY BOARD

The IR Site 7 RAB was formed in April 1994. Members of the community were invited to become involved in the environmental restoration program for IR Site 7 to review and discuss planned environmental investigation activities.

Since April 1994, the RAB has met regularly, has participated in site tours and educational workshops, and has received updates on field activities, funding issues, and other technical and administrative matters. The RAB also discusses project progress, reviews reports, and comments on investigation and cleanup activities. RAB meetings are open to the public and are attended by the DON, DTSC, Water Board, U.S. EPA, CDFG, NOAA, USFWS, POLB, City and local county environmental officials, and interested members of the community. By sharing information during regularly scheduled meetings with the groups they represent, RAB members increase awareness and progress of the IR Program process. In addition, members of the public can contact RAB members to obtain information or express concerns to be discussed at subsequent meetings.

The former LBNC RAB reviewed and provided comments on the IR Site 7 RI/FS Work Plan (JEG 1993a), the final RI Report (BNI 1997), and the final FS Report (BEI 2003). The community also reviewed and was provided the opportunity to comment on the Proposed Plan for IR Site 7 (DON 2006).

Currently, the RAB meets semi-annually at AirFlite, 3250 AirFlite Way, Long Beach (located at the Long Beach Airport), to discuss environmental issues at IR Program sites. Copies of the RAB meeting minutes, as well as technical reports and other investigation and site cleanup information, are available at the former LBNC information repository, located at the City of Long Beach Public Library, Government Publications Section (located on the lower level), 101 Pacific Avenue, Long Beach. RAB meeting minutes are also located on the former LBNC website home page:

http://www.bracpmo.navy.mil/bracbases/california/lbnc/default.aspx.

3.4 PUBLIC MAILINGS

Public mailings, including information updates, fact sheets, and proposed plans, have been used to broaden the dissemination of information within the local community. The DON has compiled a mailing list of approximately 120 recipients, including local residents; local, state, and federal regulatory agencies; government offices; news media; homeowners' associations and neighborhood watches; newsletters of environmental organizations; city mayors and council members; and other interested parties.

Those on the mailing list receive notifications about ways the public can participate in investigations and remedial planning, and the availability of the former LBNC Administrative Record. Methods used to create and maintain the mailing list include documentation of telephone inquiries, meeting sign-in sheets, responses to mail-in coupons provided in fact sheets and proposed plans, and annual updating of the list of elected officials. The mailing list continues to be updated to support the DON's effectiveness in reaching interested and concerned parties.

Section 3 Highlights Community Participation

3.5 COMMUNITY PARTICIPATION FOR IR SITE 7

The findings, conclusions, and recommendations of the RI Report (BNI 1997) and the FS Report (BEI 2003) conducted for IR Site 7 were reviewed with the community during various RAB meetings held between 1994 and 2003. The Proposed Plan for IR Site 7 presented the preferred remedial alternatives for IR Site 7 AOECs A, B, C, E, F, and G and was issued to the public in October 2006.

A public notice announcing the availability of the Proposed Plan was published in the *Long Beach Business Journal* on October 10, 2006, and the *Long Beach Press-Telegram* on October 24, 2006. The public notice invited interested community members to review the Proposed Plan, attend the public meeting (held on October 25, 2006), provide comments or questions and announced the availability of the Administrative Record file for public review. A public comment period was held from October 16, 2006 to November 23, 2006. Comments received during the public comment period and the public meeting are addressed in the Responsiveness Summary portion of this ROD (Part III). The current Administrative Record Index printout for IR Site 7 is included with this document as Attachment A, and a transcript of the public meeting held for the Proposed Plan is included as Attachment B.

Complete Administrative Record files for the former LBNC are available at NAVFAC Southwest, 1220 Pacific Highway, San Diego, California 92132-5190. An information repository is available for review at the City of Long Beach Public Library, Government Publications Section (located on the lower level), 101 Pacific Avenue, Long Beach, California.

Section 3 Highlights Community Participation

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Section 4 SCOPE AND ROLE OF RESPONSE ACTIONS

Fifteen sites have been investigated at the former LBNC. Seven of these sites (IR Sites 1 through 7, including 6A and 6B) are associated with former NAVSTA Long Beach. The remaining sites (IR Sites 8 through 14 and 16) are associated with former LBNSY. The current status of each site is summarized below.

The following are the former NAVSTA Long Beach sites:

- IR Sites 1 and 2 were addressed in a ROD that was finalized in 2000. The selected remedial action for both sites was excavation, *in situ* air sparging, soil vapor extraction, land-use controls in the form of deed restrictions, and groundwater monitoring.
- IR Sites 3, 4, 5, and 6A were addressed in a ROD that was finalized in 1999. The selected remedies for IR Sites 3, 4, and 6A were ICs and monitoring. The selected remedy for IR Site 5 was ICs. Groundwater monitoring is complete at IR Sites 3, 4, and 6A.
- Site 6B was considered under the initial IR program but was never designated as an IR site. Investigations showed that contaminant concentrations in soil and groundwater were below baseline sample results. Site closure was requested and approved by the regulatory agencies in 1997.
- IR Site 7 is the subject of this ROD.

The following are the former LBNSY sites:

- IR Sites 8 and 10 are addressed in a final ROD/Remedial Action Plan (RAP) that was issued in 2004. The recommended remedy is to use ICs to maintain industrial land use and to prevent unauthorized disturbance of soil and groundwater.
- IR Site 9 is addressed in a final ROD/RAP that was finalized in 2005. The selected remedy for IR Site 9 is ICs and monitored natural attenuation of select contaminants of concern in groundwater.
- IR Site 11 is addressed in a ROD/RAP issued in 2006. The selected remedy for IR Site 11 is ICs in the form of land-use covenants and groundwater monitoring.
- IR Sites 12 and 13 are addressed in a ROD/RAP issued in 2006. The selected remedies for IR Site 12 and 13 are ICs in the form of land-use covenants, groundwater monitoring, and maintaining pavement and other surface improvements.
- IR Site 14 was the subject of an Action Memorandum finalized in 2000. The selected removal action included soil excavation, enhanced natural attenuation, groundwater monitoring, and ICs.

• IR Site 16 was addressed in an expanded site inspection report that was finalized in 2005. The report received regulatory approval and the site was closed with NFA required.

AOECs A, B, C, E, F, and G were each reviewed on the basis of their own characteristics, and assigned one or more of the following remedies based on evaluation of the nine NCP criteria:

- no remedial action;
- removal and discharge of AOEC sediments at off-site (outside IR Site 7) projects;
- removal and on-site (inside IR Site 7) containment of AOEC sediments discharge of dredged sediments inside Navy Mole; and
- limited action ICs.

Section 5 SITE CHARACTERISTICS

This section provides an overview of IR Site 7 features, identifies IR Site 7 AOECs, and summarizes physical, chemical and biological characteristics of IR Site 7 AOECs.

Complete discussions of environmental investigations and assessments conducted at IR Site 7, including information and data such as locations of sediment sampling stations and sampling methodologies, chemical compounds and their concentrations reported for IR Site 7 and reference sediments, nature and extent of chemically impacted IR Site 7 sediments, and results of human health and ecological risk assessments, can be found in the SI Reports (JEG 1992a,b), the RI Report (BNI 1997), and the FS Report (BEI 2003).

The RI acquired data for use in site characterization and for conducting both human health and ecological risk assessments, and the FS acquired additional physical, chemical, and biological data for use in further identifying and characterizing individual AOECs and in developing remedial action alternatives.

5.1 IR SITE 7 FEATURES

IR Site 7 is bounded by the former LBNC on the north, the Navy Mole and Los Angeles Harbor on the west, the Navy Mole and San Pedro Bay on the south, and Long Beach Harbor Channel on the east during the operation of the former LBNC (BNI 1997). Many of these facilities still exist today.

The climate in the general region of IR Site 7 is classified as Mediterranean. Precipitation occurs between November and March, with an average annual rainfall of about 12 inches (BNI 1997).

Southern California coastal tides are semidiurnal, with two low and two high tides of unequal height every 25 hours. Rising tides, which vary with the phase of the moon, enter Long Beach Harbor and flow up the various channels and basins; flows reverse during falling tides. Tidal currents generally create water circulation patterns. Water circulation patterns within IR Site 7 are clockwise (BNI 1997).

Mean tide in Long Beach Harbor has a maximum range of 5.5 feet. The maximum velocity at the entrance to the LA/LB Harbors has been estimated at 0.54 foot per second (ft/s) for ebb tide and 0.46 ft/s for flood tide. Velocity magnitudes throughout the LA/LB Harbors generally are small, usually less than 1 ft/s (BNI 1997).

The temperature within the IR Site 7 water column varies spatially by season; it is cooler in the winter and warms up during spring and summer (BNI 1997).

Water depth of IR Site 7 is generally uniform with an average water depth of approximately 40 feet (mean lower low water [MLLW]), a deeper (55 feet) area along the northern portions as a result of recent dredging by the POLB, and a shallower (40 feet) area in the western portion of the site (Figure 2-1). There are no known submerged features such as rock outcrops. The shoreline of IR Site 7 is lined with riprap and piers.

5.2 IDENTIFICATION OF IR SITE 7 AOECs

IR Site 7 was characterized on the basis of physical, chemical, and biological data for surface and subsurface sediments for the purpose of identifying AOECs (BNI 1997). The RI concluded that ecological risk assessments using these data suggested the presence of AOECs in IR Site 7 with associated COECs. Beneath-pier and nonpier sediment sampling station data were considered separately in the site characterization data analyses because these two groups of data consistently indicated differences in quality of beneath-pier and nonpier sediments.

Physical properties of surface and subsurface sediments were evaluated through laboratory grain-size analyses, total organic carbon (TOC), and observations made during sampling activities. In general, IR Site 7 sediments exhibited a wide range of particle-size distribution. Clay-size particle content and TOC were higher in beneath-pier sediments; silt- and sand-size particle contents were lowest for beneath-pier sediments as compared to nonpier sediments. TOC was well correlated with total fine particle content and with most metals, PAHs, PCBs, and DDTs. Total fines percentage was correlated with most metals and DDTs. The strongest correlation was between individual metals and sediment clay fraction.

Chemical properties of surface and subsurface sediments were evaluated through laboratory analyses. The surface sediments in areas along the seawall of NAVSTA, LBNSY, and the Navy Mole contained concentrations of chemicals generally higher than those of the central areas of IR Site 7.

Biological properties of surface sediments were evaluated through laboratory toxicity analyses (echinoderm, amphipod, and polychaete bioassays), bioaccumulation analyses (whole body samples of laboratory clams, California halibut, and white croaker; fillet samples of California halibut and white croaker; and gall bladder bile of California halibut), and benthic community evaluation.

Bioassay and benthic community study results were evaluated with respect to patterns related to the distribution of chemical analytes. Statistical analyses did not reveal any strong relationships between chemical analytes and biological responses. However, it appeared that a strong relationship existed between the biological responses and the locations of the sampling stations.

A gradient of benthic community species was inferred by the results of data analyses to be extending from the IR Site 7 entrance westward into IR Site 7, extending to near the northwestern corner of IR Site 7. Characteristics of beneath-pier benthic community were affected by the types of physical processes typically occurring beneath large piers, such as shell hash and organic material accumulation (BNI 1997).

On the basis of these characterizations, nonpier surface sediment sampling stations exhibiting both a biological effect (sediment toxicity and/or affected benthic community) and elevated chemistry (concentrations exceeding reference station concentrations), and those exhibiting PCB concentrations exceeding the project threshold value, were

considered to be AOECs, having reported chemical compounds with the potential to cause the biological effects (BNI 1997).

All beneath-pier surface sediment sampling stations were considered AOECs due to elevated chemistry, adverse sediment toxicity effects, and a conservative evaluation for beneath-pier sediments (BNI 1997).

At the conclusion of the IR Site 7 RI, the POLB had indicated its intention of developing the northern periphery of IR Site 7 as a deep-water wharf facility.

5.2.1 AOEC Evaluation

Following the RI, non-AOEC and NFA areas (Figure 2-1) were further identified in planning meetings at the outset of the IR Site 7 FS activities. The Agencies/Trustees requested that the IR Site 7 AOEC area that had been identified in the RI and which fell within the area planned by the POLB to be dredged for new wharf development not be included in the IR Site 7 FS Report. The reason was that the sediments in this area would be dredged regardless of the CERCLA process for IR Site 7, due essentially to business reasons, and their disposal regulated under United States Army Corps of Engineers (USACE) permit(s). By agreement of the Agencies/Trustees subsequent to the conclusion of the IR Site 7 RI, the non-AOEC area in the central portion of IR Site 7 was also identified as a NFA area. These areas were excluded from the FS and were not discussed further (BEI 2003). In addition, the DON, POLB, and Agencies/Trustees agreed to a NFA decision for AOEC D because the 1994 and the 1998 sampling results indicated that the sediments of AOEC D pose very little ecological risk. AOEC D was briefly discussed in the FS, but not evaluated further (BEI 2003).

Using data collected in both 1994 (RI) and 1998 (FS) and on the basis of ecological risk assessments using the combined data set (BEI 2003) six AOECs (A, B, C, E, F, and G) were identified as requiring further evaluation. Figure 2-1 illustrates the locations of IR Site 7 AOECs (BEI 2003).

AOEC boundaries were determined by station groupings and relationships among surface sediment quality characteristics, and IR Site 7 features such as water circulation patterns, water depths and other physical features such as grain size distribution and the presence of structures (e.g., piers) (BNI 1997, BEI 2003).

The vertical extent of chemically impacted sediments (depth of ecological concern) at individual AOECs was estimated by examining the subsurface sediment data and selecting a sediment depth at which chemical concentrations that had been reported for surface samples had diminished (sediment chemistry concentration by depth below sediment surface profiles) and, specifically for IR Site 7 AOECs that may involve dredging of sediments, by the use of sediment management objective values (SMOs). The SMOs, effects-based COEC-specific concentrations for the nonpier sediments of IR Site 7 at and below which there would not be a cause of concern for ecological risk, were prepared during the course of the IR Site 7 FS for use in determining whether chemically impacted sediments have been suitably removed after completion of dredging activities by the POLB (BEI 2003). Table 5-1 provides a listing of SMO values for IR Site 7

COECs, and lists the sediment sampling stations at AOEC A and AOEC C exceeding these SMOs.

Chemical compounds detected in the surface sediments of AOECs (0 to 10 centimeters deep) with concentrations greater than those detected in the surface sediments of reference stations were considered COECs: copper, lead, mercury, silver, zinc, PAHs, PCBs, and DDTs (BNI 1997, BEI 2003).

5.2.2 Fate and Transport Mechanisms

Chemical migration, conversion, and degradation are dependent upon several fate-andtransport mechanisms. The reported COECs are generally sorbed to fine sediment particles (silt and clay sized particles) or sediment organic material. Consequently, the potential migration of the COECs is associated with the movement of sediments. Migration of sediments such as the bottom sediments at IR Site 7 depend upon resuspension and transport mechanisms. At IR Site 7, it is considered unlikely that the effect of tidal currents can resuspend sediments (JEG 1993a). Wave action and bioturbation are also not expected to resuspend the sediments. However, propeller wash from large water craft may resuspend sediments, which may be transported by tidal currents. The sediments beneath piers are expected to be less susceptible to propeller wash because the presence of shell debris would help to stabilize the sediments.

The fate of metals in the environment is dependent on sorption, chemical speciation, complexation, biotransformation, and bioaccumulation. Metals occurring in sediment may be sorbed to particles, bound in complex molecules, bound in precipitates (e.g., sulfides), or may exist in a free ionic state. Organisms can easily bioaccumulate available metals.

PAHs in the sediment are associated with particulate material. PAHs in sediment may transfer to biota. Environmental degradation occurs by chemical oxidation, photooxidation, and biological transformation. Soil- and sediment-bound PAHs can persist for an extended time. Biological transformation is likely the final fate of PAHs.

PCBs in the sediment are associated with particulate material. Volatilization occurs for PCBs with few substituted chlorines. PCBs in sediment may transfer to biota. PCBs are lipophilic and will bioaccumulate and biomagnify in the food chain. Environmental degradation occurs by photochemical breakdown and biological transformation. Soil-and sediment-bound PCBs can persist for an extended time. Biological transformation is likely the final fate of PCBs.

Pesticides adsorb strongly to sediment particles. Volatilization, photolysis, and oxidation rates vary among the pesticides depending on structure; these are generally not significant pathways. Because of their lipophilic character, pesticides strongly bioaccumulate as well as biomagnify.

5.3 IR SITE 7 AOEC CHARACTERISTICS

This section summarizes physical, chemical, and biological properties and characteristics of benthic sediments (i.e., surface sediments) of AOECs A, B, C, E, F, and G, as

addressed in this ROD. Characteristics of IR Site 7 AOECs are summarized in Table 5-2 and discussed below.

5.3.1 AOEC A

The area between former Pier 1 and existing Pier E was identified as an AOEC in the RI. AOEC A is located adjacent to the new deep-water wharf facility constructed by POLB. AOEC A was identified because of total PCB concentrations in its surface sediment sample that exceeded 350 micrograms per kilogram (μ g/kg), a concentration agreed to in the RI as a threshold value. Surface sediment PCB concentration was 20 times greater than the project reference value (BNI 1997).

The 1998 data indicated an elevated mercury concentration (8 times greater than the reference value) for the surface sediment. Subsurface sediment concentrations were elevated for PCBs (95 times greater than the project reference value) and mercury (5 times greater than the reference value). The subsurface sediment data indicated that the elevated concentrations could extend to approximately 4.3 feet below the sediment bed (BEI 2003).

No toxicity or benthic community effects were noted in the RI for surface sediments of AOEC A, which exhibited a large percentage of fine-grained particles and high concentrations of TOC (BNI 1997). The 1998 FS surface sediment analysis reported low toxicity and no benthic community effects (BEI 2003).

AOEC A surface sediments were considered to represent an area of low ecological risk due to the lack of adverse benthic community effects and the lack of compelling sediment toxicity data. Subsurface sediments of AOEC A were considered to represent a greater potential ecological risk if they were disturbed and exposed, for example by deep-draft commercial vessels traversing this area.

5.3.2 AOEC B

The western portion of IR Site 7, between Pier 9 and Pier 10 approximately, was identified as an AOEC in the RI because of surface sediment toxicity and six chemical compounds that slightly exceeded the reference value. Sediments of AOEC B exhibited a moderate percentage of fine-grained particles and moderate concentrations of TOC (BNI 1997).

The 1998 data indicated similar surface sediment chemical concentrations as the 1994 data. There were no elevated subsurface sediment concentrations. The sediment data indicated that the elevated sediment concentrations of AOEC B could extend to approximately 2.5 feet below the sediment bed (BEI 2003).

The 1998 surface sediment analysis reported no toxicity at sediment sampling stations and no benthic community effects.

AOEC B surface and subsurface sediments were considered to represent low ecological risk due to the lack of adverse benthic community effects and the lack of compelling sediment toxicity data.

5.3.3 AOEC C

AOEC C is located in the southern portion of IR Site 7 along the Navy Mole, between Pier 10 and Pier 15. It was identified as an AOEC in the RI because of sediment toxicity, benthic community effects, and 17 chemical compounds that exceeded reference values. PCB and DDT concentrations were up to 11 and 34 times greater than reference values, respectively. Sediments of AOEC C exhibited a large percentage of fine-grained particles and high concentrations of TOC (BNI 1997).

The 1998 data indicated elevated surface sediment concentrations for lead, PCBs, and PAHs at 5, 140, and 10 times greater than the reference values, respectively. There were no elevated subsurface sediment concentrations. The sediment data indicated that the elevated sediment concentrations at AOEC C could extend to approximately 3 feet below the sediment bed (BEI 2003).

AOEC C was considered to represent an area of moderate ecological risk due to the adverse benthic community effects and the sediment toxicity data.

5.3.4 AOEC E

Sediments at AOEC E, where Pier 12 (Fuel Pier) is located, were identified as an AOEC in the RI because of sediment toxicity and 18 chemical compounds that slightly exceeded the reference value. The benthic community did not indicate adverse effects. Sediments of AOEC E exhibited a large percentage of fine-grained particles and high concentrations of TOC (BNI 1997).

The sediment beneath the pier rises to a somewhat higher elevation than the surrounding sediment level. Extensive shell debris is mixed in with the sediment beneath the pier. The benthic community, which is not typical of soft-bottom harbor sediments, had characteristics of a hard substrate habitat probably due to the extensive presence of shell debris (BNI 1997).

The AOEC E surface sediment was considered to represent an area of low ecological risk due to sediment toxicity but no adverse benthic community effects.

None of the subsurface sediment concentrations were elevated; however much of the sediment core sample was lost during collection. Therefore, the subsurface conditions were estimated using data from beneath the nearby pier. The sediment data indicated that the chemically impacted sediments of AOEC E could extend to approximately 9 feet below the sediment bed and may represent potential ecological risk if they are disturbed and benthic community is exposed to them (BNI 1997). AOEC E subsurface sediments were considered to represent moderate ecological risk.

5.3.5 AOEC F

Sediments at AOEC F, beneath Pier 15, were identified as an AOEC in the RI because 19 chemical compounds exceeded the reference values. Sediment toxicity was not reported for these sediments. The benthic community did not indicate adverse effects. Copper and PAH concentrations were up to 2 and 13 times greater than reference values,

respectively. Sediments of AOEC F exhibited a large percentage of fine-grained particles and high concentrations of TOC (BNI 1997).

Similar to other piers, the sediment beneath Pier 15 rises to a somewhat higher elevation than the surrounding sediment level. Extensive shell debris is mixed in with the sediment beneath the pier. The benthic community, which is not typical of soft-bottom harbor sediments, had characteristics of a hard substrate habitat probably due to the extensive presence of shell debris (BNI 1997).

The AOEC F surface sediment was considered to represent an area of low ecological risk due to no sediment toxicity and no adverse benthic community effects.

Subsurface sediment concentrations were elevated for copper, lead, mercury, zinc, and DDTs (each 2 times greater than the reference value), PAHs (6 times greater than the reference value), and PCBs (14 times greater than the reference value). Subsurface sediment data indicated that the chemically impacted sediments of AOEC F could have a thickness of about 9 feet and may represent potential ecological risk if they are disturbed and benthic community is exposed to them, (BNI 1997). AOEC F subsurface sediments were considered to represent moderate ecological risk due to elevated concentrations.

5.3.6 AOEC G

Sediments at AOEC G, beneath Pier 16, were identified as an AOEC in the RI because of sediment toxicity and a conservative approach to evaluating the piers. None of the chemical concentrations at AOEC G exceeded the reference values. The benthic community did not indicate adverse effects. Sediments of AOEC G exhibited a large percentage of fine-grained particles and high concentrations of TOC (BNI 1997).

The sediment beneath Pier 16 is expected to rise to a somewhat higher elevation than the surrounding sediment level, similar to other piers. Extensive shell debris is mixed in with beneath-pier sediments. The benthic community found beneath piers, which is not typical of soft-bottom harbor sediments, has characteristics of a hard substrate habitat probably due to the extensive presence of shell debris (BNI 1997).

The AOEC G surface sediment was considered to represent an area of low ecological risk due to sediment toxicity but no adverse benthic community effects.

Subsurface data were not collected from AOEC G; however, subsurface sediment data from a nearby pier indicated that the chemically impacted sediments of AOEC G could have a thickness of about 9 feet and may represent potential ecological risk if they are disturbed and benthic community is exposed to them (BNI 1997). AOEC G subsurface sediments were considered to represent moderate ecological risk due to potential elevated concentrations of chemicals.

Section 5 Site Characteristics

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Section 6 CURRENT AND POTENTIAL FUTURE SITE AND RESOURCE USES

General land use at and in the vicinity of the former LBNC and IR Site 7 is primarily port-related and industrial. Facilities surrounding IR Site 7 include tank farms; automobile-, cement-, and cargo-handling terminals; and storage terminals. The areas east and west of IR Site 7 are used for commercial shipping, liquid bulk handling, and heavy industrial activities. The area north of former LBNC is used for oil production activities.

Terminal Island, where the former LBNC once operated, comprises the western portion of POLB and the eastern portion of the Port of Los Angeles. These ports participate in heavy shipping traffic, container storage, cargo handling, dredging activities, and loading/off-loading operations.

Currently, the POLB uses IR Site 7 to support the shipping operations of its tenants who lease cargo container terminal space. To achieve this use, POLB has demolished and removed piers located along the northern seawall of IR Site 7, filled and covered dry docks that once were located along the northern seawall, and deepened the central and northern portions of IR Site 7 by dredging to allow deep-draft container-carrying vessels to dock at the new Pier T (former NAVSTA Long Beach and former LBNSY).

Future use of IR Site 7 and the former LBNC property is identified as port-related and industrial.

Section 6 Current and Potential Future Site and Resource Uses

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Section 7 SUMMARY OF SITE RISKS

Risk assessments provide an evaluation of the potential threat to human health and the environment in the absence of remedial action. They provide the basis for determining whether remedial action is necessary and the justification for performing remedial actions, and they identify the contaminant and exposure pathways that need to be addressed by the remedial action (U.S. EPA 1988, 1991).

The medium of concern for IR Site 7 AOECs is the benthic sediments. Human health and ecological risk assessments were conducted for IR Site 7 during the RI phase. Additional ecological risk assessments were conducted during the FS phase.

7.1 HUMAN HEALTH RISK ASSESSMENT

Cancer, noncancer, and lead risks to recreational and subsistence anglers consuming fish taken from IR Site 7 and from the reference stations, were estimated for recreational and subsistence anglers consuming California halibut and white croaker. These are the two species of fish that dominated the catch in the fish trawls for the IR Site 7 RI.

7.1.1 Cancer Risks

The human health risk assessment results did not indicate an appreciable difference in cancer risks associated with consumption of California halibut and white croaker from IR Site 7 and the reference stations (BNI 1997). The results indicated, however, that the upper-bound cancer risk associated with consumption of California halibut and white croaker, regardless of the source (IR Site 7 or reference stations), was within the range considered to be unacceptable in accordance with criteria presented in the NCP. Thus, concentrations of carcinogenic chemicals identified in some of the IR Site 7 and reference station California halibut and white croaker samples appeared to be high enough to potentially pose an adverse affect to individuals who consumed these two species of fish. Since this risk was associated with both IR Site 7 and the reference stations, the risk is not considered attributable to IR Site 7 (BNI 1997). In recognition of the risk associated with consuming fish from LA/LB Harbors, the California Office of Environmental Health Hazard Assessment (OEHHA) has issued a fish consumption advisory for the LA/LB Harbors (http://www.oehha.ca.gov/fish/so_cal/index.html).

7.1.2 NonCancer Risks

The results of the human health risk assessment did not indicate an appreciable difference in noncancer risks associated with consumption of California halibut and white croaker from IR Site 7 and the reference stations. Most of the noncancer risk for both IR Site 7 and reference stations was associated with arsenic. Noncancer risk associated with arsenic as calculated in the RI is probably overstated because a very conservative estimator value was used in the calculations. Generally, arsenic values found in the IR Site 7 fish tissue samples were similar to results from other southern California harbors. Since this risk was associated with both IR Site 7 and the reference stations, the risk is not considered attributable to IR Site 7 (BNI 1997).

7.1.3 Lead Risks

The concentrations of lead in the fillets of white croaker from IR Site 7 appeared to be high enough to cause lead toxicity. The concentrations of lead in the fillet and whole body samples of California halibut from IR Site 7 appeared not to pose a risk to either recreational or subsistence anglers (BNI 1997). However, since lead was infrequently detected in the white croaker fillet samples and because the lead risk value only slightly exceeded the benchmark value, the lead risks were not addressed further.

7.2 ECOLOGICAL RISK ASSESSMENT

The ecological risk assessment prepared as part of the RI (BNI 1997) focused on the assessment of risk to ecological receptors posed by the chemicals measured in IR Site 7 sediments. The methods employed to assess the potential for ecological risk included a preponderance-of-evidence approach that evaluated the chemical analytes identified in sediment samples and their relation to the benthic community, as indicated by the benthic community composition, sediment toxicity, and bioaccumulation test results. HQ calculations were used for analysis of potential risk to an aquatic predator (harbor seal) exposed to chemical analytes in a benthic-feeding prey species (white croaker).

A review of the tissue chemical residue data for test clams and captured fish indicated that arsenic, copper, mercury, and tributyltin may have bioaccumulated in marine organisms of IR Site 7. Tissue concentrations in the fish and clam samples were within the range reported from other studies in the area, and may not be indicative of detrimental levels beyond the levels occurring within the LA/LB Harbors (BNI 1997).

HQ values calculated for the harbor seal indicated that risk due to arsenic exists for the harbor seal feeding exclusively on IR Site 7 fish. However, the risk is probably similar to the risk posed to the harbor seal feeding on fish from the reference stations or other harbor areas based on the fish tissue residue data reported by other studies (BNI 1997).

Results of bioassays and the benthic community study were evaluated with respect to patterns related to the distribution of chemical analytes. Statistical analyses did not reveal any strong relationships between chemical analytes and biological responses. However, it appeared that a strong relationship existed between the biological responses and the locations of the sampling stations. Sediment toxicity (affecting echinoderm larval development) was apparent in the western and northwestern portions, and in the entrance of IR Site 7, while adverse benthic community effects (lowered indices) were apparent in an area near Pier 12 (BNI 1997).

7.2.1 Chemicals of Ecological Concern

Chemical compounds detected in the sediments of IR Site 7 AOECs with concentrations greater than those of reference stations were considered COECs. The most prevalent COECs reported in the RI were seven metals (beryllium, chromium, copper, lead, mercury, silver, and zinc), PAHs, and PCBs. At a few AOECs, pesticides, phthalates, and phenol were also identified as COECs (BNI 1997).

The ecological risk assessment suggested the presence of AOECs in IR Site 7 with associated COECs. The RI recommended that the CERCLA process be continued for the IR Site 7 AOECs by conducting a FS to evaluate potential remedial action alternatives, which would focus on reducing ecological risk associated with the COECs in the sediments at the AOECs (BNI 1997). These COECs were evaluated as part of the FS that followed the RI, and several COECs were not considered significant for further evaluation because of their low and narrow range of concentrations. The COECs retained in the FS were (BEI 2003):

- Copper exceeded reference station values by a factor of 2;
- Lead exceeded reference station values by a factor of 5;
- Mercury exceeded reference station values by a factor of 8;
- Silver exceeded reference station values by a factor of 1.4;
- Zinc- exceeded reference station values by a factor of 1.3;
- PAHs exceeded reference station values by a factor of 13;
- PCBs exceeded reference station values by a factor of 20; and
- DDTs exceeded reference station values by a factor of 34.

7.2.2 Exposure Pathways of Concern

The ecological receptors identified for the IR Site 7 AOECs are the benthic community. The exposure pathways of chemical compounds associated with the sediments at IR Site 7 AOECs to the benthic community include their dermal contact with sediments, ingestion of sediments, and ingestion of smaller sediment-dwelling organisms (BNI 1997). The benthic community is also exposed to porewater within the sediments, as well as to the sediments themselves. Members of the benthic community may contain the same compounds detected in the sediments, depending on factors controlling the partitioning and binding of the chemical compounds they come in contact with in the sediment bed.

7.2.3 Ecological Significance

The IR Site 7 ecological risk assessments concluded that COECs may adversely affect the benthic community inhabiting the sediments of individual IR Site 7 AOECs, as summarized in Table 5-2.

Section 7 Summary of Site Risks

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Section 8 REMEDIAL ACTION OBJECTIVE

The Remedial Action Objective (RAO) for IR Site 7 is to protect the presence of an ecologically productive and diverse benthic community in the sediments of IR Site 7 AOECs, consistent with existing land use (port-related and industrial). Remedial alternatives were developed to achieve this RAO.

Achieving this RAO would provide the basis for the completion and termination of the remedy or remedies that may be implemented at IR Site 7 AOECs.

The RI concluded that the benthic community living in the beneath-pier sediments of IR Site 7 is similar to other benthic communities living beneath a typical industrial-use pier, in the absence of other anthropogenic effects. The FS evaluations provided the basis for considering that implementation of ICs for the chemically impacted beneath-pier sediments through limiting or precluding the unauthorized disturbance of these sediments would support this RAO until such a time when the ICs are terminated, or these sediments are dredged and discharged into a containment, or otherwise rendered no longer an ecological threat to the benthic community.

Dredging remedies would achieve the RAO upon confirmation that the targeted sediments have been removed as planned. The length of time for achieving the RAO may not be readily discernible under the periodic sediment quality monitoring remedy.

Section 8 Remedial Action Objective

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Section 9 DESCRIPTION OF POTENTIAL REMEDIAL ACTION ALTERNATIVES

This section describes the potential remedial action alternatives considered and documented in the final FS Report (BEI 2003) and final FS Addendum (CDM 2006) for the chemically impacted sediments of IR Site 7 AOECs. These remedial action alternatives were developed on the basis of technology evaluation, remedial alternatives screening, and detailed analyses of remedial alternatives retained after the screening process. The objective of developing and evaluating a series of potential remedial action alternatives was to provide the means for mitigating adverse biological effects observed on the benthic community living in the chemically impacted sediments of IR Site 7 AOECs.

The remedial action alternatives presented herein are based on the findings of the IR Site 7 RI (BNI 1997), the IR Site 7 FS (BEI 2003), the IR Site 7 FS Addendum (CDM 2006), and on a review of the Applicable or Relevant and Appropriate Requirements (ARARs) with respect to the chemically impacted sediments of IR Site 7 AOECs. These sediments were determined to be the only environmental medium of interest at IR Site 7. Potential receptors of risk posed by these chemically impacted sediments were determined to be the benthic community, the only ecosystem of interest at each IR Site 7 AOEC.

Remedial action alternatives for the chemically impacted sediments of IR Site 7 AOECs were developed to achieve the RAO and in accordance with requirements of CERCLA, as amended by SARA, and the NCP. Seven potential remedial alternatives were developed for the chemically impacted sediments of IR Site 7 as follows:

- Alternative 1: No Remedial Action
- Alternative 2: Limited Action Periodic Sediment Quality Monitoring
- Alternative 3: *In Situ* Capping of AOECs with "Clean" Imported Sediments
- Alternative 4: Removal and On-Site (Inside IR Site 7) Containment of AOEC Sediments Discharge of Dredged Sediments Inside Navy Mole
- Alternative 5: Removal and Off-Site (Outside IR Site 7) Containment of AOEC Sediments Discharge of Dredged Sediments Outside Navy Mole
- Alternative 6: Removal and Discharge of AOEC Sediments at Off-Site (Outside IR Site 7) Projects
- Alternative 7: Limited Action ICs

The common element among these remedial alternatives, except for Alternative 1: No Remedial Action, is to limit or preclude benthic community exposure to the chemically impacted sediments of IR Site 7 AOECs. All of these remedial alternatives are potentially applicable to both non-pier and beneath-pier sediments of IR Site 7.

Table 9-1 summarizes the remedial alternatives considered for IR Site 7 AOECs and associated base cost estimates (base year estimate for 1999). The cost estimates were initially developed

during the FS for order of magnitude comparison. Detailed cost estimates of the remedial alternatives are provided in the IR Site 7 final FS Report (BEI 2003) and final FS Addendum (CDM 2006).

9.1 ALTERNATIVE 1: NO REMEDIAL ACTION

The no remedial action alternative is required by CERCLA to be evaluated in the same manner as the other potential remedial action alternatives being considered for a site. No remedies are implemented under this alternative.

There are no special engineering considerations associated with this alternative. There are no remedial or operation and maintenance (O&M) costs associated with the no remedial action alternative.

9.2 ALTERNATIVE 2: LIMITED ACTION – PERIODIC SEDIMENT QUALITY MONITORING

Under this alternative, the physical, chemical, and biological conditions of IR Site 7 AOEC sediments would be monitored annually. Data would be analyzed, collected, and used for decisions as to whether to continue with monitoring or to implement a different action.

Monitoring quality of the chemically impacted sediments and the receptor benthic community that live in these sediments is the focus of this alternative, as such a monitoring program would:

- provide a means for periodically evaluating and assessing the condition of chemically impacted sediments;
- allow assessment of whether any natural recovery processes are occurring, and, if so, whether natural recovery is effective in improving ecological conditions at the AOECs;
- offer the advantages of causing less environmental disturbance than remedies associated with capping or dredging of chemically impacted sediments; and
- allow the opportunity to make decisions in the future with respect to whether or not other remedial actions are warranted.

The methods, techniques, tools, equipment, laboratory facilities, and skilled personnel for implementing this alternative are readily available. There are no O&M costs associated with this alternative.

9.3 ALTERNATIVE 3: IN SITU CAPPING OF AOECs WITH "CLEAN" IMPORTED SEDIMENTS

Under this alternative, chemically impacted sediments of selected IR Site 7 AOECs would be left in place and capped with an isolating medium. The capping material considered for this alternative is imported, "clean" dredged sediments with physical and particle size characteristics similar to those of IR Site 7 sediments, but without toxicity to

the benthic community, and on which a benthic community can colonize and establish itself.

A sufficiently thick cover would be designed and placed over the entire AOEC areas selected for capping to prevent the benthic community, and deeper burrowing organisms such as the ghost shrimp, from reaching the underlying, chemically impacted sediments, as well as to prevent the chemicals in the underlying sediments from diffusing into the cap and reaching the benthic community inhabiting the cap, thereby providing a suitable medium for the colonization of the cap surface. For conceptual design and costestimating purposes, it was assumed that the cap in this alternative would be six feet thick, based on a review of cap thicknesses used in similar projects.

Monitoring of the cap would be necessary during and immediately after construction, followed by long-term monitoring at less-frequent intervals. In addition to physical and chemical monitoring, biological monitoring of the cap would be conducted to observe and record colonization of the cap with benthic community, and to assess whether chemicals are migrating into the bioturbation zone of the cap.

Capping is inappropriate for environments with a high potential for ship scour, currents, or wave action because these disturbances can lead to cap erosion. Maintenance dredging also precludes the use of capping in areas maintained for shipping. Currents within IR Site 7 are primarily tidal in origin and result in generally quiescent flow conditions. To prevent the potential for ship scour, the capped areas would have to be restricted to ship traffic that might jeopardize the integrity of the cap. This alternative can provide chemical migration control and minimize the exposure of the benthic community to chemicals in the sediments.

In general, capping, as described herein, can be readily implemented. Construction and engineering controls for capping operations exist and can be easily implemented. Monitoring the cap after its construction uses well-established sampling and analytical methods as well as marine survey technologies.

For the purposes of this alternative, it was considered that among the IR Site 7 AOECs, capping was most implementable at the non-pier AOECs B and C. The estimated volume of capping material was 900,000 cubic yards (cy) for AOEC B, and 650,000 cy for AOEC C. Evaluations during the design stage may dictate placement of additional capping material to prevent failure due to scour or diffusion of chemicals. Additional cap thickness or barrier layers may also need to be included to mitigate the effects of deep burrowing species on cap integrity.

O&M costs would include monitoring of the physical, chemical, and benthic qualities of the cap, and maintenance of the cap for as long as the cap is in service. ICs would be implemented to minimize the disturbance of the cap, and CERCLA statutory five-year reviews of the remedy would be implemented for as long as the cap is in service.

9.4 ALTERNATIVE 4: REMOVAL AND ON-SITE (INSIDE IR SITE 7) CONTAINMENT OF AOEC SEDIMENTS – DISCHARGE OF DREDGED SEDIMENTS INSIDE NAVY MOLE

Under this alternative, chemically impacted sediments would be dredged, transported, and contained within IR Site 7, thus precluding the need for further remedial action. This would be accomplished by removing chemically impacted sediments from selected AOECs and placing these sediments within a diked containment to be constructed for this purpose inside IR Site 7. The containment would then be capped with a two-foot-thick layer of "clean" sediment. The cap in turn would be covered with asphalt pavement one foot in thickness.

Under this alternative, a diked containment would be constructed within AOEC C, between Pier 12 and Pier 15. This location was selected because sediment samples collected from this area had exhibited higher chemical concentrations than at other IR Site 7 AOECs. Under this alternative, these sediments with high chemical concentrations would essentially be buried beneath the containment. The dikes would extend to above the water surface and to the same elevations as the top of the existing Navy Mole. A portion of the inboard face of the Navy Mole would be used to complete the containment structure. Then, chemically impacted sediments dredged from selected AOECs would be transported by pipeline and/or barge and placed inside this containment.

This alternative provides long-term protection of the IR Site 7 benthic community against exposure to the chemically impacted sediments of IR Site 7 AOECs by removing and enclosing these sediments within a diked containment. The dredged sites are expected to be colonized by a new benthic community within approximately two years.

All components of this remedy are implementable. Necessary equipment, material, and skilled personnel for the implementation of this alternative are available. Dredging of marine sediments for their placement elsewhere can be accomplished with conventional or customized dredges, which are in routine use at the POLB and throughout the United States. Dikes are routinely constructed within LA/LB Harbors and at many other project sites in harbors and along coastlines.

Upon completion of chemically impacted sediment dredging, transport and containment, this remedy would be considered as having been successfully implemented. As such, there would be no monitoring of sediments at the dredged AOECs after completion of the remedy, because the chemically impacted sediments would have been transported out of the AOECs.

The estimated volumes of sediments to be dredged at IR Site 7 AOECs under this alternative are: 100,000 cy at AOEC A, 527,400 cy at AOEC B, 130,000 cy at AOEC C, 22,600 cy at AOEC E, 16,480 cy at AOEC F, and 21,160 cy at AOEC G.

O&M costs would include maintenance of the containment structure for as long as the containment is in service. There would be no O&M costs associated with dredged areas

after completion of sediment dredging activities. ICs would be implemented to minimize the disturbance of the containment structure, and CERCLA statutory five-year reviews of the remedy would be implemented for as long as the containment is in service.

9.5 ALTERNATIVE 5: REMOVAL AND OFF-SITE (OUTSIDE IR SITE 7) CONTAINMENT OF AOEC SEDIMENTS – DISCHARGE OF DREDGED SEDIMENTS OUTSIDE NAVY MOLE

Major elements of this alternative are similar in nearly all aspects to Alternative 4 involving discharge of dredged sediments in a containment to be constructed along the inboard face of the Navy Mole. A significant difference is that under this alternative, chemically impacted sediments dredged from selected IR Site 7 AOECs would be placed in an off-site containment to be constructed outside IR Site 7 for this purpose along the outboard face of the Navy Mole, thus precluding the need for further remedial action.

The estimated volumes of sediments to be dredged at IR Site 7 AOECs under this alternative are: 100,000 cy at AOEC A, 527,400 cy at AOEC B, 130,000 cy at AOEC C, 22,600 cy at AOEC E, 16,480 cy at AOEC F, and 21,160 cy at AOEC G.

O&M costs would include maintenance of the containment structure for as long as the containment is in service. There would be no O&M costs associated with dredged areas after completion of sediment dredging activities.

9.6 ALTERNATIVE 6: REMOVAL AND DISCHARGE OF AOEC SEDIMENTS AT OFF-SITE (OUTSIDE IR SITE 7) PROJECTS

Major elements of this alternative are similar in nearly all aspects to Alternatives 4 and 5 involving discharge of dredged sediments in containments to be constructed along the inboard or outboard face of the Navy Mole. Under this alternative, chemically impacted sediments dredged from selected IR Site 7 AOECs would be used and placed at off-site (outside IR Site 7) POLB projects in the harbor, thus precluding the need for further remedial action.

The estimated volumes of sediments to be dredged at IR Site 7 AOECs under this alternative are: 100,000 cy at AOEC A, 527,400 cy at AOEC B, 130,000 cy at AOEC C, 22,600 cy at AOEC E, 16,480 cy at AOEC F, and 21,160 cy at AOEC G.

The project area where these sediments are eventually discharged would be monitored by POLB. There would be no O&M costs associated with dredged areas after completion of sediment dredging activities.

9.7 ALTERNATIVE 7: LIMITED ACTION – INSTITUTIONAL CONTROLS

Under this remedy, ICs in the form of legal or administrative mechanisms are used to limit the disturbance of chemically impacted sediments and to restrict use, access, and/or exposure to contaminants at a site. ICs would be described in the remedial design reports, which will be developed and submitted to the Federal Facility Site Remediation Agreement (FFSRA) signatories for review.

This remedy would include the means for:

- preventing unauthorized or uncontrolled disturbance and thereby the migration of the chemically impacted AOEC sediments; and
- maintaining AOEC use consistent with the existing port-related and industrial use.

There are no special engineering considerations associated with this remedy. The methods, administrative rules and procedures, legal precedents, and administrative personnel for implementing this remedy are readily available.

Section 10 COMPARATIVE ANALYSIS OF POTENTIAL REMEDIAL ACTION ALTERNATIVES

This section presents the results of comparative analyses conducted to evaluate the relative advantages and disadvantages of each remedial action alternative in relation to the nine evaluation criteria outlined in CERCLA Section 121(b), as amended. The results of these analyses allow decision makers the opportunity to identify key issues that may need to be balanced between the various potential remedial action alternatives being considered. A complete discussion of the comparative evaluation of the potential remedial action alternatives for IR Site 7 can be found in the final FS Report for IR Site 7 (BEI 2003).

CERCLA evaluation criteria are based on requirements promulgated in the NCP. As stated in the NCP (40 C.F.R. § 300.430[f]), remedy evaluation criteria are arranged in the following hierarchical manner: threshold criteria, primary balancing criteria, and modifying criteria. A remedy must meet the threshold criteria to be eligible for selection. Primary balancing criteria are used to weigh major trade-offs among remedies and to identify the most favorable. Modifying criteria are taken into account after public comments are received on the Proposed Plan.

The nine criteria are listed below and described in the following sections, along with comparative analysis of the potential remedial action alternatives considered for IR Site 7 AOECs:

- 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
 - Short-term Effectiveness
 - Implementability
 - Cost
- Modifying Criteria
 - State Acceptance
 - Community Acceptance

10.1 OVERALL PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT

Evaluation of remedial action alternatives with respect to this criterion addresses how the remedies would affect existing risk posed by identified potential exposure pathways

through treatment, engineering actions, monitoring, or ICs. The evaluation also examines whether the remedial alternatives pose any unacceptable short-term or cross-media impacts.

Alternative 3 involves capping chemically impacted sediments in-situ to provide a 'clean' sediment layer for benthic community activity, and to prevent disturbance of the chemically impacted sediments that would be covered by the cap. The overall protectiveness of capping depends upon the thickness and stability of the cap as well as the stability of the sediments beneath the cap. Capping would be protective of the environment at any of the AOECs.

Alternatives 4, 5, and 6 involve dredging chemically impacted sediments and transporting them to locations where they would not pose a risk to human health or the environment. As a result, the receptor benthic community would no longer be exposed to these sediments, and these alternatives would provide overall protection to the environment at any of the AOECs.

Periodic sediment quality monitoring (Alternative 2) and ICs (Alternative 7), which are non-dredging remedial alternatives, would leave chemically impacted sediments on-site at IR Site 7. The protectiveness of these alternatives depends on whether the benthic community is exposed to the chemically impacted sediment, and the stability of the chemically impacted sediments and any overlying sediments.

At non-pier AOEC A, chemically impacted sediments located within the subsurface sediments would represent a probable exposure of benthic community to unacceptable levels of chemical concentrations if released or exposed. They are overlain by 'clean' sediments which can be considered a natural sediment cap and for which no adverse benthic community effects were reported. However, AOEC A is located adjacent to a new wharf developed for accommodating deep-draft cargo vessels, and thereby potentially affected by frequent ship traffic and associated impacts such as ship wake and propeller wash, which could have an adverse affect on the stability of AOEC A sediments. As such, Alternatives 2 and 7 would not provide overall protection to the environment at AOEC A.

At non-pier AOEC C, the chemically impacted sediments comprise the surface sediments with reported adverse impacts on the benthic community. Thus Alternatives 2 and 7 would not provide overall protection to the environment at AOEC C.

At AOECs E, F, and G, which are located beneath piers, chemically impacted sediments comprise the subsurface sediments, and are overlain by surface sediments for which no adverse benthic community effects were reported. The subsurface sediments are covered by these surface sediments that are armored with shell hash which helps to stabilize the sediments. As long as the subsurface sediments are not disturbed they are not considered to pose a risk to the benthic community. Therefore at AOECs E, F, and G Alternatives 2 and 7 meet the threshold criteria of overall protection of human health and the environment.

Alternative 1 does not include any actions, and as such it would not be protective of the environment at any of the AOECs because there is no mechanism to prevent the exposure

of the benthic community to chemically impacted surface sediment, or to prevent or monitor sediment disturbance that could expose chemically impacted subsurface sediments that would pose a threat to the benthic community.

10.2 COMPLIANCE WITH APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS

This criterion is used to determine whether each remedial action alternative would meet federal and state ARARs.

CERCLA Section 121(d) (42 U.S.C. § 9621[d]) specifies that remedial actions must attain a degree of cleanup that assures protection of human health and the environment. Additionally, remedial actions that leave hazardous substances, pollutants, or contaminants on-site must meet standards, requirements, limitations, or criteria that are ARARs. Federal ARARs for any site may include requirements under any federal environmental laws. State ARARs include promulgated requirements under state environmental or facility-siting laws that are more stringent than federal ARARs and that have been identified by the state in a timely manner.

CERCLA Section 121 states that, at the completion of a remedial action, a level or standard of control required by an ARAR will be attained for wastes that remain on site. In addition, the NCP, 40 C.F.R. § 300.435(b)(2), requires compliance with ARARs during the remedial design/remedial action.

ARARs are triggered only when a remedial action is taken; as such, no ARARs would take effect under the no remedial action alternative (Alternative 1). All other remedial alternatives (Alternatives 2 through 7) considered for the chemically impacted sediments of IR Site 7 AOECs would meet identified chemical-, location-, and action-specific ARARs.

Remedial alternatives involving sediment quality monitoring (Alternative 2) and ICs (Alternative 7) would yield data and information that can be used to assess the compliance of the remedial alternative with identified ARARs, predict a future completion point, or support modification to the alternative if required.

10.3 LONG-TERM EFFECTIVENESS AND PERMANENCE

This criterion is used to assess the ability of a remedy to continue protecting human health and the environment over time after the remedy has been implemented.

The *in situ* capping alternative (Alternative 3) would provide long-term effectiveness and permanence at AOEC C because the chemically impacted sediments would be contained beneath a 'clean' sediment cap, limiting the disturbance and migration of the capped sediments. The overall long-term effectiveness and permanence of capping depends upon the thickness and stability of the cap as well as the stability of the sediments beneath the cap. The cap would need to be periodically inspected and have maintenance when necessary.

The capping alternative was considered inappropriate for AOEC A because the cap would decrease the navigable water depth and diminish the long-term usefulness of this area for POLB operations. Capping was also considered inappropriate for AOECs E, F, and G because of the existing piers and their pile supports.

The capping alternative would temporarily result in a loss of benthic habitat beneath the footprint of the cap; this loss would be remedied within a relatively short time as new benthic community inhabits the surface of the cap.

Dredging alternatives (Alternatives 4, 5, and 6) would provide long-term effectiveness and permanence at any of the AOECs. Once the chemically impacted sediments posing risk to the benthic community have been transported away from the AOECs, to locations where they would not pose a risk to human health or the environment, no residual risk would remain at these AOECs, and no post-removal long-term management and monitoring functions would be required.

Dredging alternatives that require the construction of containment structures (Alternatives 4 and 5) would result in a loss of benthic habitat beneath the footprints of the containments, and would require O&M functions for the containments. The off-site projects where the POLB may use chemically impacted sediments dredged from IR Site 7 under Alternative 6 would be operated and maintained by others than the DON; the uncertainty of future POLB projects may affect the implementability of this alternative.

Overall, sediment monitoring (Alternative 2) would not provide active controls or longterm solutions for the protection of the benthic community because treatment, removal, or isolation of the chemically impacted sediments would not occur. As such, the AOEC volume and concentrations of chemicals in the AOEC sediments would not decrease appreciably. Potential migration of chemically impacted sediments beyond the limits of the AOEC due to factors such as scour and resuspension would remain a possibility. Threats to benthic community would remain. However, monitoring is an effective method for evaluating and assessing site conditions and sediment quality of the surface sediments.

At AOECs A, E, F, and G, the surface sediments have been reported not to pose adverse impacts on the benthic community; thus Alternative 2 would provide an effective means for long-term monitoring the surface sediment quality. But monitoring would not provide long-term effectiveness and permanence in the form of a remedy because the ecological risk for AOEC A is associated with subsurface sediment that the surface monitoring does not address.

At AOEC C, the chemically impacted surface sediments have been reported to pose adverse impacts on the benthic community; thus Alternative 2 would provide an effective means for long-term monitoring the surface sediment quality. But monitoring would not provide long-term effectiveness and permanence in the form of a remedy because periodic monitoring here would only confirm the existing toxicity of these sediments.

At AOECs A and C, ICs (Alternative 7) in the form of legal or administrative mechanisms for the purpose of limiting or precluding the unauthorized or unplanned disturbance of chemically impacted sediments would not provide for long-term effectiveness and permanence. Limiting ship traffic at and in the vicinity of AOEC A would adversely impact the operation of the adjacent deep-draft wharf. Surface

Section 10 Comparative Analysis of Potential Remedial Action Alternatives

sediments at AOEC C are known to be adversely impacting the benthic community and ICs would not mitigate these impacts.

The ICs remedy for sediments at AOECs E, F, and G, which are located beneath piers, is intended to minimize or limit the potential for anthropogenic processes, such as propeller wash of vessels docking or operating as part of their typical operations at or near these AOECs, to cause subsurface sediments from being scoured or suspended. This objective would be achieved by establishing operational criteria around these pier AOECs with the intent of preventing activities that might disrupt the beneath-pier sediments. Sediment disturbing activities have not been observed during the RI and FS field investigations (1994 and 1998, respectively).

The FS has assumed that beneath-pier sediments, due to their shell hash content, have more stability and more resistance to scour and resuspension than typical harbor sediments. Because of this stability, the sediments at AOECs E, F, and G are expected to remain in place within the AOEC boundaries and are not expected to represent a source of sediments to the adjacent AOEC C or to the rest of IR Site 7. According to the POLB, bathymetric investigations have shown no discernable occurrences of deposition or scour within IR Site 7. Persistent currents within IR Site 7 are not strong enough to mobilize bottom sediments (JEG 1993a). With ICs in place, the anthropogenic disturbance and exposure of beneath-pier sediments can be controlled.

The no remedial action (Alternative 1), would not provide for long-term effectiveness and permanence. As such, the AOEC volume and concentrations of chemicals in the AOEC sediments would not decrease appreciably. Potential migration of chemically impacted sediments beyond the limits of the AOEC due to factors such as scour and resuspension would remain a possibility. Threats to benthic community would remain.

10.4 REDUCTION OF TOXICITY, MOBILITY, OR VOLUME THROUGH TREATMENT

This criterion is used to assess the degree to which the potential remedial action alternatives employ recycling or treatment that reduce harmful effects to the environment (toxicity), the contaminant's ability to move (mobility), and the amount of contamination (volume), including how treatment is used to address the primary threats posed by the site.

None of the alternatives considered for the IR Site AOECs provide a form of treatment to the chemically impacted sediments of the AOECs; therefore, these alternatives would not reduce the toxicity, mobility, or volume of chemically impacted sediments at the AOECs through treatment. Based on the nature and relatively low concentrations of chemicals in the chemically impacted sediments of IR Site 7 AOECs, recovery of reusable resources under these alternatives is not expected to be practicable.

Although dredging and placing chemically impacted sediments in containments does not include any form of treatment of these sediments, containment is expected to isolate these sediments from the physical and biological processes that could typically lead to sediment and COEC mobility.

The chemically impacted sediments of IR Site 7 AOECs are not considered as principal threat wastes; they have not been reported as highly toxic or highly mobile. As such, these sediments can be effectively and reliably dredged and contained.

The dredging and containment remedies would, by reducing the mobility of these sediments and COECs, also reduce the potential for toxic effects of the chemically impacted sediments by isolating them from the benthic community that might be impacted if these sediments were left in their current place and native state.

10.5 SHORT-TERM EFFECTIVENESS

This criterion is used to assess the affects of a remedial action alternative during its implementation phase until the RAO is achieved. The remedial action alternatives are evaluated with respect to their affects on the environment and the time required in achieving the RAO. The evaluation of the remedial alternatives based on short-term protectiveness typically includes these considerations: community protection during implementation, worker protection during implementation, environmental protection during implementation, and timeliness (estimated time required for the alternative to meet the RAO).

Implementation of the no remedial action alternative (Alternative 1) does not require any remedial actions and as such does not require the use of any personal protective equipment (PPE). Implementation of ICs alternative (Alternative 7) requires legal or administrative actions and as such does not require the use of PPE. Alternatives 1 and 7 do not pose any additional risks to the environment than already exists because disturbance of chemically impacted sediments would not take place and no additional pathways for migration of chemically impacted sediments would be created.

For the remaining remedial alternatives (i.e., monitoring, capping, and dredging), workers would be protected from exposure to chemically impacted sediments by using necessary environmental safety and health monitoring equipment and PPE, which would be identified and described in the site-specific safety and health plan (SSHP). The SSHP would also address heat stress, noise, exposure to airborne chemicals, and risk of accidents potentially posed by sediment sampling, capping, and dredging activities.

Short-term effects involved with these remedial alternatives would include the unavoidable possibility of temporary resuspension of sediments and the affects of this on the surrounding environment. Mitigative measures such as silt screens can be implemented during sediment-handling activities to minimize off-site migration of chemically impacted sediments. Under dredging alternatives, sediments would be transported to the containment facility/placement area by pipes or by barges. Environmental risks may be involved if some accidental sediment discharge occurs during transit or discharge at the containment.

Implementation of the sediment quality monitoring alternative (Alternative 2) would require about three months for each sampling and analysis event, including data interpretation and preparation of a technical report. Monitoring would occur annually. Sediment dredging and containment, and capping alternatives (Alternatives 3, 4, 5, and 6)

Section 10 Comparative Analysis of Potential Remedial Action Alternatives

are expected to require 12 to 16 months each for completion. Monitoring and maintenance of the containment and the cap would occur annually.

Implementation of the ICs (Alternative 7) would continue until ecological risk no longer exists. CERCLA statutory five-year reviews would be conducted to document compliance with the environmental restrictions of the ICs remedy. The CERCLA five-year reviews would continue in perpetuity or until ICs have been released or terminated when ecological risk no longer exists.

10.6 IMPLEMENTABILITY

This criterion is used to assess the technical feasibility and institutional feasibility of implementing the remedial action alternatives as well as the availability of necessary goods and services. This criterion includes the analysis of a number of factors, including constructability, operability, and reliability of remedial technologies; ability to monitor overall performance and effectiveness of technologies; ability to obtain necessary agency approvals/permits and coordinate access to private property if needed; and availability of storage capacity, equipment, and specialists.

Implementation of the remedial action alternatives considered for IR Site 7 AOECs would require satisfying regulatory requirements. Compliance with these requirements is expected to be relatively straightforward. Difficulties or uncertainties about technical feasibility, institutional feasibility, and availability of services under these alternatives are not expected.

The no remedial action alternative (Alternative 1) has no actions. Implementation of the sediment quality monitoring alternative (Alternative 2) requires sediment sampling using a survey vessel, specialized sampling equipment, and an analytical laboratory. Implementation of the ICs alternative (Alternative 7) would involve legal or administrative actions. All phases of these tasks are easily implementable and routinely conducted. ICs and sediment quality monitoring alternatives would pose no significant difficulties if future actions are required or planned at the AOECs where they are implemented.

Implementation of capping (Alternative 3) and dredging (Alternatives 4, 5, and 6) would require dredging, transport, and placement of 'clean' and chemically impacted sediments. All phases of these tasks involve the use of well-proven dredging, sediment transport and placement, and containment construction technologies in the environmental and marine structures construction industries. A large number of vendors capable of performing these activities are available in southern California. In view of these observations, capping and dredging/construction of containment alternatives are considered to be easily and equally implementable at AOECs A and C.

These alternatives would not be easily implementable at the AOECs beneath piers. The piers, constructed with closely spaced concrete pilings, are approximately 60 feet in width and 800 feet to over 1000 feet in length. As such, dredging sediments or installing a sediment cap beneath these piers poses significant engineering considerations and disruptions of their operations.

The uncertainty of future POLB projects may affect the implementability of the dredging and off-site discharge remedy (Alternative 6). Maintenance of chemically impacted sediments used by the POLB at off-site projects under this alternative is not a component of dredging and off-site discharge remedial alternatives considered for IR Site 7.

10.7 COST

This criterion is used to assess the estimated costs of potential remedial action alternatives. The cost estimates are developed based on the conceptual descriptions and information developed for each of the remedial action alternatives. Capital costs include expenditures required to implement a remedial action and take into consideration both direct and indirect costs. Direct costs include construction costs or expenditures for equipment, labor, disposal of materials, and purchase or rental of materials required to implement the remedial action. Indirect costs include those associated with engineering, permitting, construction management, and other services necessary to carry out the remedial action. Annual O&M costs are also estimated where applicable.

Sensitivity analyses were used to determine a possible range (minus 30 to plus 50 percent) of costs for each remedial action alternative, should one or more of the critical factors that influence the capital or O&M costs vary. The factors considered in the sensitivity analyses included effective life of the remedial action, O&M costs, duration of remedial action, volume of sediments impacted by chemicals, and the method of sediment handling and placement.

Present worth analysis was used to evaluate expenditures by discounting future costs to a common base year. This 'base case' cost estimate refers to the base year estimate (1999 for IR Site 7). Table 9-1 presents the base case cost estimates for the IR Site 7 potential remedial action alternatives (BEI 2003 and CDM 2006). The cost estimates are intended solely for use in comparing potential remedial action alternatives with each other, and should not be used for project budgeting or planning purposes. The FS (BEI 2003) and FS Addendum (CDM 2006) provide detailed descriptions of the assumptions used to develop the cost estimates. The following presents a summary of these cost assumptions:

- periodic monitoring would continue for 30 years;
- *in situ* cap monitoring would continue for 30 years;
- no post-remedy monitoring is required at dredged AOECs; and
- ICs would continue for 30 years and include statutory CERCLA five-year reviews.

Under CERCLA, capital and O&M costs are estimated for a period not to exceed 30 years. Monitoring of containment structures, sediment quality, or implementation of ICs may be found to be no longer necessary within a time-frame shorter than or longer than this 30-year period. For example, the ICs may be terminated when the ecological risk no longer exists.

As demonstrated in Table 9-1, the no remedial action alternative (Alternative 1) is the least costly, and removal and off-site (outside IR Site 7) containment (Alternative 5) is the most costly of the remedial action alternatives considered for IR Site 7 AOECs.

10.8 STATE ACCEPTANCE

This criterion reflects whether the State of California's environmental agencies (i.e., the DTSC and the Water Board) agree with, oppose, or have no objection to or comment on the remedial action alternatives developed for the individual IR Site 7 AOECs.

The DTSC and the Water Board have reviewed and commented on the IR Site 7 FS and FS Addendum and its contents including the RAO, general response actions, potential remedial technologies and processes, and potential remedial action alternatives, as well as the Proposed Plan and the preferred remedial alternatives, during the development and preparation of these documents. The FS, FS Addendum, and the Proposed Plan have been modified as appropriate by incorporating technical and administrative issues, preferences, and concerns regarding these remedial alternatives that have been expressed in technical meetings and in review comments received from the DTSC and the Water Board, and finalized.

The State of California has concurred with the remedial action alternatives developed, screened, retained and preferred for the chemically impacted sediments of IR Site 7 AOECs.

10.9 COMMUNITY ACCEPTANCE

This criterion is used to assess whether community concerns are addressed by the remedy and if the community had a preference for a remedy. Although public comment is an important part of the final decision, the DON is compelled by law to balance community concerns with other criteria.

The Proposed Plan has been presented to the community and was discussed at a public meeting. No comments were received from the public either at the Proposed Plan public meeting or during and at the conclusion of the Proposed Plan public review period.

Section 10 Comparative Analysis of Potential Remedial Action Alternatives

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Section 11 PRINCIPAL THREAT WASTES

The chemically impacted sediments of IR Site 7 are not considered principal threat wastes. Principal threat wastes are those source materials considered to be highly toxic or highly mobile that generally cannot be reliably contained, or would present a significant risk to human health or the environment should exposure occur. A source material is material that includes or contains hazardous substances, pollutants or contaminants that act as a reservoir for migration of contamination to ground water, surface water or air, or acts as a source for direct exposure. Although no "threshold level" of risk has been established to identify principal threat wastes, source material is generally considered a principal threat waste where toxicity and mobility characteristics combine to pose an increased potential risk of several orders of magnitude or where there is a risk of 10⁻³ or greater (U.S. EPA 1999).

The chemically impacted sediments of IR Site 7 are considered source materials. These sediments are not considered to be principal threat wastes because of their generally low to moderate concentrations and toxicity and limited exceedances from those of reference stations.

The human health risk assessment concluded that the risk related to IR Site 7 was similar to the risk related to LA/LB Harbors in general. According to the results of the human health risk assessment, the RI concluded that there appeared to be similar levels of health risk posed to recreational and subsistence anglers consuming California halibut and white croaker taken from IR Site 7 and from the reference stations. The existing OEHHA fish consumption advisory for the LA/LB Harbors was found to be consistent with the findings of the RI, which recommended that this advisory remain in place for IR Site 7.

Ecological risk potentially posed by the chemically impacted sediments of IR Site 7 AOECs was presented in the IR Site 7 FS on a qualitative scale of low and moderate as follows.

- "Low" ecological risk described areas that reported no adverse benthic community effects, but did report both sediment toxicity and COECs that exceeded the RI reference, as well as effects-range low (ERL) values.
- "Moderate" ecological risk described areas that reported adverse benthic community effects and COECs that exceeded the RI reference, as well as ERL values; sediment toxicity may or may not have been reported.

None of the IR Site 7 AOECs fit the description of "high" ecological risk, which would have described areas where, in addition to the benthic community, organisms such as fish and harbor seal that were evaluated in the RI Report would have exhibited adverse effects.

Section 11 Principal Threat Wastes

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Section 12 SELECTED REMEDIES

The DON has selected remedies that will achieve the RAOs for the chemically impacted sediments of IR Site 7 AOECs. Remedy selection for each AOEC was based on the results of the RI and the FS conducted for IR Site 7, the Administrative Record file for this site, and an evaluation of comments submitted by interested parties during the public comment period held for the IR Site 7 Proposed Plan. Groundwater and surface water at IR Site 7 do not require action.

For AOECs A and C, the DON has selected a primary and a secondary remedy. The primary remedy comprises dredging, transportation and placement of chemically impacted sediments at off-site (outside IR Site 7) POLB projects (Alternative 6). The secondary remedy (to be implemented if appropriate POLB projects are not available) involves dredging, transporting, and containing chemically impacted sediments in a containment to be constructed for this purpose within IR Site 7 (Alternative 4). For AOECs E, F, and G, the selected remedy is ICs (Alternative 7). For AOEC B, no remedial action (Alternative 1) is necessary.

AOEC D received a NFA decision prior to the completion of the Final FS based on the 1994 RI sampling results and the 1998 FS sampling results. The DON, POLB, and Agencies/Trustees agreed to the NFA decision because the results indicated that the sediments of AOEC D pose very little ecological risk. AOEC D was briefly discussed in the FS (BEI 2003) and Proposed Plan (DON 2006), but was not evaluated further in those documents.

The rationale for selection of these remedies, descriptions of the remedies, their estimated costs, and the estimated outcomes are discussed below.

12.1 AOEC B - NO REMEDIAL ACTION REMEDY

The no remedial action remedy (Alternative 1) was selected for AOEC B.

12.1.1 Summary of Rationale for the Selected Remedy

Data analysis conducted during the FS indicated that the benthic community at AOEC B was already in a healthy and diverse state. Concentrations of chemical compounds reported in the sediments have not resulted in sediment toxicity, adverse effects on the benthic community, or ecological risk. Therefore, the rationale for selecting the no remedial action remedy is that no action is necessary to achieve the RAO; a healthy and diverse benthic community is supported at AOEC B.

12.1.2 Description of the Selected Remedy

No response actions are taken under this remedy. No costs are associated with this alternative.

12.2 AOEC A AND AOEC C

Primary and secondary remedies were selected for AOECs A and C to provide flexibility to the POLB during remedy implementation. Dredging, transportation, and placement of chemically impacted sediment at off-site (outside IR Site 7) POLB projects (Alternative 6) was selected as the primary remedy for AOECs A and C. Due to uncertainties

regarding the availability of off-site POLB projects, the DON selected a secondary remedy for these AOECs. The secondary remedy for AOECs A and C is dredging and containing chemically impacted sediments on-site (inside IR Site 7) along the inboard face of the Navy Mole.

12.2.1 Primary Remedy – Removal and Discharge of AOEC Sediments at Off-Site (Outside IR Site 7) Projects

Dredging and off-site discharge at POLB projects was selected as the primary remedy for AOECs A and C.

12.2.1.1 SUMMARY OF RATIONALE FOR PRIMARY REMEDY

Ecological risk assessment for AOECs A and C indicated that the chemically impacted sediments were adversely affecting the benthic community. The rationale for selecting the dredging and off-site (outside IR Site 7) discharge at POLB projects as the primary remedy for AOECs A and C is because it provides the greatest long-term effectiveness and permanence by removing the chemically impacted sediments from the AOECs and IR Site 7.

This remedy will provide the greatest level of protection to the benthic community, achieve the RAO for IR Site 7 in a relatively short period of time, and is easily implementable through dredging. This remedy will separate the IR Site 7 benthic community from the COECs reported in these sediments.

The sediment dredging and off-site discharge remedy was preferred over other remedies that were also considered for AOECs A and C. *In situ* capping remedy would have significantly reduced water depths at these areas and ICs would have established strict land use controls at these areas. Capping and ICs remedies would have the potential for significantly reducing the usability of these areas that are actively used by the tenants of the POLB. The no remedial action and ICs alternatives would not have separated the benthic community from the chemically impacted sediments of these AOECs.

12.2.1.2 DESCRIPTION OF PRIMARY REMEDY

Under this alternative, the chemically impacted sediments of AOECs A and C would be dredged, transported, and discharged at locations outside IR Site 7, at various POLB development projects in the harbor. Dredged sediments would be transported by pipeline and/or barge to the selected discharge areas.

This alternative provides long-term protection to the IR Site 7 benthic community against exposure to the chemically impacted sediments of AOECs A and C by placing these sediments within projects outside IR Site 7. The dredged sites are expected to be colonized by a benthic community within approximately two years.

All components of this alternative are implementable. For the purposes of evaluating this alternative, it was assumed that a clamshell bucket mechanical dredge and barge transport system would be used for dredging and transport of chemically impacted sediments of these AOECs. Silt curtains could be erected as appropriate and feasible in the dredge and containment areas to minimize off-site migration of chemically impacted sediments.

Upon completion of chemically impacted sediment dredging, transport and discharge, this remedy would be considered successfully implemented. As such, there would be no monitoring of sediments at the dredged AOECs after completion of the remedy, because the chemically impacted sediments would have been transported out of the AOECs. Further, since the dredged sediments would have been discharged by the POLB at its offsite (outside IR Site 7) projects, there will be no monitoring of the discharge areas by the DON after completion of the remedy.

The estimated volumes of sediments at IR Site 7 AOECs are approximately 100,000 cy at AOEC A and 130,000 cy at AOEC C.

The dredging limits will be refined and the dredging method(s) will be determined during the Remedial Design phase.

12.2.2 Secondary Remedy - Removal and On-site (Inside IR Site 7) Containment of AOEC Sediments – Discharge of Dredged Sediments Inside Navy Mole

Dredging and on-site containment (inside IR Site 7) (Alternative 4) was selected as the secondary remedy for AOECs A and C.

12.2.2.1 SUMMARY OF RATIONALE FOR SECONDARY REMEDY

The rationale for selecting dredging and on-site (inside IR Site 7) containment as the secondary remedy for AOECs A and C is similar to the rationale for the primary remedy. However, due to the uncertainties regarding the availability of off-site POLB projects, the rationale considered the benefit of an alternative containment location.

12.2.2.2 DESCRIPTION OF SECONDARY REMEDY

Under this secondary remedy, the chemically impacted sediments of AOECs A and C would be dredged, transported, and contained within IR Site 7. ICs would be implemented to minimize the disturbance of the containment structure, and CERCLA statutory five-year reviews of the remedy would be implemented for as long as the containment is in service.

A containment for this purpose, would be constructed within AOEC C, between Pier 12 and Pier 15. This location was selected because sediment samples collected from here had exhibited higher chemical concentrations than at other IR Site 7 AOECs. Dredged sediments would be transported by pipeline and/or barge and essentially be buried beneath the containment. The containment would then be capped with a two-foot-thick layer of "clean" sediment. The cap in turn would be covered with asphalt pavement one foot in thickness. The containment would extend to above the water surface and to the same elevations as the top of the existing Navy Mole. A portion of the inboard face of the Navy Mole would be used to complete the containment structure.

Similar to the primary remedy, this alternative provides long-term protection of the IR Site 7 benthic community against exposure to the chemically impacted sediments of IR Site 7 AOECs by enclosing these sediments within a containment. The dredged

sites are expected to be colonized by a new benthic community within approximately two years.

All components of this alternative are implementable. For the purposes of evaluating this alternative, it was assumed that a clamshell bucket mechanical dredge and barge transport system would be used for dredging and transport of chemically impacted sediments of these AOECs. Silt curtains could be erected as appropriate and feasible in the dredge and containment areas to minimize off-site migration of chemically impacted sediments. Dikes are routinely constructed within LA/LB Harbors and at many other project sites in harbors and along coastlines.

Upon completion of chemically impacted sediment dredging, transport and containment, this remedy would be considered successfully implemented. As such, there would be no monitoring of sediments at the dredged AOECs after completion of the remedy, because the chemically impacted sediments would have been transported out of the AOECs. Periodic monitoring of the containment will be required for as long as the containment is in service.

The estimated volumes of sediments at IR Site 7 AOECs are approximately 100,000 cy at AOEC A and 130,000 cy at AOEC C.

The dredging limits will be refined and the dredging method(s) will be determined during the Remedial Design phase.

12.3 AOEC E, AOEC F, AND AOEC G - LIMITED ACTION - ICs REMEDY

The ICs alternative (Alternative 7) was selected for AOECs E, F, and G.

12.3.1 Summary of Rationale for Selected Remedy

Chemically impacted sediments beneath these piers are considered to represent ecological risk if these sediments are disturbed and the receptor benthic community is exposed to them. The rationale for selecting ICs, such as deed restrictions and land-use controls, for these three pier AOECs was that application of environmental restrictions for the sediments beneath these piers would prevent unauthorized or uncontrolled disturbance and thereby the exposure and migration of the chemically impacted beneath-pier sediments to the benthic community at these areas. These piers are in current use by the DON (Pier 12, Fuel Pier), and by the tenants of the POLB (Pier 15 and Pier 16), as such, ICs were chosen as the preferred remedy to allow continued port-related and industrial use.

12.3.2 Description of Selected Remedy

This remedial action involves the establishment of ICs in the form of legal or administrative mechanisms used to limit or preclude the disturbance of the beneath-pier chemically impacted sediments of AOECs E, F, and G.

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 the use restrictions.

Under this remedy, the DON has determined that it will rely upon administrative mechanisms for implementation of the ICs for AOEC E (submerged lands beneath Pier 12) and legal mechanisms for implementing ICs for AOECs F and G (submerged lands beneath Piers 15 and 16). More specifically, the ICs developed for AOECs F and G will be incorporated into any quitclaim deed conveying real property containing such AOECs.

Commensurate with the closure and transfer of federally owned portions of IR Site 7 to a nonfederal entity, the DON plans to incorporate applicable ICs into the "Covenant to Restrict Use of property" as provided in the March 2000 "Memorandum of Agreement Between the United States Department of the Navy and the California Department of Toxic Substances Control." This Covenant will incorporate the specific ICs into environmental restrictive covenants that run with the land and that are enforceable by DTSC and the DON against future transferees. The quitclaim deeds will include the identical ICs in environmental restrictive covenants that run with the land and that will be enforceable by the DON against future transferees.

The efficiency of ICs will be monitored by CERCLA statutory five-year reviews in perpetuity or until the ICs have been released and terminated when ecological risk no longer exists.

12.4 ESTIMATED COSTS

Estimated costs of the remedies presented in this ROD are provided in Table 12-1. These are order-of-magnitude engineering cost estimates expected to be within +50 to -30 percent of actual remedy cost which were originally developed in the FS for comparative purposes. Detailed cost estimates for these remedial action alternatives are presented in the IR Site 7 final FS Report (BEI 2003) and the final FS Addendum (CDM 2006).

Costs of these remedies may change as a result of new information and data that may be collected during planning, design and implementation of the selected remedies. Significant changes may be documented in memoranda to the administrative record as an explanation of significant differences, or as an amendment to this ROD.

12.5 EXPECTED OUTCOMES OF THE SELECTED REMEDIES

The expected outcome of the primary and secondary remedies for AOECs A and C is to allow these areas to be inhabited by a new benthic community in the absence of chemically impacted sediments. Implementation of the primary or secondary remedy for AOECs A and C will achieve this outcome through post-remedy verification sampling and laboratory analysis of sediments at final dredge limits that will ascertain that the chemically impacted sediments have indeed been removed from AOECs A and C. Postremedy monitoring of AOECs A and C is not necessary because the chemically impacted sediments at these AOECs would have been dredged and transported away for containment. Completion of the primary or secondary remedy will allow these areas to be inhabited with new benthic community in the absence of the chemically impacted sediments that had occupied these areas previously. The expected outcome of the selected remedy for AOECs E, F, and G is to allow the continued use of these piers while also limiting or precluding the disturbance or dredging of beneath-pier chemically impacted sediments so as not to impact the benthic community. Implementation of the selected remedy for AOECs E, F, and G will achieve this outcome through legal or administrative mechanisms, details of which will be developed in the Remedial Design phase.

CERCLA statutory five-year reviews of the IC remedy will be conducted in perpetuity or until ICs have been released or terminated when ecological risk no longer exists.

Section 13 STATUTORY DETERMINATIONS

Under CERCLA, the DON's primary responsibility is to undertake remedial actions that achieve adequate protection of human health and the environment. Section 121 of CERCLA establishes several statutory requirements and preferences specifying that, when complete, the remedial action must comply with ARARs established under federal and state laws unless a statutory waiver is justified. The remedy also must be cost-effective and use permanent solutions and alternative treatment technologies to the maximum extent practicable. Additionally, the statute includes a preference for remedies that, as their principal element, permanently and significantly reduce the volume, toxicity, or mobility of hazardous substances.

The following sections discuss how the remedies presented in this ROD meet these statutory requirements and preferences. Complete discussions are provided in the IR Site 7 FS (BEI 2003) and the IR Site 7 FS Addendum (CDM 2006).

13.1 PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT

The human health risk assessment indicated that there was no appreciable difference in cancer and noncancer risks between anglers consuming fish caught at IR Site 7 and anglers consuming fish caught at the reference stations in LA/LB Harbor.

Ecological receptors identified for the IR Site 7 AOECs are the benthic community. The ecological medium of interest for IR Site 7 is the surficial sediments of IR Site 7. The exposure routes of chemical compounds associated with the sediments at IR Site 7 AOECs to the benthic community include dermal contact with sediments, ingestion of sediments, and ingestion of smaller sediment-dwelling organisms.

The RAO developed for IR Site 7 is to support the presence of an ecologically productive and diverse benthic community in the sediments of IR Site 7 AOECs, commensurate with existing land use (port-related and industrial), through various options that can include no remedial action, periodic monitoring of sediment quality, deed restrictions, or other remedial actions such as dredging and discharging or containing chemically impacted sediments within or outside IR Site 7.

The remedies selected for the IR Site 7 AOECs are intended to be protective of the environment by separating chemically impacted sediments from the receptor benthic community of IR Site 7.

Short-term effects due to dredging activities include a possibility of temporary resuspension of sediments. Sediment resuspension may disturb the aquatic environment including the benthic community by reducing light penetration and burial beneath settled sediment. Sediment screens can be used during dredging activities to alleviate such concerns related to the resuspension of sediments.

13.2 COMPLIANCE WITH ARARs

ARARs include substantive provisions of any promulgated federal or more stringent state environmental standards, requirements, criteria, or limitations that are determined to be legally applicable or relevant and appropriate requirements for a CERCLA site or action. The selected remedies for IR Site 7 AOECs are intended to comply with such federal and state requirements.

CERCLA Section 121(e), 42 U.S.C. § 9621(e), states that no federal, state, or local permit is required for remedial actions conducted entirely on-site. Actions conducted entirely on-site must meet only the substantive, not the administrative, requirements of the ARARs. Any action conducted off-site is subject to the full requirements of federal, state, and local regulations.

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-by-site basis for remedial actions where CERCLA authority is the basis for cleanup. The chemical-, location-, and action-specific ARARs identified for the remedies selected for IR Site 7 AOECs are discussed below.

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 identified for sediments and surface waters of the IR Site 7 AOECs are presented in Table 13-1 and discussed below. The selected remedies can be implemented in general compliance with these chemical-specific ARARs.

13.2.1.1 SURFACE WATER ARARs

Surface water is not being remediated at IR Site 7. However, because one of the selected remedies for IR Site 7 includes sediment dredging that could affect the surface water of IR Site 7, chemical-specific surface water requirements are evaluated in this section.

13.2.1.1.1 FEDERAL ARARS

The substantive provisions of the following requirement were identified as federal ARARs for the selected remedial actions at IR Site 7:

• Clean Water Act (California Toxics Rule [CTR] and National Toxics Rule [NTR]) at 40 C.F.R. § 131.36(b) and 131.38

Clean Water Act, 33 U.S.C. On 22 December 1992, U.S. EPA promulgated federal water quality standards under the authority of the federal Clean Water Act (CWA) Section 303(c)(4)(B), 33 U.S.C., Chapter (ch.) 26, § 1313, in order to establish water quality standards required by the CWA where the state of California and other states had failed to do so (57 *Federal Register* [Fed. Reg.] 60,848 [1992]). These standards have been amended over the years in the Fed. Reg. including the amendments of the NTR (60 Fed. Reg. 22,228 [1995]), and they are applicable federal ARARs for discharge to or cleanup of surface water. The water quality standards, as amended, are codified at 40 C.F.R. § 131.36.

U.S. EPA promulgated a rule on 18 May 2000 to fill a gap in California water quality standards that was created in 1994 when a state court overturned the state's water quality control plans (WQCPs) that contained water quality criteria for priority toxic pollutants. The rule is commonly called the CTR. The rule is codified at 40 C.F.R. § 131.38. These federal criteria are legally applicable in the state of California for inland surface waters and enclosed bays and estuaries for all purposes and programs under the CWA.

The standards of the CTR apply to the state's designated uses and "supersede any criteria adopted by the State, except when state regulations contain criteria which are more stringent for a particular use in which case the state's criteria will continue to apply."

Federal water quality standards of the CTR and NTR are applicable to discharges to surface waters, including discharge during sediment dredging. However, there is no standard for turbidity.

13.2.1.1.2 STATE ARARS

The substantive provisions of the following requirements were identified as state ARARs for the remedies selected at IR Site 7:

- State and Regional Water Resources Control Boards, *California Water Code* (Cal. Water Code), Division (div.) 7, Sections (§§) 13241, 13243, 13263(a), 13269, and 13360 (Porter-Cologne Water Quality Control Act);
- WQCP for the Los Angeles Region (Basin Plan) (Cal. Water Code § 13240), water quality objectives (WQOs) and beneficial uses for the Long Beach Harbor West Basin (IR Site 7 comprises the West Basin of Long Beach Harbor);
- Statement of Policy With Respect to Maintaining High Quality of Waters in California, California State Water Resources Control Board (SWRCB); Resolution (Res.) 68-16; and
- Sources of Drinking Water Policy, SWRCB Res. 88-63.

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

Water Quality Control Plan, Los Angeles Region. Chapter 2 of the Basin Plan lists the following beneficial uses for the West Basin of Long Beach Harbor under "All Other Inner Areas" of the LA/LB Harbor:

- industrial service supply;
- navigation;

- noncontact water recreation;
- commercial and sport fishing;
- marine habitat;
- rare, threatened, or endangered species;
- water contact recreation; and
- water shellfish harvesting.

The current and future use of IR Site 7 and the LA/LB Harbors is port-related and industrial. Consequently, contact and noncontact water recreation; commercial, subsistence, and sport fishing; and water shellfish harvesting are not expected to be current or future planned uses of IR Site 7 AOECs.

The WQOs listed in Chapter 4 of the Basin Plan are applicable for discharges resulting from remedial action alternatives that include dredging of IR Site 7 AOEC sediments. These dredging activities could temporarily increase turbidity at the work area(s). The substantive provisions for the turbidity WQOs state that increases in natural turbidity attributable to controllable water quality factors shall not exceed the following limits:

- where natural turbidity is between 0 and 50 nephelometric turbidity units (NTUs), increases shall not exceed 20 percent;
- where natural turbidity is greater than 50 NTUs, increases shall not exceed 10 percent; and
- allowable zones of dilution within which higher concentrations may be tolerated may be defined for each discharge.

Chapter 4 of the Basin Plan specifies waste discharge requirements (WDRs) for dredging activities. The substantive provisions of the WDRs for dredging are applicable ARARs for sediment dredging. The substantive provisions specify that dredging activities will not cause adverse water quality impacts.

SWRCB Res. 68-16, Statement of Policy With Respect to Maintaining High Quality of Waters in California. This policy requires that "any activity which 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 which will result in the best practicable treatment or control of the discharge necessary to assure that a) pollution or nuisance will not occur and b) the highest water quality consistent with maximum benefit to the people of the State will be maintained."

The DON has determined that SWRCB Res. 68-16 is not a chemical-specific ARAR for determining remedial action goals. The DON has determined that migration of already contaminated sediment is not a discharge governed by the language in SWRCB 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 sediments that are already degraded. The California Regional Water Quality Control Board (RWQCB) disagrees with the DON's position on SWRCB Res. 68-16. The SMOs developed for IR Site 7 will be used in dredging remedy planning that would be consistent with the SWRCB Res. 68-16 Antidegradation policy and beneficial uses of the surface waters. Since the RWQCB has agreed to the SMOs to be used in planning sediment dredging remedies, this disagreement will be documented but will not affect the remedy.

However, the DON agrees that SWRCB Res. 68-16 is an applicable state ARAR for potential discharges during dredging activities that could result in a new discharge to surface waters. The surface water beneficial uses in the Basin Plan are applicable to remedial action alternatives evaluated for the sediments of IR Site 7 AOECs. A potential concern for the water column could exist during sediment dredging and discharge under some of the remedial actions for the IR Site 7 AOECs. Accordingly, in the event sediment dredging is implemented as a remedy, protection of beneficial uses will rely on SMOs developed for the sediments of IR Site 7 AOECs.

13.2.1.2 SEDIMENT ARARs

No federal or state chemical-specific ARARs for benthic sediment cleanup levels were identified for IR Site 7. However, SMOs developed for IR Site 7 sediments, and agreed to by the Agencies/Trustees and the POLB, were determined to be used as guidance for remedial actions involving sediment dredging planned for IR Site 7 AOECs. The SMOs are included in the final Technical Memorandum 1 for IR Site 7, February 2002 (Appendix B of the IR Site 7 final FS Report [BEI 2003]).

13.2.2 Location-Specific ARARs

Location-specific ARARs are restrictions on the concentrations of hazardous substances or on activities solely because they are in specific locations such as floodplains, wetlands, historic places, and sensitive ecosystems or habitats. Location-specific ARARs identified for the IR Site 7 AOECs are presented in Table 13-2 and discussed below. The selected remedial actions will be implemented to comply with location-specific ARARs.

13.2.2.1 FEDERAL ARARs

The substantive provisions of the following requirements were identified as the most stringent of federal location-specific ARARs for the remedial actions at IR Site 7:

- Rivers and Harbors Act; and
- 16 U.S.C. §§ 1451–1464 (Coastal Zone Management Act [CZMA]).

Rivers and Harbors Act. The Rivers and Harbors Act, applicable only to AOECs A and C in the event that the secondary remedy is implemented, includes technical requirements for construction of dikes and for areas near navigation lanes, in addition to those for the protection of identified bird and mammal species, associated prey and habitat, and water quality with regard to beneficial uses. Quality of sediments placed in the on-site containment is not expected to pose a significant threat to protected bird species reported to use the area as feeding grounds; neither these species nor fish on which they feed

would come in contact with the sediments placed within the containment. After dredging of the chemically impacted sediments, the remaining AOECs A and C sediments would not be expected to pose a risk to the marine environment.

Coastal Zone Management Act. The CZMA (16 U.S.C. §§ 1451–1464) and the accompanying regulations in 15 C.F.R. § 930 require that federal agencies conducting or supporting activities directly affecting the coastal zone conduct or support those activities in a manner that is consistent with the approved state coastal zone management programs. A state coastal zone management program (developed under state law and guided by the CZMA) sets forth objectives, policies, and standards to guide public and private uses of lands and water in the coastal zone. The substantive provisions of the CZMA are applicable to IR Site 7 because it is located within the coastal zone.

13.2.2.2 STATE ARARs

The substantive provisions of the following requirements were identified as the most stringent of the state location-specific ARARs for the remedial actions at IR Site 7:

• *California Public Resources Code* (Cal. Pub. Res. Code) §§ 30000–30900 and *California Code of Regulations* (Cal. Code Regs.) Title (tit.) 14, §§ 13001–13666.4 (California Coastal Act of 1976)

California Coastal Act of 1976. Cal. Pub. Res. Code §§ 30000–30900 and Cal. Code Regs. tit. 14, §§ 13001–13666.4 regulate activities associated with development to control direct significant impacts on coastal waters and to protect state and national interests in California coastal resources. The California Coastal Act policies set forth in the act constitute the standards used by the California Coastal Commission in its coastal development permit decisions and for the review of local coastal programs. Cal. Pub. Res. Code §§ 30702–30708 are applicable to the IR Site 7 remedial action alternatives.

13.2.3 Action-Specific ARARs

Action-specific ARARs identified for the remedies selected for IR Site 7 AOECs are presented in Table 13-3 and discussed below.

13.2.3.1 NO REMEDIAL ACTION – AOEC B

ARARs are not triggered for the no remedial action alternative because ARARs apply to "any removal or remedial action conducted entirely on-site" and "no action" is not considered a removal or remedial action (CERCLA Section 121[e], 42 U.S.C. § 9621[e]). CERCLA Section 121 (42 U.S.C. § 9621) cleanup standards for selection of a Superfund remedy, including the requirement to meet ARARs, are not triggered by the no action alternative (U.S. EPA 1991). Therefore, a discussion of compliance with action-specific ARARs is not necessary for this remedy.

13.2.3.2 LIMITED ACTION – INSTITUTIONAL CONTROLS – AOECS E, F, AND G

ICs in the form of legal or administrative mechanisms can be used to reduce the exposure of benthic community to chemically impacted sediments by preventing unauthorized disturbance and subsequent migration of these sediments. Examples of ICs would include limiting the use of IR Site 7 pier AOECs E, F, and G to port-related activities,

maintaining access control and oversight, and not allowing disturbance of the beneathpier sediments at these AOECs (e.g., dredging or construction) without prior authorization and evaluation.

ICs would provide the means to prevent unauthorized or uncontrolled disturbance and/or exposure of beneath-pier sediments. State statutes that have been accepted by the DON as ARARs for implementing ICs and entering into an Environmental Restriction Covenant and Agreement with DTSC include substantive provisions of the:

- Cal. Code Regs. tit.22 § 67391.1;
- *California Civil Code* (Cal. Civ. Code) § 1471;
- Cal. Health & Safety Code § 25202.5;
- Cal. Health & Safety Code §§ 25222.1 and 25355.5(a)(1)(C);
- Cal. Health & Safety Code § 25233(c); and
- Cal. Health & Safety Code § 25234.

Cal. Code Regs. tit. 22, § 67391.1. DTSC promulgated a regulation on 19 April 2003 regarding "Requirements for Land Use Covenants" in Cal. Code Regs. tit. 22, § 67391.1. This regulation provides for a land-use covenant to be executed and recorded when remedial actions are taken and hazardous substances will remain at the property at concentrations that are unsuitable for unrestricted use of the land. The substantive provisions of this regulation have been determined to be "relevant and appropriate" state ARARs by the DON.

Cal. Civ. Code § 1471. 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 or the environment as a result of the presence on the land of hazardous materials, as defined in Section 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 environmental restriction covenant and agreement and run with the land.

Cal. Health & Safety Code § 25202.5. The substantive provisions of Cal. Health & Safety Code § 25202.5 are the general narrative standard to restrict "present and future uses of all or part of the land on which the . . . facility . . . is located . . .". These substantive provisions will be implemented by incorporation of restrictive environmental covenants in the Environmental Restriction Covenant and Agreement at the time of transfer for purposes of protecting present and future public health and safety.

Cal. Health & Safety Code §§ 25222.1 and 25355.5(a)(1)(C). These codes 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 Cal. Health & 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 Cal. Health & 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 land." The DON will comply with the substantive requirements of Cal. Health & Safety Code §§ 25222.1 and 25355.5(a)(1)(C) by incorporating the CERCLA use restrictions into the DON's deed of conveyance in the form of restrictive covenants under the authority of Cal. Civ. Code § 1471 and into the environmental restriction covenant and agreement. The substantive provisions of Cal. Health & Safety Code §§ 25222.1 and 25355.5(a)(1)(C) may be interpreted in a manner that is consistent with the substantive provisions of Cal. Civ. Code § 1471. The covenants shall be recorded with the deed and run with the land.

Cal. Health & Safety Code § 25233(c). This code sets forth substantive criteria for granting variances from the uses prohibited in § 25232(b)(1)(A)-(E) based on specified environmental and health criteria. Cal. Health & Safety Code § 25232(b)(1)(A)-(E) prohibits certain uses of land containing hazardous waste without a specific variance. This section requires that land-use restrictions be used to prohibit the following activities: residential use of the AOECs, construction of hospitals for humans, schools for persons under 21 years of age, day care centers for children, or any permanently occupied human habitation on the AOECs.

Cal. Health & Safety Code § 25234. This code sets forth 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 Environmental Restriction Covenant and Agreement between the DON and DTSC, the appropriate and relevant portions of Cal. Health & 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.

U.S. EPA does not agree with the DON and DTSC that the sections of the Cal. Civ. Code and Cal. Health & Safety Code cited above are ARARs because they fail to meet the criteria for ARARs pursuant to U.S. EPA guidance (i.e., they are administrative, not substantive, requirements that establish a discretionary way to implement land-use restrictions). However, U.S. EPA agrees that the substantive provisions of the recently promulgated regulation (Cal. Code Regs. tit. 22, § 67391.1) providing for the execution of a land-use covenant between DON and DTSC is a relevant and appropriate state ARAR. DTSC's position is that all of the state statutes and regulations referenced in this section are ARARs.

13.2.3.3 REMOVAL AND DISCHARGE OF AOEC SEDIMENTS AT OFF-SITE (OUTSIDE IR SITE 7) PROJECTS – AOEC A AND AOEC C (PRIMARY REMEDY)

CWA Section 404 requirements identified in the FS as ARARs for the sediment dredging and discharge remedial action alternatives do not regulate the act of dredging but rather the discharge of dredged material. No federal ARARs were identified for the act of dredging. This remedial alternative would discharge off-site and does not include on-site discharge of dredged material. ARARs address only CERCLA activities conducted onsite. The off-site discharge will need to comply with applicable requirements including procedural requirements (i.e., permits may be required for off-site activities, as appropriate).

The following state ARARs identified address the discharge of sediment to the surrounding surface water during dredging activities:

- Section 6 of the Basin Plan;
- California Fish and Game Code (Cal. Fish & Game Code) 3005(a); and
- Cal. Fish & Game Code ch. 2 § 5650(a), (b), and (f).

Section 6 of the Basin Plan. Sediment dredging is a common occurrence in harbor areas and, as a remedial action, is not likely to interrupt regular port traffic or habitats for migratory birds. Relocation of AOECs A and C sediments is not expected to introduce materials that would adversely impact water quality and be inconsistent with beneficial uses of LA/LB Harbors. The impact of dredging on water quality is expected to be limited to resuspension of AOECs A and C sediments in the water column of the immediate work area. The water column would be monitored in accordance with the substantive provisions of Section 6 of the Basin Plan as related to discharge of dredged sediments. Monitoring results would be compared to the Basin Plan WQOs, and to federal water quality standards. Silt curtains surrounding the work area would minimize the extent of the area affected by increased turbidity and sediment resuspension.

Cal. Fish & Game Code § 3005(a). Procedural aspects are not ARARs; certain substantive provisions pertaining to take of birds or mammals with a poisonous substance are applicable. The taking of birds or mammals is not planned as a part of the remedial action alternatives. However, temporarily increased turbidity may expose marine animals to chemicals due to temporary resuspension of AOEC sediments. Section 3005 is also applicable because incidental loss of unprotected benthic community and fish may result from increased suspended sediments or dredging. Dredging of chemically impacted sediments is intended to decrease the risk to benthic community. No threatened or endangered species, or their habitat, would be put at risk as a result of implementing this alternative.

Cal. Fish & Game Code ch. 2, § 5650(a), (b), and (f). Procedural aspects are not ARARs; certain substantive provisions pertaining to take of birds or mammals with a poisonous substance are applicable. Cal. Fish & Game Code ch. 2, § 5650(a), (b), and (f) are applicable for remedial action alternatives that disturb the sediments. Remedial

actions that include dredging would use silt curtains or other controls at the work area; an enclosed clamshell bucket would be used to minimize introducing suspended sediments to the water column; resuspension of sediments could cause increased turbidity.

13.2.3.4 REMOVAL AND ON-SITE (INSIDE IR SITE 7) CONTAINMENT OF AOEC SEDIMENTS – DISCHARGE OF DREDGED SEDIMENTS INSIDE NAVY MOLE – AOEC A AND AOEC C (SECONDARY REMEDY)

The dredging ARARs described for the primary remedy will also apply to the secondary remedy. In addition, because the secondary remedy includes a containment to be constructed within IR Site 7, the following additional action-specific ARARs also apply to this remedy:

• Section 404 of the CWA.

Section 404 of the CWA. Dredged sediments would be transported in a manner that would minimize runoff or incidental release of AOEC sediments. Dredged sediments would be discharged in accordance with substantive requirements identified under Section 404 of the CWA. Once the dredged sediments are contained, access to the chemically impacted sediments of AOECs A and C and, therefore, risk to the benthic community from these sediments would be minimized.

13.3 COST-EFFECTIVENESS

The remedies selected for the AOECs of IR Site 7, no remedial action, ICs, dredging and discharge of sediments at off-site projects, and dredging and on-site containment within IR Site 7 are considered to be cost-effective measures that comply with ARARs and provide low-cost, long-term overall protectiveness to the benthic community of IR Site 7 commensurate with the site's current and future use (port-related and industrial). These remedies would allow the continued use of IR Site 7 by the POLB and its tenants as well as by the DON (Pier 12) while achieving the RAO for the chemically impacted sediments of IR Site 7.

Other remedies considered for the AOECs of IR Site 7 included capping, periodic monitoring, and removing sediments from the AOECs and placing them in containments to be constructed for this purpose. However, in comparison, it was determined that the remedies presented in this ROD would provide a higher level of economical and ecological benefit in achieving the IR Site 7 RAO then would these other remedies evaluated as also being applicable to IR Site 7. Cost effectiveness data are provided in Table 13-4.

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

On the basis of factors such as potentially large volumes of chemically impacted marine benthic sediments and the nature and low concentrations of chemicals measured in these sediments, suitable treatment technologies that would provide satisfactory treatment of chemically impacted sediments in a technically acceptable and cost-effective manner were not identified for IR Site 7 AOECs. Consequently, recovery of reusable resources or permanent and significant reduction of toxicity, mobility, or volume of chemically impacted sediments through treatment is not expected to be practicable for the sediments of IR Site 7 AOECs.

13.5 PREFERENCE FOR TREATMENT AS A PRINCIPAL ELEMENT

None of the alternatives considered for the IR Site 7 AOECs provide a form of treatment to the chemically impacted sediments of the AOECs; therefore, these alternatives would not reduce the toxicity, mobility, or volume of chemically impacted sediments at the AOECs through treatment. Based on the nature and relatively low concentrations of chemicals in the chemically impacted sediments of IR Site 7 AOECs, recovery of reusable resources under these alternatives is not expected to be practicable.

13.6 CERCLA STATUTORY FIVE-YEAR REVIEW REQUIREMENTS

The purpose of CERCLA statutory five-year reviews is to evaluate whether a remedy that has been implemented at a site remains protective of human health and the environment at that site. A five-year review report provides a clear statement as to whether the selected remedy is being protective, or if it is expected to become protective sometime in the future as well as documenting the methods used in assessing the implementation and performance of the selected remedy, its findings, and conclusions of these evaluations.

In the event a five-year review finds deficiencies to exist in remedy implementation or in the performance of the remedy itself which could lead to non-protectiveness of human health and the environment, the five-year review report would identify such issues, and provide recommendations as to how these issues can be resolved. Similarly, if the fiveyear review finds that assumptions, regulatory requirements and/or analytical methods used to establish cleanup goals for the chemicals of concern at the time of selecting and implementing the remedy have changed during the five years covered by the review, which could lead to non-protectiveness of human health and the environment, then the five-year review would identify such changes and provide recommendations as to how to address such issues. As such, the five-year review report would contain recommendations of specific actions that would provide the means for the remedy to become or to continue being protective.

Five-year reviews are required by statue in U.S.C. CERCLA §121(c), as amended:

"If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented."

Additionally, the NCP, 40 C.F.R. §300.430(f)(4)(ii) states:

"If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action."

The DON has interpreted these regulations as requirements for a five-year review when hazardous substances, pollutants, or contaminants remain at a site above levels that would allow for unlimited use and unrestricted exposure, and, if the ROD for the site was signed on or after October 17, 1986, when SARA was promulgated. The DON defines 'unlimited use' and 'unrestricted exposure' to mean no restrictions placed on the use of a site.

As such, the DON and the POLB will undertake the preparation of CERCLA statutory five-year reviews for AOECs E, F, and G where the IC remedy has been selected to prevent unauthorized or uncontrolled disturbance and/or exposure of chemically impacted sediments to the benthic community. These CERCLA statutory five-year reviews will be conducted in perpetuity or until ICs have been released or terminated when ecological risk no longer exists.

Section 14 DOCUMENTATION OF SIGNIFICANT CHANGES

The Proposed Plan for IR Site 7 was released for public comment from October 16 through November 23, 2006. The Proposed Plan identified the preferred remedies for the chemically impacted sediments of AOEC A and AOEC C as dredging and off-site discharge at POLB projects; AOEC B as no remedial action; and AOECS E, F, and G as ICs.

Since the completion of the Proposed Plan, the DON has identified a secondary remedy for AOECs A and C. In the event that off-site POLB projects are not available to discharge the dredged sediments, then the secondary remedy will be implemented.

The secondary remedy identified for AOECs A and C is dredging of the chemically impacted sediments of these AOECs, and transporting and placing these sediments in a containment to be constructed for this purpose within IR Site 7. The secondary remedy was added to provide the POLB with flexibility in implementation of the ROD. Both the primary and secondary remedies for AOECs A and C are protective of the IR Site 7 benthic community.

Since the completion of the Proposed Plan, the DON has refined the boundaries of AOECs E, F, and G (submerged lands beneath Piers 12, 15, and 16, respectively) to coincide with the property boundaries (i.e., the pier footprints). This refinement provides greater implementability for the IC remedy at AOECs E, F, and G by ensuring that legal or administrative mechanisms can be established to meet the requirements of the remedy. This refinement of boundaries is not considered to be a technical change; as required by the remedy, the chemically impacted beneath-pier sediments will not be exposed to the benthic community at these areas.

Section 14 Documentation of Significant Changes

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Section 15 REFERENCES

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- United States Environmental Protection Agency. 1988. Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA. Interim Final. EPA-540-G-89-004. October.

- ——. 1991. Handbook Remediation of Contaminated Sediments. EPA-625-6-91-028. June.
- ——. 1999. A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents. OSWER Directive 9200.1-23. EPA 540-R-98-031. July.
- U.S. EPA. See United States Environmental Protection Agency.

RESPONSIVENESS SUMMARY

RESPONSIVENESS SUMMARY

The Proposed Plan for IR Site 7 which presented the preferred alternatives was distributed for public review and comment in October 2006. Public notices announcing the availability of the Proposed Plan, the start of the public comment period, and the scheduled public meeting were published in the *Long Beach Business Journal* on October 10, 2006, and the *Long Beach Press-Telegram* on October 24, 2006. The public comment period ran from October 16 to November 23, 2006, one week beyond the 30-day statutory requirement.

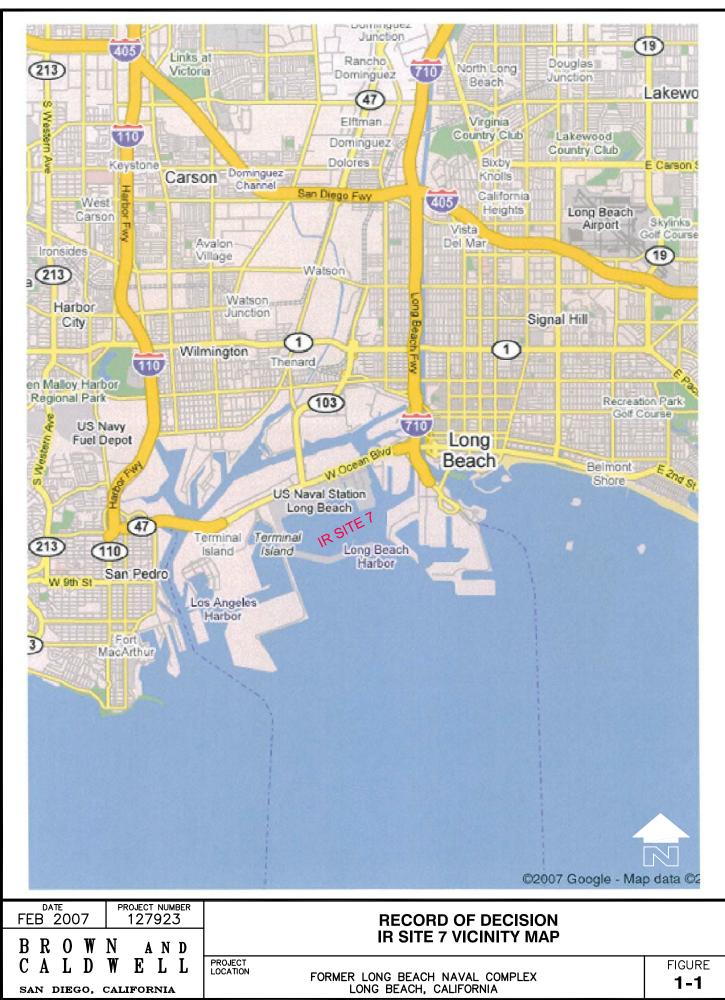
A public meeting was held on October 25, 2006. At this meeting the DON gave a presentation on the preferred alternatives for IR Site 7 and provided the opportunity for the public to ask questions and formally comment on the alternatives. The transcript of this public meeting is included as Attachment B.

No public comments were received either during the October 25, 2006 public meeting or during the public review period from October 16 through November 23, 2006.

Responsiveness Summary

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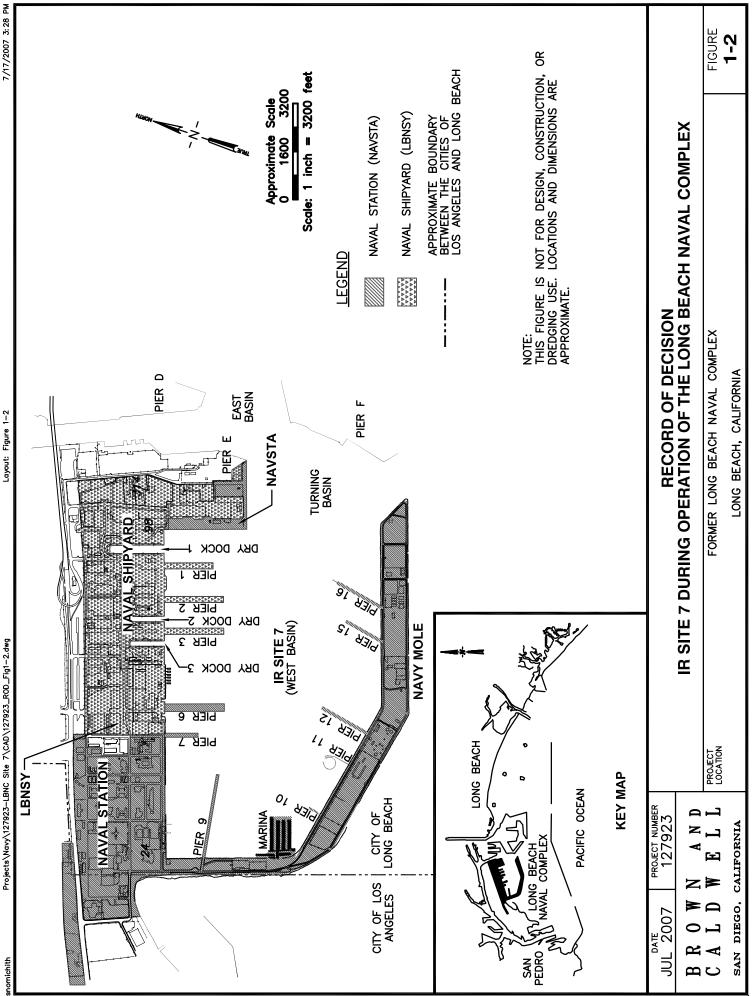
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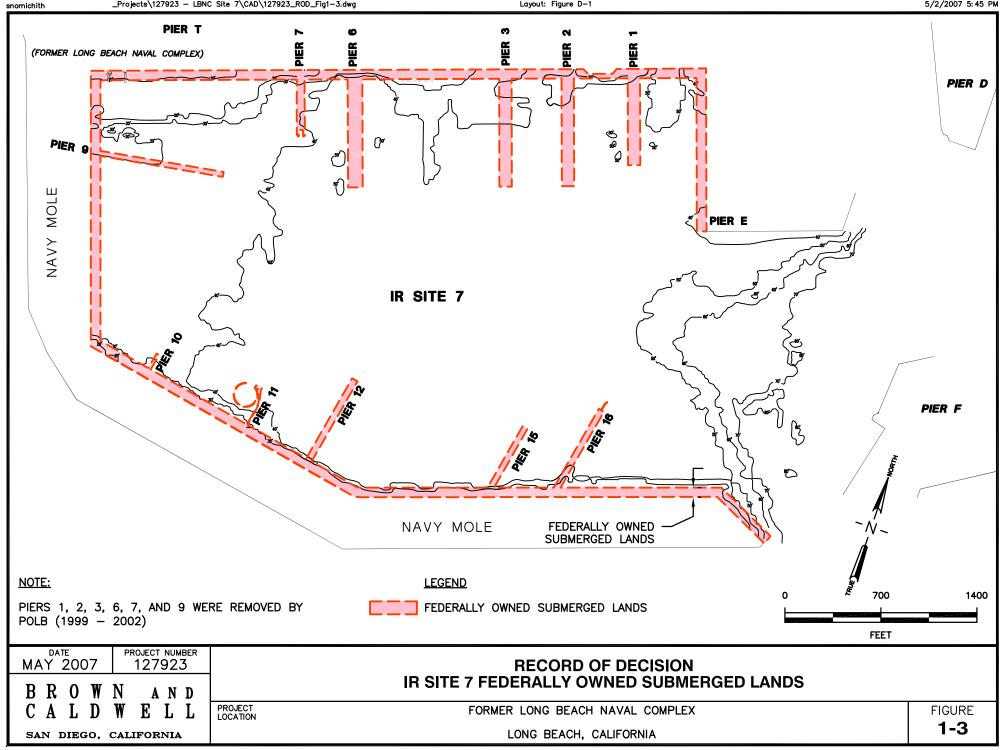
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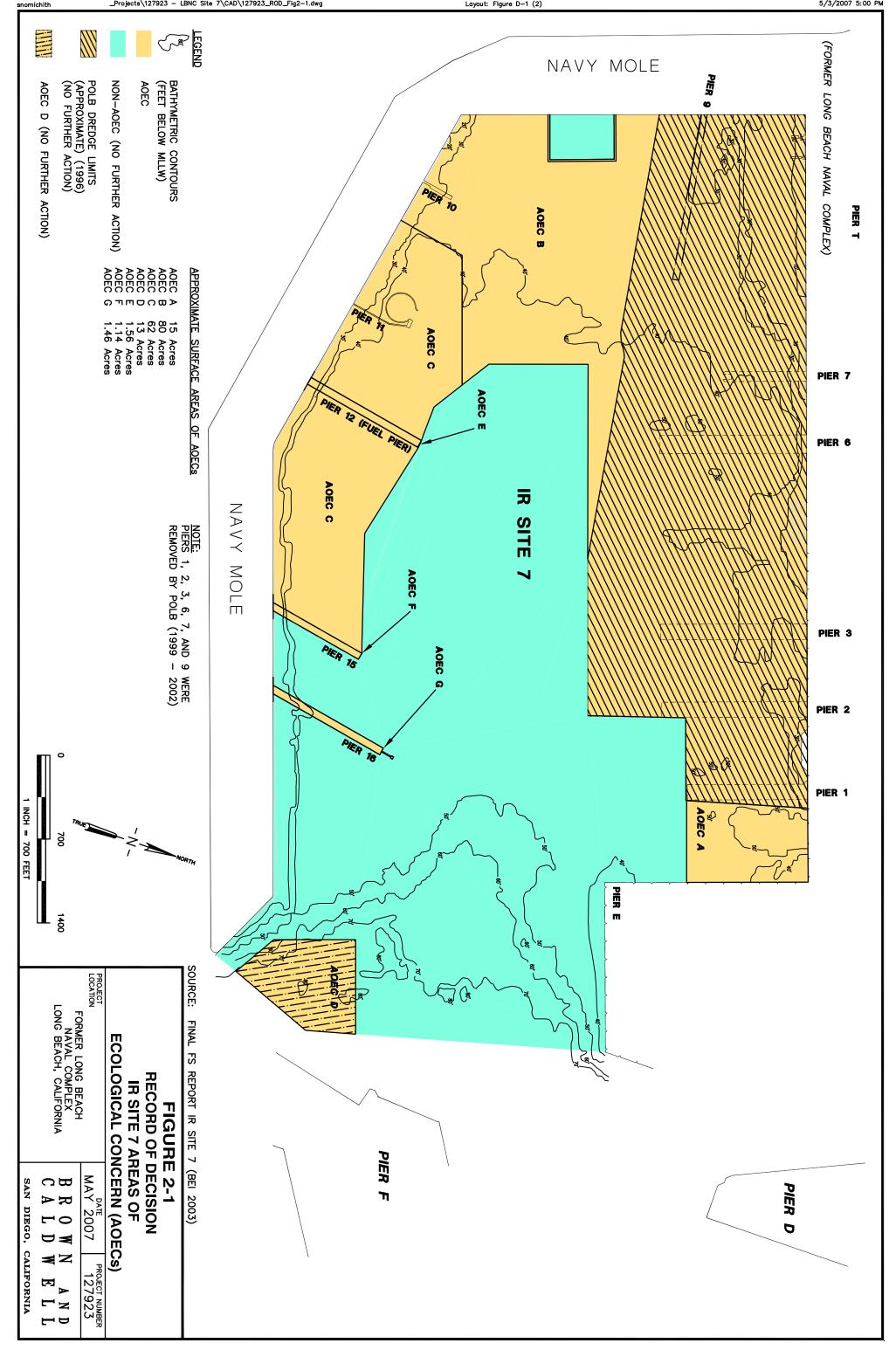
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TABLES

	SMO for Echinoderm	SMO for Amphipod	SMO for Benthic	Final SMO	STATIONS EXCEEDING FINAL SMO	
COEC	(mg/kg dw)	(mg/kg dw)	(mg/kg dw)	(mg/kg dw)	AOEC A	AOEC C
copper	254	254	254	254	53-1 ^a	
lead	100	100	100	100	53-1	61 ^b
mercury	0.9	1.0	1.1	0.9	27, 53-1, 53-3, 54-1	9,41,59,62
silver	3.5	3.8	3.8	3.5		
zinc	307	307	480	307	53-1	

Table 5-1 Sediment Management Objectives for IR Site 7

	SMO for SMO for Echinoderm Amphipod		SMO for Benthic	Final SMO	STATIONS EXCEEDING FINAL SMO	
	(µg/kg dw)	(µg/kg dw)	(µg/kg dw)	(µg/kg dw)	AOEC A	AOEC C
total PAH	5,400	5,400	5,400	5,400	53-1	41
total DDT	210	213	213	210		
total PCB	570	570	570	570	53-1, 54-1, 54-3	16

Notes:

^a first number is station ID; second number is the depth horizon

^b station ID only, means surface sample (uppermost 10 centimeters)

Acronyms/Abbreviations:

AOEC – area of ecological concern COEC – chemical of ecological concern

DDT – dichlorodiphenyltrichloroethane

dw-dry weight

IR – Installation Restoration (Program)

µg/kg – micrograms per kilogram

mg/kg - milligrams per kilogram

PAH – polynuclear aromatic hydrocarbon

PCB –polychlorinated biphenyl

SMO - sediment management objective

AOEC	Characteristics				
А	Description: sediments between former Pier 1 and existing Pier E				
	Extent: 15 acres; 4.3 feet deep; 103,000 cubic yards				
	Sampling: three surface and two subsurface sediment sampling stations				
	Elevated concentrations of chemical compounds reported for surface sediments but no sediment toxicity and no benthic community effects reported.				
	Elevated concentrations of subsurface sediment chemicals reported, which would represent a probable exposure of benthic community to unacceptable levels of chemical concentrations if these subsurface sediments were to be released or exposed.				
В	Description : sediments between former Pier 9 and existing Pier 10				
	Extent: 80 acres; 2.5 feet deep; 527,400 cubic yards				
	Sampling: six surface and three subsurface sediment sampling stations				
	Elevated chemical concentrations reported for surface sediments but no sediment toxicity and no benthic community effects reported; none reported for subsurface sediments.				
С	Description : sediments between existing Pier 10 and existing Pier 15				
	Extent: 62 acres; 1.3 feet deep; 130,000 cubic yards				
	Sampling: seven surface and three subsurface sediment sampling stations				
	Elevated chemical concentrations, sediment toxicity, and adverse benthic community effects reported for surface sediments; none reported for subsurface sediments.				
D	AOEC D was accepted as a no further action (NFA) area by the DON, POLB, and the Agencies/Trustees because the 1994 and the 1998 sampling results indicated that the sediments in this area posed very little ecological risk. AOEC D was briefly discussed in the FS and Proposed Plan, but was not evaluated further.				
Е	Description : sediments beneath existing Pier 12				
	Areal Extent: 1.56 acres; 9 feet deep; 22,600 cubic yards				
	Sampling: three surface and one subsurface sediment sampling stations				
	Elevated chemical concentrations and some sediment toxicity reported but no adverse benthic community effects reported.				
F	Description : sediments beneath existing Pier 15				
	Extent : 1.14 acres; 9 feet deep; 16,480 cubic yards				
	Sampling: one surface and one subsurface sediment sampling stations				
	Elevated chemical concentrations reported but no sediment toxicity or adverse benthic community effects reported.				
G	Description: sediments beneath existing Pier 16				
	Extent: 1.46 acres; 9 feet deep; 21,160 cubic yards				
	Sampling: one surface (and no subsurface) sediment sampling station				
	Elevated chemical concentrations and some sediment toxicity reported but no adverse benthic community effects reported.				

Table 5-2 **IR Site 7 AOEC Characteristics Summary**

Acronyms/Abbreviations: AOEC – area of ecological concern DON – Department of the Navy FS – feasibility study IR – Installation Restoration (Program)

NFA – no further action POLB – Port of Long Beach

Table 9-1Summary Listing of Remedial Action Alternatives and Base Case Cost EstimatesRemedial Action Alternatives for the Chemically Impacted Sediments of IR Site 7 AOECs(Net Present Value \$1,000 - Source: IR Site 7 Feasibility Study - 1999 Dollars)

R	EMEDIAL ACTION ALTERNATIVE	. – .	NONPIER AOEC REMEDIAL ACTION ALTERNATIVES			PIER AOEC (beneath-pier sediments) REMEDIAL ACTION ALTERNATIVES		
No.	Description	AOEC A Between Pier 1 and Pier E	AOEC B Between Piers 9 and 10	AOEC C Between Piers 10 and 15	AOEC E Pier 12 (Fuel Pier)	AOEC F Pier 15	AOEC G Pier 16	
1	No remedial action	\$0	\$0	\$0	\$0	\$0	\$0	
2	Limited action – periodic sediment quality monitoring	\$640	\$680	\$670	\$670	\$670	\$670	
3	<i>In situ</i> capping of AOECs with "clean" imported sediments	NA	\$13,970	\$10,360	NA	NA	NA	
4	Removal and on-site (inside IR Site 7) containment of AOEC sediments – discharge of dredged sediments inside Navy Mole	\$7,620	\$14,020	\$12,900	\$9,920	\$7,900	\$9,830	
5	Removal and off-site (outside IR Site 7) containment of AOEC sediments – discharge of dredged sediments outside Navy Mole	\$7,885	\$15,490	\$14,070	\$10,240	\$8,500	\$10,160	
6	Removal and discharge of AOEC sediments at off-site (outside IR Site 7) projects	\$3,030	\$8,560	\$7,190	\$7,050	\$5,330	\$6,720	
7	Limited action – institutional controls	\$150	\$150	\$150	\$150	\$150	\$150	

Notes:

The cost estimates provided in this Record of Decision are intended solely for use in comparing potential remedial action alternatives with each other for the chemically impacted sediments of IR Site 7 as described in this document, and should not be used for project budgeting or planning purposes.

Present worth analysis was used to evaluate expenditures by discounting future costs to a common base year. This 'base case' cost estimate refers to the base year estimate (1999 for IR Site 7).

Per CERCLA guidance, costs at the Feasibility Study stage are estimated due to numerous assumptions of potentially critical cost factors; actual costs may be +50 to -30 percent of the estimated costs.

Acronyms/Abbreviations:

AOEC – area of ecological concern

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

IR – Installation Restoration (Program)

NA – not applicable

POLB – Port of Long Beach

Table 12-1 Summary of Base Case Cost Estimates of Remedies for the Chemically Impacted Sediments of IR Site 7 AOECs (Net Present Value)

Description of	Ν	ONPIER AOECs		PIER AOECs (beneath-pier sediments)		
Selected Remedy Alternative	AOEC A Between Pier 1 and Pier E	AOEC B Between Piers 9 and 10	AOEC C Between Piers 10 and 15	AOEC E Pier 12 (Fuel Pier)	AOEC F Pier 15	AOEC G Pier 16
1. No remedial action	NA	\$0	NA	NA	NA	NA
 4. Removal and on-site (inside IR Site 7) containment of AOEC sediments - discharge of dredged sediments inside Navy Mole (Secondary Remedy) 	\$7,620,000	NA	\$12,900,000	NA	NA	NA
6. Removal and discharge of AOEC sediments at off-site (outside IR Site 7) projects (Primary Remedy)	\$2,610,000	NA	\$2,740,500	NA	NA	NA
7. Limited action – institutional controls	NA	NA	NA	\$276,299	\$276,299	\$276,299

Source: IR Site 7 Proposed Plan (October 2006) (for Alternative 1, 6, and 7), and IR Site 7 Final Feasibility Study (September 2003) (for Alternative 4)

Notes:

- The cost estimates of the selected remedy for AOEC A and AOEC C are different from those presented in the IR Site 7 FS because the depths of ecological concern and corresponding sediment volumes were refined during the preparation of the IR Site 7 Proposed Plan. The cost estimates shown are based on the following criteria. For AOEC A, the chemically impacted sediment volume is estimated to be approximately 103,000 cubic yards, which is based on an estimated areal extent of 15 acres and an estimated depth of ecological concern of 4.3 feet. For AOEC C, the chemically impacted sediment volume is estimated to be approximately 130,000 cubic yards, which is based on an estimated to be approximately 130,000 cubic yards, which is based on an estimated areal extent of 62 acres and an estimated depth of ecological concern of 1.3 feet. Actual depths of dredging and actual volumes of sediment to be dredged will be developed during the subsequent remedial design phase when factors such as the results of possible additional sediment sampling and analyses, type of dredge equipment to be used, depth of over dredge allowance, and the designation of dredged sediments, will be incorporated into the final dredge design.
- The cost estimates of the selected remedy for AOEC A and AOEC C were adjusted to reflect 2006 dollars by applying a 30.5% cumulative escalation rate to the 1999 costs provided in the IR Site 7 FS. This escalation rate is based on the 1999 and 2006 yearly composite indexes from the 2006 US Army Corps of Engineers Civil Works Construction Cost Index System, Engineering Manual 1110-2-1304.

The cost estimates of the selected remedy for AOECs E, F, and G were developed using 2006 dollars (2006 IR Site 7 Feasibility Study Addendum).

Acronyms/Abbreviations:

AOEC – area of ecological concern IR – Installation Restoration (Program) *NA* – not applicable

Requirement	Citation	ARAR Determination	Comments
	SURFA	ACE WATER	
]	Federal	
Clean Water Act, 33 U.S.C.,	ch. 26, §§ 1251–1387 ^b		
Discharges to waters of the United States are subject to water quality standards.	40 C.F.R. § 131.36(b) and 131.38	Applicable	Federal water quality standards of the NTR and CTR are applicable to discharges to surface waters, including discharge during sediment removal. However, there is no standard for turbidity.
		State	
State and Regional Water R	esources Control Boar	rds ^b	
Authorizes the SWRCB and RWQCB to establish in water quality control plans beneficial uses and numerical and narrative standards to protect both surface water and groundwater quality. Authorizes regional water 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 quality.	Cal. Water Code, div. 7, §§ 13241, 13243, 13263(a), 13269, and 13360 (Porter-Cologne Water Quality Control Act)	Applicable	The DON accepts as applicable state ARARs the substantive provisions of §§ 13241, 13243, 13263(a), 13269, and 13360 of the Porter-Cologne Act as enabling legislation, as it is implemented through the beneficial uses, WQOs, waste discharge requirements, and promulgated policies of the Basin Plan.
Establishes beneficial uses of surface waters including Long Beach Harbor, establishes water quality objectives, 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 Los Angeles Region (Cal. Water Code § 13240), WQOs and beneficial uses for Long Beach Harbor	Applicable	Substantive requirements pertaining to beneficial uses, WQOs, and waste discharge requirements are applicable for this remedial action.

Table 13-1 Chemical-Specific ARARs by Medium

(table continues)

Table 13-1 (continued)

Requirement	Citation	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	Applicable for discharges during dredging activities that could result in new discharges to surface water	The DON has determined that SWRCB Res. 68-16 is not a chemical-specific ARAR for determining remedial action goals under SWRCB Res. 68-16. However, SWRCB Res. 68-16 is an applicable action-specific ARAR for regulating discharges to surface waters that may occur during sediment removal. The DON has determined that migration of sediments that have already been impacted with chemicals 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 sediments that are already degraded. The RWQCB disagrees with the DON's position on SWRCB Res. 68-16. The SMOs developed for IR Site 7 will be used in removal remedy planning that would be consistent with the SWRCB Res. 68-16 antidegradation policy and beneficial uses of the surface waters. Since the RWQCB has agreed to the SMOs to be used in planning sediment removal remedies, this disagreement will be documented but will not affect the remedy. The DON agrees that SWRCB Res. 68-16 is an applicable state ARAR for potential discharges during dredging activities that could result in new discharges to surface waters. The DON will comply with other ARARs in the Basin Plan identified above through engineering controls implemented during dredging activities.

(table continues)

Table 13-1 (continued)

Requirement	Citation	ARAR Determination	Comments			
	SED	DIMENT				
	Federal					
Chemical-s	Chemical-specific federal ARARs were not identified for IR Site 7 AOECs.					
		State				
SMOs agreed to by the oversight Agencies/Trustees, and POLB.	Final Technical Memorandum 1 for IR Site 7, February 2002 (Appendix B of the final FS Report [BEI 2003])	Not an ARAR	The SMOs will be used as guidance for sediment management at IR Site 7 AOECs for remedies that involve sediment removal.			

Notes:

^a many action-specific ARARs contain chemical-specific limitations and are addressed in the actionspecific ARARs tables

^b statutes and policies, and their citations, are provided as headings to identify general categories of 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 ARARs; specific ARARs are addressed in the table below each general heading; only substantive requirements of specific citations are considered ARARs

Acronyms/Abbreviations:

AOEC - area of ecological concern ARAR – applicable or relevant and appropriate requirement Basin Plan - Water Quality Control Plan, Los Angeles Region Cal. Water Code - California Water Code CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act C.F.R. - Code of Federal Regulations ch. - chapter CTR - California Toxics Rule div. - division DON - Department of the Navy FS - feasibility study gpd - gallons per day IR - Installation Restoration (Program) NPDES - National Pollutant Discharge Elimination System NTR - National Toxics Rule POLB - Port of Long Beach Res. - Resolution RWQCB - (California) Regional Water Quality Control Board § – section SMO - sediment management objective SWRCB - (California) State Water Resources Control Board TDS - total dissolved solids U.S.C. - United States Code U.S. EPA - United States Environmental Protection Agency

WQO – water quality objective

Table 13-2
Location-Specific ARARs

Requirement	Citation	ARAR Determination	Comments
	FED	ERAL	
Coastal Zone Management Act*	(16 U.S.C. §§ 1451–14	464)	
Conduct activities in a manner consistent with approved state management programs.	16 U.S.C. § 1456 (15 C.F.R. §§ 930 and 923.45)	Applicable	Applicable because the IR Site 7 AOECs are within the coastal zone. Federal actions will be consistent with the State Coastal Management Plan.
Includes technical requirements for construction of dikes and for areas near navigation lanes, in addition to those for the protection of identified bird and mammal species, associated prey and habitat, and water quality with regard to beneficial uses.	Rivers and Harbors Act	Applicable	Quality of sediments placed in the on-site containment is not expected to pose a significant threat to protected bird species reported to use the area as feeding grounds; neither these species nor fish on which they feed would typically be in contact with the sediments placed within the containment. After dredging of the chemically impacted sediments, the remaining AOECs A and C sediments would not be expected to pose a risk to the marine environment.
	ST	ATE	
California Coastal Act of 1976*			
Regulates activities associated with development to control direct significant impacts on coastal waters and to protect state and national interests in California coastal resources.	Cal. Pub. Res. Code §§ 30702–30708; Cal. Code Regs. tit. 14, §§ 13001– 13666.4	e Applicable	Substantive provisions are applicable for the selected remedial alternatives.

Note:

* statutes and policies, and their citations, are provided as headings to identify general categories of 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 ARARs; specific ARARs follow each general heading; only substantive requirements of the specific citations are considered ARARs

Acronyms/Abbreviations:

AOÉC – area of ecological concern ARAR – applicable or relevant and appropriate requirement Cal. Code Regs. – *California Code of Regulations* Cal. Pub. Res. Code – *California Public Resources Code* C.F.R. – *Code of Federal Regulations* COEC – chemical of ecological concern DON – Department of the Navy IR – Installation Restoration (Program) § – section tit. – title U.S.C. – United States Code

Table 13-3 Action-Specific ARARs

		ARAR	
Action/Requirement	Citation	Determination	Comments
	FEDEF		
Requires that dredged sediments be transported in a manner that would minimize runoff or incidental release of sediments.	Section 404 of the CWA	Applicable	Dredged sediments would be discharged in accordance with substantive requirements identified under Section 404 of the CWA. Once the dredged sediments are contained, access to the chemically impacted sediments of AOECs A and C and, therefore, risks to the benthic community from these sediments would be minimized.
	STAT	Έ	
California Civil Code*			
Provides conditions under which land-use restrictions will apply to successive owners of land.	Cal. Civ. Code § 1471	Relevant and appropriate	Substantive provisions 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 or the environment as a result of the presence of hazardous materials, as defined in Section 25260 of the California Health and Safety Code." This narrative standard would be implemented through incorporation of restrictive covenants in the deed at the time of transfer.
California Health and Safety Code*			
Allows DTSC to enter into an agreement with the owner of a hazardous waste facility to restrict present and future land uses.	Cal. Health & Safety Code § 25202.5	Relevant and appropriate	The substantive provisions of Cal. Health & Safety Code § 25202.5 are the general narrative standards to restrict "present and future uses of all or part of the land on which the facility is located"
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 Cal. Health & Safety Code § 25232(b)(1)(A)–(E).	Cal. Health & Safety Code § 25222.1	Relevant and appropriate	Cal. Health & Safety Code § 25222.1 provides the authority for the state to enter into voluntary agreements to establish land-use covenants with the owner of the property. The substantive provision of Cal. Health & Safety Code § 25222.1 is the general narrative standard: "restricting specified uses of the property."

Table 13-3 (continued)

Action/Requirement	Citation	ARAR Determination	Comments
Provides authority for the state to enter into voluntary agreements to establish land-use covenants with the owner of property.	Cal. Health & Safety Code § 25355.5(a)(1)(C)	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 land."
Provides a process for obtaining a written variance from a land-use restriction.	Cal. Health & Safety Code § 25233(c)	Relevant and appropriate	Cal. Health & Safety Code § 25233(c) sets forth substantive criteria for granting variances from the uses prohibited in § 25232(b)(1)(A)–(E) based on specified environmental and health criteria. Cal. Health & Safety Code § 25232(b)(1)(A)–(E) prohibits certain uses of land containing hazardous waste without a specific variance. This section requires that land-use restrictions be used to prohibit the following activities: residential use of the AOECs, construction of hospitals for humans, schools for persons under 21 years of age, day care centers for children, or any permanently occupied human habitation on the AOECs.
Provides for a means to remove a land-use restriction when no longer a hazard.	Cal. Health & Safety Code § 25234	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."
Requirements for land-use covenants.	Cal. Code Regs. tit. 22, § 67391.1	Relevant and appropriate	Cal. Code Regs. tit. 22, § 67391.1 provides for a land-use covenant to be executed and recorded when remedial actions are taken and hazardous substances will remain at the property at concentrations that are unsuitable for unrestricted use of the land. The substantive provisions of this regulation have been determined to be "relevant and appropriate" state ARARs.

(table continues)

Action/Requirement	Citation	ARAR Determination	Comments
State Water Resources Control Board			
Dischargers regulated under WDRs are required to collect regular samples of their receiving waters according to a schedule to determine compliance.	Water Quality Control Plan for the Los Angeles Region (4), Basin Plan (Cal. Water Code § 13240) Section 6	Applicable	Substantive provisions are applicable to remedial actions that involve dredging operations. Monitoring will be conducted to comply with chemical-specific ARARs for IR Site 7.
The taking of birds or mammals, including the taking by poison, is prohibited.	Cal. Fish & Game Code § 3005(a)	Applicable	Procedural aspects are not ARARs; certain substantive provisions pertaining to take of birds or mammals with a poisonous substance are applicable. The taking of birds or mammals is not planned as a part of the remedial action alternatives. However, temporarily increased turbidity may expose marine animals to chemicals due to temporary resuspension of AOEC sediments.
Prohibits water pollution with any substance or material deleterious to fish life, plant life, or bird life.	Cal. Fish & Game Code, ch. 2, § 5650(a), (b), and (f),	Applicable	Procedural aspects are not ARARs; certain substantive provisions pertaining to take of birds or mammals with a poisonous substance are applicable. Applicable for remedial action alternatives that disturb the sediments. Remedial actions that include dredging would use silt curtains or other controls at the work area; an enclosed clamshell bucket would be used to minimize introducing suspended sediments to the water column; resuspension of sediments could cause increased turbidity.

Table 13-3 (continued)

Note:

statutes and policies, and their citations, are provided as headings to identify general categories of 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 ARARs; specific ARARs are addressed in the table below each general heading; only substantive requirements of specific citations are considered ARARs

(table continues)

Table 13-3 (continued)

Acronyms/Abbreviations:

AOEC – area of ecological concern ARAR – applicable or relevant and appropriate requirement Cal. Civ. Code – *California Civil Code* Cal. Code Regs. – *California Code of Regulations* Cal. Fish & Game Code – *California Fish and Game Code* Cal. Health & Safety Code – *California Health and Safety Code* Cal. Water Code – *California Water Code* ch. – chapter DON – Department of the Navy DTSC – (California Environmental Protection Agency) Department of Toxic Substances Control IR – Installation Restoration (Program) § – section tit. – title WDR – waste discharge requirement

Table 13-4 Matrix Of Cost Effectiveness Data IR Site 7 Remedial Action Alternatives – AOECs A, B, C, E, F, and G Former Long Beach Naval Complex Source – IR Site 7 Final FS Report (September 2003) – 1999 Dollars

Alternative	AOEC A Estimated Cost (NPV)	AOEC B Estimated Cost (NPV)	AOEC C Estimated Cost (NPV)	AOEC E Estimated Cost (NPV)	AOEC F Estimated Cost (NPV)	AOEC G Estimated Cost (NPV)	Long-Term Effectiveness and Permanence	Reduction of Toxicity, Mobility, and Volume Through Treatment	Short-Term Effectiveness
1. No remedial action	No cost	Chemically impacted sediments would remain in place without restrictions or controls; not a long term or permanent solution	Does not reduce toxicity, mobility, or volume through treatment because no treatment would be implemented.	No short-term risks to workers or the environment.					
 Limited action – periodic sediment quality monitoring 	\$640,000	\$680,000	\$670,000	\$670,000	\$670,000	\$670,000	Chemically impacted sediments would remain in place with periodic sediment monitoring; not a long term or permanent solution	Does not reduce toxicity, mobility, or volume through treatment because no treatment would be implemented.	Safety and health issues of workers can be easily mitigated.
3. <i>In Situ</i> capping of AOEC with "clean" imported sediments	NA	13,970,000	\$10,360,000	NA	NA	NA	Chemically impacted sediments would remain in place but be contained beneath a cap; periodic monitoring of cap required; not a long term or permanent solution; provides a greater level of effectiveness than preceding alternatives; limits future migration of chemically impacted sediments	Does not reduce toxicity, mobility, or volume through treatment because no treatment would be implemented.	Easily implementable; cap construction is a common technology; ample availability of services and materials.
 Removal and on-site (inside IR Site 7) containment of AOEC sediments – discharge of dredged sediments inside Navy Mole 	\$7,620,000	\$14,020,000	\$12,900,000	\$9,920,000	\$7,900,000	\$9,830,000	Chemically impacted sediments dredged and contained on-site; no post-remedy monitoring or institutional controls required at dredged areas; but monitoring of containment is required; provides a greater level of effectiveness than the preceding alternatives; limits future migration of chemically impacted sediments	Does not reduce toxicity, mobility, or volume through treatment because no treatment would be implemented.	Easily implementable; sediment dredging and containment are common technologies; ample availability of services and materials.
 5. Removal and off-site (outside IR Site 7) containment of AOEC sediments – discharge of dredged sediments outside Navy Mole 	\$7,885,000	\$15,490,000	\$14,070,000	\$10,240,000	\$8,500,000	\$10,160,000	Chemically impacted sediments dredged and transported off-site; no post-remedy monitoring or institutional controls required at dredged areas; but monitoring of containment is required; provides a greater level of effectiveness than the preceding alternatives; limits future migration of chemically impacted sediments	Does not reduce toxicity, mobility, or volume through treatment because no treatment would be implemented.	Easily implementable; sediment dredging and containment are common technologies; ample availability of services and materials.
 Removal and discharge of AOEC sediments at off-site (outside IR Site 7) projects 	\$3,030,000	\$8,560,000	\$7,190,000	\$7,050,000	\$5,330,000	\$6,720,000	Provides the greatest level of long-term effectiveness and permanence; limits future migration of chemically impacted sediments	Does not reduce toxicity, mobility, or volume through treatment because no treatment would be implemented.	Easily implementable; sediment dredging and containment are common technologies; ample availability of services and materials.
7. Limited action – institutional controls	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	Chemically impacted sediments would remain in place without restrictions or controls; not a permanent solution; ICs would restrict uncontrolled disturbance of the chemically impacted sediments	Does not reduce toxicity, mobility, or volume through treatment because no treatment would be implemented.	No short-term risks to workers or the environment.

Notes: ^a AOEC – area of ecological concern ^b ARAR – applicable or relevant and appropriate requirement ^c NPV – net present value, based on discount rate of 7 percent over 30 years – base cost ^d RAO – remedial action objective

ATTACHMENTS

ADMINISTRATIVE RECORD INDEX FOR IR SITE 7

ATTACHMENT A1 - LONG BEACH NAVAL STATION (NAVSTA)

ATTACHMENT A2 - LONG BEACH NAVAL SHIPYARD (LBNSY)

ATTACHMENT A1

LONG BEACH NAVAL STATION (NAVSTA)

LONG BEACH NAVSTA

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

FILTERED DATA BY KEYWORDS/SITES

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N68311 / 000287 CLE-C01-01F0017- B6-0002 RPT N68711-89-D-9296 00330	09-21-1994 04-26-1990 00017 03.3	JACOBS ENGINEERING B. WONG NAVFAC - SOUTHWEST DIVISION H. PADRO	DRAFT SITE INSPECTION (SI) WORK PLAN, INCLUDING THE FIELD QA/QC AND THE SITE HEALTH & SAFETY PLAN	ADMIN RECORD	FS GW H&SP HAZ WASTE IAS QA QC RI SAP SARA SI SSHP	001 002 003 004 005 006 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110503 IMAGED LBNS_001
N68311 / 000047 CLE-C01-01F017- B6-0004 RPT N68711-89-D-9296 00446	08-23-1994 10-31-1990 00017 03.3	JACOBS ENGINEERING GROUP D. WONG NAVFAC - SOUTHWEST DIVISION	FINAL DRAFT SITE INSPECTION WORK PLAN, INCLUDING THE FIELD QA/QC PLAN & THE SITE HEALTH & SAFETY PLAN	ADMIN RECORD	H&SP QA QC SI SSHP WORK PLAN	001 002 003 004 005 006 007A	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03101601 IMAGED LBNS_001

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N68311 / 000058 08-23-1994 CLE-C01-01F017- 04-08-1991 B6-0006 00017 RPT 03.3 N68711-89-D-9296 00489	JACOBS ENGINEERING GROUP, INC. B. WONG NAVFAC - SOUTHWEST DIVISION	INSTALLATION RESTORATION PROGRAM (IRP) FINAL SITE INSPECTION (SI) WORK PLAN INCLUDES FIELD QUALITY ASSURANCE (QA)/QUALITY CONTROL (QC) PLAN AND THE SITE SAFETY & HEALTH PLAN (SSHP). ***COMMENTS: CERCLA, 1980 AS AMENDED BY SARA, 1986***	ADMIN RECORD	H&SP IRP QA QC SI	001 002 003 004 005 006 007A	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03101601 IMAGED LBNS_001
N68311/ 000321 09-23-1994 CLE-C01-01F122- B6-0001 00122 RPT 01.2 N68711-89-D-9296 00363	NAVFAC - SOUTHWEST DIVISION NAVFAC - SOUTHWEST DIVISION	INSTALLATION RESTORATION PROGRAM (IRP) DRAFT SITE INSPECTION (SI) REPORT (VOLUME I) - SEE AR #322 - DRAFT SI RPT VOL II	ADMIN RECORD	CERCLA DATA GW H&SP HAZ WASTE IAS IRP LAB MONITORING PERMIT QA QC RCRA SARA SB SI WATER WELLS	001 002 003 004 005 006 007A	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110503 IMAGED LBNS_002
N68311 / 000322 09-23-1994 CLE-C01-01F122- 05-08-1992 B6-0001 00122 RPT 01.2 N68711-89-D-9296 00417	NAVFAC - SOUTHWEST DIVISION NAVFAC - SOUTHWEST DIVISION	INSTALLATION RESTORATION PROGRAM (IRP) DRAFT SITE INSPECTION (SI) REPORT (VOLUME II) - SEE AR #321 - DRAFT SI RPT VOL I	ADMIN RECORD	DATA IRP MONITORING SB SI WELLS	001 002 003 004 005 006 07A	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110503 IMAGED LBNS_002

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N68311 / 000333 NONE RPT NONE 00010	09-23-1994 06-29-1992 NONE 01.2	NAVFAC - SOUTHWEST DIVISION NAVFAC - SOUTHWEST DIVISION	BRIEFING OF THE DRAFT SITE INSPECTION REPORT MEETING	ADMIN RECORD	DATA SI	001 002 003 004 005 006A 007 008 009 010 011 012	SOUTHWEST DIVISION - BLDG. 1 PROBLEM FILE CABINET
N68311 / 000087 NONE RPT N68711-89-D-9296 00392	08-25-1994 11-14-1992 00122 01.2	NAVFAC - SOUTHWEST DIVISION	INSTALLATION RESTORATION PROGRAM (IRP) FINAL SITE INSPECTION (SI) REPORT (VOLUME 1)	ADMIN RECORD INFO REPOSITORY	CERCLA GW HAZMAT IRP SI	001 002 003 004 005 006 007A	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03101602 IMAGED LBNS_001

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N68311 / 000475 CLE-C01-01F249- B7-0001 PLAN N68711-89-D-9296 00500	10-25-2001 04-02-1993 00249	JACOBS ENGINEERING GROUP K. BREWER NAVFAC - SOUTHWEST DIVISION	INSTALLATION RESTORATION PROGRAM DRAFT REMEDIAL INVESTIGATION/ FEASIBILITY STUDY WORK PLAN	ADMIN RECORD	COC DCE DQO FS GW IRP METALS PAH PCB PESTICIDES RFA RFI RI ROD SEDIMENTS SOIL SOIL BORING STORMWATER TFH TRC UST VOC VSI WATER	001 002 003 004 005 006A 007	SOUTHWEST DIVISION - BLDG. 1 PROBLEM FILE CABINET
N68311 / 000115 NONE MEMO NONE 00011	08-26-1994 06-14-1993 NONE 04.3	NAVFAC - SOUTHWEST DIVISION C. LEADON CODE 1832.JJ J. JOYCE	TECHNICAL REVIEWS OF THE DRAFT REMEDIAL INVESTIGATION/FEASIBILITY STUDY WORK PLANS, DRAFT PRELIMINARY ASSESSMENT FOR SITE 6B AND DRAFT SITE MANAGEMENT PLAN. ***COMMENTS: INTERIM FINAL, EPA/540/G-89/004, WASHINGTON D.C., DTD 10/88; US EPA INT. FINAL, PB92-963334, PUB. 9285.7-01C, DTD 12/91; SMUCKER, S.J. REGION IX PRG'S SECOND QTR '93. DOCUMENT WAS NOT SUBMITTED TO ADMINISTRATIVE RECORDS.***	ADMIN RECORD	ARAR COMMENTS FS IRA PA RI SMP	001 002 004 006A 006B 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03112001 IMAGED LBNS_002

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N68311 / 000373 CLE-C01- 01F249/250-39 MM NONE 00007	10-03-1994 07-19-1993 00249 AND 250 04.3	JACOBS ENGINEERING K. BREWER NAVFAC - SOUTHWEST DIVISION	19 JULY 1993 COMMENT RESOLUTION MEETING DRAFT REMEDIAL INVESTIGATION/FEASIBILITY (RI/FS) STUDY WORK PLANS & SAMPLING & ANALYSIS PLANS (SAPS). ***COMMENTS: PROJECT NOTE NO. PN-0249/250-39***	ADMIN RECORD	CHAR COMMENTS DATA FS GW MONITORING RI SAP WATER WELLS	003 004 007 008 012 013 06A	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03112001 IMAGED LBNS_002
N68311 / 000377 NONE LTR NONE 00005	10-03-1994 09-02-1993 NONE 01.1	DTSC C.A. O'ROURKE NAVFAC - SOUTHWEST DIVISION A. LEE	RESPONSE TO PROPOSED MODIFICATIONS TO BIOACCUMULATION TESTING PROGRAM FOR SITE 7	ADMIN RECORD	DATA	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03112001 IMAGED LBNS_002
N68311 / 000284 CLE-CO-01F249-B2- 0002 RPT N68711-89-D-9296 00660	09-21-1994 • 09-13-1993 00249 03.1	JACOBS ENGINEERING GROUP NAVFAC - SOUTHWEST DIVISION	RI/FS FINAL SAMPLING AND ANALYSIS PLAN (SAP) INCLUDES QAPP & HASP SEE AR #158 FINAL TECH MEMO PROPOSED MOD TO FINAL RI/FS PLAN DTD 30 JAN 1994 AND AR #191 TECH MEMO NO. 2, REVISED FINAL TECH MEMO PROPOSED MOD TO FINAL RI/FS PLAN DTD MAY 1994		DMP FS GW H&SP MONITORING PERMIT QA QAPP QC RI SAP SB WELLS WMP	001 002 003 004 005 006A 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110502 IMAGED LBNS_001

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N68311 / 000240 CLE-C01-01F226- S2-0001 RPT N68711-89-D-9296 00347	09-07-1994 10-14-1993 00226 01.1	JACOBS ENGINEERING NAVFAC - SOUTHWEST DIVISION	INSTALLATION RESTORATION PROGRAM (IRP) FINAL SITE MANAGEMENT PLAN (SMP)	ADMIN RECORD	AWQC BCP BRAC CERCLA IRP OU RCRA SMP	001 002 003 004 005 007 06A 06B	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110502 IMAGED LBNS_001
N68311 / 000140 NONE RPT N68711-92-D-4670 00005	08-29-1994 12-18-1993 00015, 016, 026 03.0	BECHTEL NATIONAL, INC. K. KAPUR NAVFAC - SOUTHWEST DIVISION	DRAFT INVESTIGATION DERIVED WASTE (IDW) MANAGEMENT PLAN CTO- 0015,0016,0026	ADMIN RECORD	FS GW IDWMP LAB RI	001 002 003 004 005 006A 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110501 IMAGED LBNS_001
N68311 / 000141 NONE PLAN N68711-92-D-4670 00053	08-29-1994 12-18-1993 00015 04.3	BECHTEL NATIONAL, INC. K. KAPUR NAVFAC - SOUTHWEST DIVISION	DRAFT RISK ASSESSMENT WORK PLAN REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS). ***COMMENTS: SARA SECTION 211 (10 USC 2703); SARA SECTION 211 (10 USC 2701)***	ADMIN RECORD	CERCLA DERA FS HAZ WASTE IRP RA RCRA RI SARA	001 002 003 004 005 006A 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110501 IMAGED LBNS_001
N68311 / 000158 NONE RPT N68711-92-D-4670 00017	08-29-1994 01-30-1994 00015, 016, 026 04.3	BECHTEL NATIONAL, INC. K. KAPUR NAVFAC - SOUTHWEST DIVISION	FINAL TECHNICAL MEMO PROPOSED MOD TO FINAL RI/FS PLAN SEE AR #284, RI/FS, DATED 13 SEP 1993 AND AR #191, TECHNICAL MEMO NO. 2, REVISED FINAL TECHNICAL MEMO PROPOSED MOD TO FINAL RI/FS PLAN, DTD MAY 1994	ADMIN RECORD	FS GW RI TECH MEMO WELLS WORK PLAN	004 006A 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110501 IMAGED LBNS_001

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N68311 / 000160 NONE RPT N68711-92-D-4670 00053	08-29-1994 01-30-1994 00015, 016, 026 03.3	BECHTEL NATIONAL, INC. K. KAPUR NAVFAC - SOUTHWEST DIVISION	FINAL RISK ASSESSMENT WORK PLAN REMEDIAL INVESTIGATION/FEASIBILITY STUDY (SEE AR #852 - DRAFT ADDENDUM AND AR #1009 - FINAL ADDENDUM)	ADMIN RECORD	CERCLA CHAR DATA DERA FS GW IRP RCRA RI RISK SARA WORK PLAN	001 002 003 004 005 006A 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110501 IMAGED LBNS_001
N68311 / 000161 NONE RPT N68711-92-D-4670 00142	08-29-1994 01-30-1994 00015 03.3	BECHTEL NATIONAL, INC. K. KAPUR NAVFAC - SOUTHWEST DIVISION	FINAL DATA MANAGEMENT PLAN FOR CTO'S 015, 016, AND 026	ADMIN RECORD	DATA DMP FS GW LAB OU QAPP RI SAP SB WATER	001 002 003 004 005 006A 007A 007B	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03101602 IMAGED LBNS_001
N68311 / 000163 NONE RPT N68711-92-D-4670 00005	08-29-1994 01-30-1994 00015 03.3	BECHTEL NATIONAL, INC. K. KAPUR NAVFAC - SOUTHWEST DIVISION	FINAL INVESTIGATION DERIVED WASTE (IDW) MANAGEMENT PLAN CTO'S 0015, 0016, AND 0026	ADMIN RECORD	GW HAZ WASTE IDWMP SB WELLS	001 002 003 004 005 006A 007	SOUTHWEST DIVISION - BLDG. 1 POSSIBLE COMPLIANCE

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N68311 / 000164 NONE RPT N68711-92-D-4670	08-29-1994 01-30-1994 00026 03.1	BECHTEL NATIONAL K. KAPUR	FINAL TECHNICAL MEMORANDUM NO. 5 FOR FISH SAMPLING AND ANALYSIS PLAN	ADMIN RECORD	FS RA RI RISK	007	SOUTHWEST DIVISION - BLDG. 12
00015							PALLET 16 - SW03101602 IMAGED LBNS_001
N68311 / 000856 NONE PLAN NONE 00315	03-13-1997 03-01-1994 NONE 03.3	NAVSTA LONG BEACH NAVFAC - SOUTHWEST DIVISION	BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP PLAN	ADMIN RECORD	BRAC CLOSURE PCB RA UST VOC	001 002 003 004 005 006A 007 BLDG. 143 BLDG. 144 BLDG. 32 BLDG. 401 BLDG. 815 OU 1 OU 2 OU 3	SOUTHWEST DIVISION - BLDG. 1 TO BE DELETED
N68311 / 000182 NONE LTR N68711-92-D-4670 00010	08-30-1994 04-11-1994 00026 03.1	DTSC A. GUTIERREZ NAVSTA/NSY LB	REVIEW OF TECHNICAL MEMORANDUM NO. 4 - DRAFT IMPLEMENTATION OF FINAL RI/FS SAMPLING AND ANALYSIS PLAN - INCLUDES COMMENTS FROM THE REGIONAL WATER QUALITY CONTROL BOARD	ADMIN RECORD	COMMENTS FS RI SAP TECH MEMO	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110501 IMAGED LBNS_001
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N68311 / 001069 CTO-0026/0078 MM N68711-92-D-4670 00003	06-03-1999 04-13-1994 00026 03.6	NAVFAC - SOUTHWEST DIVISION VARIOUS AGENCIES	MEETING MINUTES FROM 13 APRIL 1994 TECHNICAL MEMORANDUM NO. 4 WORKSHOP - DRAFT IMPLEMENTATION OF FINAL RI/FS SAMPLING AND ANALYSIS PLAN	ADMIN RECORD	COMMENTS MTG MINS	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04011501 IMAGED LBNS_005
N68311 / 000191 NONE RPT N68711-92-D-4670 00019	08-30-1994 05-09-1994 00015, 016, 026 04.3	BECHTEL NATIONAL, INC. K. KAPUR NAVFAC - SOUTHWEST DIVISION	TECH MEMO NO. 2 REV FINAL TECH MEMO PROPOSED MOD TO FINAL RI/FS PLAN. INCLUDES RESPONSE TO COMMENTS (DATED 10 FEB 1994) ON DRAFT TECH MEMO AND WORK PLANS. SEE AR #284, RI/FS, DTD 13 SEP 1993 AND AR #158 FINAL TECH MEMO PROPOSED MOD TO FINAL RI/FS PLAN	ADMIN RECORD	FS GW RI SAP TECH MEMO WELLS	001 002 003 004 005 006A 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110501 IMAGED LBNS_001
N68311 / 000203 NONE LTR N68711-92-D-4670 00083	08-30-1994 05-18-1994 00015 04.4	BECHTEL NATIONAL, INC. K. KAPUR NAVFAC - SOUTHWEST DIVISION	REVISED FINAL HEALTH AND SAFETY PLAN SUPPLEMENT	ADMIN RECORD	FS H&SP HAZ WASTE RI SB	001 002 003 004 005 006A 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04012901 IMAGED LBNS_005
N68311 / 000205 NONE LTR NONE 00008	08-31-1994 05-20-1994 00015 03.1	DTSC A. GUTIERREZ NAVSTA LONG BEACH	COMMENTS ON THE TECHNICAL MEMORANDUM NO. 4DRAFT FINAL IMPLEMENTATION OF FINAL REMEDIAL INVESTIGATION/FEASIBILITY STUDY SAMPLING AND ANALYSIS PLAN	ADMIN RECORD	COMMENTS FS RI SAP TECH MEMO	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110502 IMAGED LBNS_001

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N68311 / 001071 NONE MISC NONE 00001	06-03-1999 06-09-1994 NONE 03.6	NAVFAC - SOUTHWEST DIVISION VARIOUS AGENCIES	MONTHLY REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) STATUS MEETING AGENDA FOR 9 JUNE 1994	ADMIN RECORD	FS RI	001 002 003 004 005 006A 006B	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010601 IMAGED
N68311 / 001072 NONE MM NONE 00001	06-03-1999 06-17-1994 00026 03.6	NAVFAC - SOUTHWEST DIVISION A. LEE NAVFAC - SOUTHWEST DIVISION	TELEPHONE CONVERSATION WITH A. GUTIERREZ OF DTSC GIVING VERBAL APPROVAL OF TECHNICAL MEMORANDUM NO. 4 WITH PERMISSION TO PROCEED WITH FIELD ACTIVITIES FOR SITE 7	ADMIN RECORD	TECH MEMO	007 007	LBNS_005 SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010601 IMAGED LBNS 005
N68311 / 001073 NONE FAX NONE 00003	06-03-1999 06-23-1994 NONE 03.6	DTSC LONG BEACH A. GUTIERREZ NAVFAC - SOUTHWEST DIVISION A. LEE	FAX TRANSMITTAL OF NOTES AND RECOMMENDATIONS FROM SITE 7 VISIT OF 21 JUNE 1994	ADMIN RECORD	SEDIMENTS	007	PALLET 16 - SW04010601 IMAGED LBNS_005
N68311 / 001074 CTO-026/0106 MM N68711-92-D-4670 00002	06-03-1999 06-23-1994 00026 03.6	NAVFAC - SOUTHWEST DIVISION VARIOUS AGENCIES	MEETING MINUTES OF JUNE 23, 1994 CONFERENCE CALL ON SEDIMENT SAMPLING IN LONG BEACH HARBOR	ADMIN RECORD	SEDIMENTS TOC	007	LBNS_005 SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010601 IMAGED LBNS_005

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N68311 / 000220 NONE LTR N68711-92-D-4670 00003	08-31-1994 06-28-1994 00026 03.1	DTSC A.A. ARELLANO COUNTY OF LONG BEACH B. GANOV	APPROVAL OF THE TECHNICAL MEMORANDUM NO. 4 - FINAL IMPLEMENTATION OF FINAL REMEDIAL INVESTIGATION (RI)/FEASIBILITY STUDY (FS) SAMPLING AND ANALYSIS PLAN	ADMIN RECORD	COMMENTS DATA FS RI SAP TECH MEMO	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03101602 IMAGED LBNS_001
N68311 / 000299 NONE LTR NONE 00007	09-21-1994 08-15-1994 NONE 10.1	DTSC A. GUTIERREZ NAVSTA/NSY LB	COMMENTS ON DRAFT TECHNICAL MEMORANDUM NO. 5, FISH SAMPLING AND ANALYSIS PLAN (SAP), DATED JULY 21, 1994	ADMIN RECORD	COMMENTS DATA RA SAP TECH MEMO	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110503 IMAGED LBNS_001
N68311 / 000450 CTO-0026/0156 MM N68711-92-D-4670 00011	10-04-1994 08-16-1994 00026 04.3	BECHTEL NATIONAL INC VARIOUS AGENCIES	MONTHLY STATUS MEETING AGENDA AND MINUTES, RI/FS ACTIVITIES AND FACILITY- WIDE INVESTIGATION. ***COMMENTS: ALSO COVERS ACTIVITIES UNDER CTO- 0015 (CTO-0015/0196), CTO-0016 (CTO- 0016/0194), AND CTO-0043 (CTO- 0043/0051)***	ADMIN RECORD	ARAR DATA FS LAB RA RI	001 002 003 004 005 006A 006B 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120401 IMAGED LBNS_002
N68311 / 000237 NONE LTR N68711-92-D-4670 00031	11-16-1994 08-24-1994 00026 03.1	BECHTEL NATIONAL, INC. A. CHARTRAND DISTRIBUTION	FINAL TECHNICAL MEMORANDUM NO. 5 FOR FISH SAMPLING AND ANALYSIS PLAN INCLUDES SWDIV TRANSMITTAL LETTER BY T. ERICKSON	ADMIN RECORD	DATA FS LAB RA RI RISK SAP TECH MEMO	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110502 IMAGED LBNS_001

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N68311 / 001083 CTO-0026/0166 MM N68711-92-D-4670 00006	06-03-1999 09-21-1994 00026 03.6	BECHTEL NATIONAL INC O. KADASTER NAVFAC - SOUTHWEST DIVISION M. RADECKI	MEETING MINUTES OF 21 SEPTEMBER 1994 MONTHLY STATUS REVIEW FOR WEST BASIN (INCLUDES LIST OF ATTENDEES)	ADMIN RECORD	MTG MINS	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010601 IMAGED LBNS_005
N68311 / 001084 CTO-0026/0175 MM N68711-92-D-4670 00004	06-03-1999 10-26-1994 00026 03.6	BECHTEL NATIONAL, INC. O. KADASTER VARIOUS AGENCIES	MEETING MINUTES FROM 26 OCTOBER 1994 MONTHLY STATUS REVIEW FOR WEST BASIN	ADMIN RECORD	MTG MINS	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010601 IMAGED LBNS_005
N68311 / 001085 NONE MISC NONE 00002	06-03-1999 11-10-1994 NONE 03.6	BECHTEL NATIONAL INC O. KADASTER NAVFAC - SOUTHWEST DIVISION M. RADECKI	AGENDA FOR 10 NOVEMBER 1994 RI/FS MONTHLY STATUS REVIEW MEETING	ADMIN RECORD	FS RI	001 002 003 004 005 006A 006B 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010601 IMAGED LBNS_005
N68311 / 001086 CTO-0026/0187 MM N68711-92-D-4670 00002	06-03-1999 11-10-1994 00026 03.6	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	MEETING MINUTES FROM 10 NOVEMBER 1994 MONTHLY STATUS REVIEW FOR WEST BASIN	ADMIN RECORD	FS MTG MINS RI	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010601 IMAGED LBNS_005

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N68311 / 000634 NONE MISC NONE 00032	11-15-1994 AD 00017	ADVISORY BOARD	RESTORATION ADVISORY BOARD COMMUNITY MEETING NOTICE, AGENDA AND HANDOUT MATERIALS	ADMIN RECORD INFO REPOSITORY	BRAC PUBNOT RAB	001 002 003 004 005 006 007 008 009	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120402 IMAGED LBNS_002
						010 011 012 013	

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N68311 / 000642	04-04-2002	BRAC	DRAFT BASE REALIGNMENT AND CLOSURE	ADMIN RECORD	ARAR	001	SOUTHWEST
NONE	12-30-1994 NONE	A. LEE NAVFAC - SOUTHWEST DIVISION	CLEANUP PLAN		AST	002	DIVISION - BLDG. 12
PLAN					BCP	003	
NONE 00202					BCT	004	
		DIVISION			BRAC	005	PALLET 16 -
					CERCLA	006A	SW03120402
					CRP	006B	IMAGED
					EA	007	LBNS_002
					EBS	OU 1	
					EIS	OU 2	
					FFSRA	OU 3	
					FOSL		
					FOST		
					FS		
					GW		
					IRP		
					MOA		
					NEPA		
					NPL		
					ORDNANCE		
					PAH		
					PCB		
					POL		
					RAB		
					RD		
					REMEDIAL ACTIO		
					RFA		
					RI		
					ROD		
					SARA		
					SOIL		
					SWMU		
					TRC		
					TRPH		
					UST		

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					UXO VOC		
N68311 / 001092 CTO-0026/0202 MM N68711-92-D-4670	06-03-1999 01-19-1995 00026 03.6	BECHTEL NATIONAL, INC. O. KADASTER NAVFAC - SOUTHWEST	MEETING MINUTES OF TECHNICAL WORKSHOP ON DATA EVALUATION AND RESPONSE TO COMMENTS ON DRAFT ADDENDUM TO RI/FS WORK PLAN AND RISK ASSESSMENT WORK PLAN	ADMIN RECORD	COMMENTS FS MTG MINS RA	007	SOUTHWEST DIVISION - BLDG. 12
00007		DIVISION			RI		PALLET 16 - SW04010602 IMAGED LBNS_005
N68311 / 000904 NONE LTR NONE 00005	03-26-1997 01-27-1995 NONE 10.1	EPA SAN FRANCISCO S. LAUTH NAVFAC - SOUTHWEST DIVISION A. LEE	COMMENTS ON DRAFT BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP PLAN	ADMIN RECORD	BCP COMMENTS	001 002 003 004 005 006A 007 PARCEL A PARCEL B	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03121801 IMAGED LBNS_004

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N68311 / 000857 03-13-1997 BECHTEL	FINAL BRAC CLEANUP PLAN (REV. NO. 2).	ADMIN RECORD	BCP	001	SOUTHWEST
NONE 02-24-1995 NATIONAL II	C ***COMMENTS: PDCC# 0116***		BRAC	002	DIVISION - BLDG. 1
PLAN 00017 K. KAPUR			CLEANUP	003	
N68711-92-D-4670 03.3 NAVFAC - SOUTHWES			GW	004	TO BE DELETED
00100 DIVISION			UST	005	TO BE DELETED
A. LEE				006A	
				007	
				AOC 1	
				AOC 10	
				AOC 11	
				AOC 12	
				AOC 13	
				AOC 14	
				AOC 15	
				AOC 16	
				AOC 17	
				AOC 18	
				AOC 19	
				AOC 2	
				AOC 20	
				AOC 3	
				AOC 4	
				AOC 5	
				AOC 6	
				AOC 7	
				AOC 8	
				AOC 9	
				BLDG. 40	
				BLDG. 673	
				BLDG. 676	
				BLDG. 756)
				OU 1	
				OU 2	
				OU 3	

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N68311 / 001093 CTO-0026/0187 MM N68711-92-D-4670 00005	06-03-1999 03-22-1995 00026 03.6	BECHTEL NATIONAL, INC. O. KADASTER NAVFAC - SOUTHWEST DIVISION	MEETING MINUTES FROM 22 MARCH 1995 MONTHLY STATUS REVIEW	ADMIN RECORD	MTG MINS	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010602 IMAGED LBNS_005
N68311 / 000659 NONE LTR NONE 00002	09-27-1995 04-21-1995 NONE 03.3	USEPA S. LAUTH NAVFAC - SOUTHWEST DIVISION M. RADECKI	COMMENTS ON DRAFT FINAL ADDENDUM TO RI/FS WORK PLAN AND RISK ASSESSMENT (RA) WORK PLAN	ADMIN RECORD	COMMENTS FS RI TECH MEMO	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120402 IMAGED LBNS_002
N68311 / 001009 NONE RPT N68711-92-D-4670 00181	12-10-1998 05-24-1995 00026 03.3	BECHTEL NATIONAL INC J. MOE NAVFAC - SOUTHWEST DIVISION M. RADECKI	FINAL ADDENDUM TO RI/FS WORK PLAN AND RISK ASSESSMENT WORK PLAN (RAWP) [SEE AR #160 - FINAL RISK ASSESSMENT, AR #283 - FINAL RI/FS AND AR #852 - DRAFT ADDENDUM)	ADMIN RECORD	AOPC FS RI SEDIMENTS WATER WORK PLAN	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04012901 IMAGED LBNS_001
N68311 / 001010 CTO-0026/0257 AND SER 1170/219 RPT N68711-92-D-4670 00229	12-10-1998 06-15-1995 00026 03.4	BECHTEL NATIONAL, INC. L. SMITH VARIOUS AGENCIES	TECHNICAL MEMORANDUM NO. 6 - INTERIM STATUS OF REMEDIAL INVESTIGATION AT SITE 7 (WEST BASIN) [INCLUDES LETTER FROM L. H. SMITH]	ADMIN RECORD	FS PCB RI SEDIMENTS TECH MEMO WATER	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010601 IMAGED LBNS_005

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N68311 / 000658 NONE LTR NONE	09-27-1995 06-27-1995 NONE 03.3	DTSC A. GUTIERREZ NSY LONG BEACH J. PICKERING	COMMENTS ON FINAL ADDENDUM TO REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) WORK PLAN AND RISK ASSESSMENT WORK PLAN	ADMIN RECORD	COMMENTS FS RI	007	SOUTHWEST DIVISION - BLDG. 12
00003							PALLET 16 - SW03120402 IMAGED LBNS_002
N68311 / 000754 NONE RPT N68711-92-D-4670 00170	08-22-1996 08-11-1995 00095 01.3	BNI SAN DIEGO K. KAPUR NAVFAC - SOUTHWEST DIVISION	DRAFT PRELIMINARY ASSESSMENT FOR THE AREAS OF POTENTIAL CONCERN	ADMIN RECORD	HAZ WASTE	001 002 003 004 005 006A 007 AOPC 1 AOPC 10 AOPC 11 AOPC 12 AOPC 13 AOPC 14 AOPC 15 AOPC 16 AOPC 17 AOPC 18 AOPC 19 AOPC 2 AOPC 20 AOPC 2 AOPC 2 AOPC 2 AOPC 5 AOPC 6 AOPC 7 AOPC 8	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03121801 IMAGED LBNS_003
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N68311 / 001011 CTO-0026/0272 RPT N68711-92-D-4670 00400	12-10-1998 08-15-1995 00026 03.4	BECHTEL NATIONAL, INC. J. KLUESENER NAVFAC - SOUTHWEST DIVISION	PRELIMINARY DATA SUBMITTAL PACKAGE FOR WEST BASIN (SURFACE SEDIMENT AND CLAM TISSUE ANALYTICAL DATA) [CD COPY NOT ENCLOSED] VOLUMES 1 THROUGH 3 OF 3. ***COMMENTS: MISSING VOLUMES 2 AND 3***	ADMIN RECORD	BIOASSAY DATA FS RI	007	SOUTHWEST DIVISION - BLDG. 1 PROBLEM SHELVING
N68311 / 001012 CTO-0026/0273 RPT N68711-92-D-4670 00030	12-10-1998 08-22-1995 00026 03.4	BECHTEL NATIONAL INC J. KLUESENER NAVFAC - SOUTHWEST DIVISION	TRANSMITTAL OF INVESTIGATION DERIVED WASTE REMOVAL FINAL REPORT DATED 16 JUNE 1995 (RELATED TO THE REMEDIAL INVESTIGATION CONDUCTED AT WEST BASIN - W/ ENCLOSURE)	ADMIN RECORD	IDW RI	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 -
		M. RADECKI					SW04011501 IMAGED LBNS_005
N68311 / 001094 CTO-0026/0295 MM N68711-92-D-4670	06-03-1999 09-06-1995 00026 03.6	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST	MEETING MINUTES FROM 6 SEPTEMBER 1995 TECHNICAL PRESENTATION - DATA EVALUATION METHODOLOGY AND TENTATIVE FINDINGS OF REMEDIAL INVESTIGATION	ADMIN RECORD	DATA FS MTG MINS RI	007	SOUTHWEST DIVISION - BLDG. 12
00010		DIVISION					PALLET 16 - SW04010602 IMAGED LBNS_005
N68311 / 001013 CTO-0026/0293 AND SER 1170/316 RPT	12-10-1998 09-18-1995 00026 03.4	BECHTEL NATIONAL INC J. KLUESENER NAVFAC - SOUTHWEST	FINAL REPORT - A BIOLOGICAL ASSESSMENT OF THE INFAUNAL COMMUNITIES (WEST BASIN, AUGUST 1994) [INCLUDES TRANSMITTAL LETTER BY L. SMITH]. ***COMMENTS: NOTE: PER	ADMIN RECORD	BIOASSAY DATA	007	SOUTHWEST DIVISION - BLDG. 12
N68711-92-D-4670 00165		DIVISION M. RADECKI	NANCY JAQUET INSTRUCTION, THE TITLE OF THE REPORT CHANGED FROM "BENTHIC COMMUNITY ANALYSIS REPORT AND PRELIMINARY DATA EVALUATION PACKAGE OF REMEDIAL INVESTIGATION FOR SITE 7 (WEST BASIN) TO THE CURRENT TITLE.***				PALLET 16 - SW04011501 IMAGED LBNS_005

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N68311 / 001095 SER 1170/316 DATA NONE 00002	06-03-1999 09-25-1995 NONE 03.6	NSY LONG BEACH VARIOUS AGENCIES	TRANSMITTAL OF BENTHIC COMMUNITY ANALYSIS REPORT AND PRELIMINARY DATA EVALUATION PACKAGE OF REMEDIAL INVESTIGATION (SEE AR #1013 - BENTHIC COMMUNITY ANALYSIS REPORT AND AR #1011 - PRELIMINARY DATA EVALUATION PACKAGE)	ADMIN RECORD	DATA RI	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04011501 IMAGED LBNS_005
N68311 / 000711 CTO-0026/0336 RPT N68711-92-D-4670 00247	03-26-1996 02-22-1996 00026 03.4	BECHTEL NATIONAL, INC. K. KAPUR NAVFAC - SOUTHWEST DIVISION	DRAFT REMEDIAL INVESTIGATION (RI) REPORT INSTALLATION RESTORATION PROGRAM FOR SITE 7 (VOLUME I OF VII) [SEE AR #712 THROUGH AR #717 - VOLUMES II THROUGH VII]	ADMIN RECORD INFO REPOSITORY	FS IRP LAB OU PCB RA RI RISK TOC	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120402 IMAGED LBNS_003
N68311 / 000712 CTO-0026/0336 RPT N68711-92-D-4670 00191	03-26-1996 02-22-1996 00026 03.4	BECHTEL NATIONAL, INC. K. KAPUR NAVFAC - SOUTHWEST DIVISION	DRAFT REMEDIAL INVESTIGATION (RI) REPORT INSTALLATION RESTORATION PROGRAM FOR SITE 7 (VOLUME II OF VII) [SEE AR #711 - VOLUME 1, AR #713 THROUGH AR #717 - VOLUMES III THROUGH VII]	ADMIN RECORD INFO REPOSITORY	FS IRP LAB OU PCB RA RI RISK TOC	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120402 IMAGED LBNS_003

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N68311 / 000713 CTO-0026/0336 RPT N68711-92-D-4670 00954	03-26-1996 02-22-1996 00026 03.4	BECHTEL NATIONAL, INC. K. KAPUR NAVFAC - SOUTHWEST DIVISION	DRAFT REMEDIAL INVESTIGATION (RI) REPORT INSTALLATION RESTORATION PROGRAM FOR SITE 7 (VOLUME III OF VII) [SEE AR #711 - VOLUME I, AR #712 - VOLUME II, AR #714 THROUGH AR #717 - VOLUMES IV THROUGH VII]	ADMIN RECORD INFO REPOSITORY	FS IRP LAB OU PCB RA RI RISK TOC	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120403 IMAGED LBNS_003
N68311 / 000714 CTO-0026/0336 RPT N68711-92-D-4670 01165	03-26-1996 02-22-1996 00026 03.4	BECHTEL NATIONAL, INC. K. KAPUR NAVFAC - SOUTHWEST DIVISION	DRAFT REMEDIAL INVESTIGATION (RI) REPORT INSTALLATION RESTORATION PROGRAM FOR SITE 7 (VOLUME IV OF VII) [SEE AR #711 THROUGH AR #713 - VOLUMES I THROUGH III, AR #715 THROUGH AR #717 - VOLUMES V THROUGH VII]	ADMIN RECORD INFO REPOSITORY	FS IRP LAB OU PCB RA RI RISK TOC	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120403 IMAGED LBNS_003
N68311 / 000715 CTO-0026/0336 RPT N68711-92-D-4670 01162	03-26-1996 02-22-1996 00026 03.4	BECHTEL NATIONAL, INC. K. KAPUR NAVFAC - SOUTHWEST DIVISION	DRAFT REMEDIAL INVESTIGATION (RI) REPORT INSTALLATION RESTORATION PROGRAM FOR SITE 7 (VOLUME V OF VII) [SEE AR #711 THROUGH AR #714 - VOLUMES I THROUGH IV, AR #716 AND AR #717 - VOLUMES VI AND VII]	ADMIN RECORD INFO REPOSITORY	FS IRP LAB OU PCB RA RI RISK TOC	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120403 IMAGED LBNS_003

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N68311 / 000716 CTO-0026/0336 RPT N68711-92-D-4670 00867	03-26-1996 02-22-1996 00026 03.4	BECHTEL NATIONAL, INC. K. KAPUR NAVFAC - SOUTHWEST DIVISION	DRAFT REMEDIAL INVESTIGATION (RI) REPORT INSTALLATION RESTORATION PROGRAM FOR SITE 7 (VOLUME VI OF VII) [SEE AR #711 THROUGH AR #715 - VOLUMES I THROUGH V, AR #717 - VOLUME VII]	ADMIN RECORD INFO REPOSITORY	FS IRP LAB OU PCB RA RI RISK TOC	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120403 IMAGED LBNS_003
N68311 / 000717 CTO-0026/0336 RPT N68711-92-D-4670 01070	03-26-1996 02-22-1996 00026 03.4	BECHTEL NATIONAL, INC. K. KAPUR NAVFAC - SOUTHWEST DIVISION	DRAFT REMEDIAL INVESTIGATION (RI) REPORT INSTALLATION RESTORATION PROGRAM FOR SITE 7 (VOLUME VII OF VII) [SEE AR #711 THROUGH 716 - VOLUMES I THROUGH VI]	ADMIN RECORD INFO REPOSITORY	FS IRP LAB OU PCB RA RI RISK TOC	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120403 IMAGED LBNS_003
N68311 / 000729 NONE MISC N68711-92-D-4670 00033	06-05-1996 02-22-1996 00017 10.3	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	PRELIMINARY RESPONSE TO RESTORATION ADVISORY BOARD AND PUBLIC COMMENTS RECEIVED ON THE DRAFT REMEDIAL INVESTIGATION REPORT	ADMIN RECORD INFO REPOSITORY	CERCLA COMMENTS IAS IRP NPL RAB RESPONSE RI SAP SARA	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04012901 IMAGED LBNS_005

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N68311 / 000740 NONE XMTL N68711-92-D-4670 00003	08-21-1996 02-23-1996 00026 01.6	BECHTEL NATIONAL, INC. J. KLUESENER NAVFAC - SOUTHWEST DIVISION P. KENNEDY	DRAFT REMEDIAL INVESTIGATION REPORT; INSTALLATION RESTORATION PROGRAM SITE 7, VOLUMES I AND II	ADMIN RECORD	RI	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03112002 IMAGED LBNS_002
N68311 / 000719 NONE MISC N68711-92-D-4670 00028	03-26-1996 03-19-1996 00017 10.5	RESTORATION ADVISORY BOARD PUBLIC INTEREST	RESTORATION ADVISORY BOARD (RAB) MEETING NOTICE, AGENDA, MEETING MINUTES, AND REMEDIAL INVESTIGATION PRESENTATION FOR SITE 7	ADMIN RECORD INFO REPOSITORY	MTG MINS PUBNOT RAB RI	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010601 IMAGED LBNS_005
N68311 / 001096 CTO-0026/0350 MM N68711-92-D-4670 00058	06-03-1999 03-20-1996 00026 03.6	NAVFAC - SOUTHWEST DIVISION M. RADECKI VARIOUS AGENCIES	20 MARCH 1996 MEETING MINUTES REGARDING PORT OF LONG BEACH DREDGING PROJECT FOR WEST BASIN, PIER T; CTO-0110 KICKOFF; AND TECHNICAL PRESENTATION ON FINDINGS OF REMEDIAL INVESTIGATION FOR WEST BASIN	ADMIN RECORD	MTG MINS RI	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010602 IMAGED LBNS_005
N68311 / 000746 NONE LTR NONE 00004	08-21-1996 03-22-1996 NONE 01.6	DTSC S. LEMIEUX NAVFAC - SOUTHWEST DIVISION K. KESLER	COMMENTS ON THE DRAFT FINDINGS OF SUITABILITY TO LEASE NAVY MOLE	ADMIN RECORD	COMMENTS FOSL	001 002 003 004 005 006 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03121801 IMAGED LBNS_003

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N68311 / 000751 NONE LTR NONE 00003	08-21-1996 04-08-1996 NONE 01.6	DTSC S. LEMIEUX NAVFAC - SOUTHWEST DIVISION K. KESLER	COMMENTS ON DRAFT FINAL FINDING OF SUITABILITY TO LEASE, NAVY MOLE	ADMIN RECORD	FOSL	001 002 003 004 005 006A 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03121801 IMAGED LBNS_003
N68311 / 000789 NONE LTR NONE 00005	09-09-1996 04-23-1996 NONE 03.4	FISH & WILDLIFE SERV G. KOBETICH NAVFAC - SOUTHWEST DIVISION M RADECKI	COMMENTS ON THE DRAFT RI REPORT IR PROGRAM FOR SITE 7	ADMIN RECORD	COMMENTS ER IRP RI	007	PALLET 16 - SW03120404 IMAGED LBNS_002
N68311 / 000752 NONE LTR NONE 00009	08-21-1996 05-02-1996 NONE 01.6	DTSC LONG BEACH A. GUTIERREZ NAVFAC - SOUTHWEST DIVISION M. RADECKI	COMMENTS ON THE DRAFT REMEDIAL INVESTIGATION REPORT FOR SITE 7	ADMIN RECORD	COMMENTS RI	007	DIVISION - BLDG. 12 PALLET 16 - SW03121801 IMAGED LBNS_003
N68311 / 000753 NONE LTR NONE 00013	08-22-1996 05-03-1996 NONE 03.6	NOAA SAN FRANCISCO L. SULLIVAN NAVFAC - SOUTHWEST DIVISION M. RADECKI	COMMENTS REGARDING THE DRAFT REMEDIAL INVESTIGATION REPORT FOR SITE 7	ADMIN RECORD	COMMENTS RI	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03121801 IMAGED LBNS_003

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N68311 / 000730 NONE MISC N68711-92-D-4670 00015	06-05-1996 05-07-1996 00017 10.3	NAVFAC - SOUTHWEST DIVISION	TECHNICAL WORKSHOP LONG BEACH HARBOR WEST BASIN AGENDA, PRESENTATION HANDOUT AND SIGN-IN SHEET	ADMIN RECORD INFO REPOSITORY	IAS IRP LAB RCRA SAP	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010601 IMAGED LBNS_005
N68311 / 000723 NONE LTR N68711-92-D-4670 00016	05-22-1996 05-13-1996 00110 04.3	BECHTEL NATIONAL, INC. K. WALTON NAVFAC - SOUTHWEST DIVISION	DRAFT TECHNICAL MEMORANDUM PROPOSED PLAN AND RECORDS OF DECISION	ADMIN RECORD INFO REPOSITORY	CERCLA FS NCP RI ROD TECH MEMO	001 002 003 004 005 006A 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010601 IMAGED LBNS_005
N68311 / 000851 CTO-0110/0015 PLAN N68711-92-D-4670 00012	03-13-1997 05-13-1996 00110 05.1	BECHTEL NATIONAL INC J. KLUESENER VARIOUS AGENCIES	DRAFT TECHNICAL MEMORANDUM PROPOSED PLANS AND RECORDS OF DECISION	ADMIN RECORD	IRA ROD TECH MEMO	001 002 003 004 005 006A 007 AOC 4	SOUTHWEST DIVISION - BLDG. 1 TO BE DELETED
N68311 / 000792 NONE MEMO NONE 00021	09-09-1996 05-23-1996 NONE 01.6	DTSC LONG BEACH A. GUTIERREZ NAVFAC - SOUTHWEST DIVISION M. RADECKI	COMMENTS ON THE DRAFT REMEDIAL INVESTIGATION REPORT FOR SITE 7	ADMIN RECORD	COMMENTS IRP RI	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010601 IMAGED LBNS_005

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N68311 / 000793 NONE LTR NONE 00020	09-09-1996 05-23-1996 NONE 01.6	DTSC LONG BEACH A. GUITIERREZ NAVFAC - SOUTHWEST DIVISION M. RADECKI	COMMENTS ON THE DRAFT RI REPORT FOR IR PROGRAM SITE 7 W/ENCL	ADMIN RECORD	COMMENTS RI	007	SOUTHWEST DIVISION - BLDG. 1 TO BE DELETED
N68311 / 001098 NONE MM N68711-92-D-4670 00020	06-03-1999 06-03-1996 00026 03.6	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION M. RADECKI	MEETING MINUTES AND AGENDA FOR 03 JUNE 1996 COMMENTS RESOLUTION MEETING	ADMIN RECORD	COMMENTS MTG MINS	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010602 IMAGED LBNS_005
N68311 / 000795 NONE MEMO NONE 00032	09-09-1996 06-15-1996 NONE 10.1	STATE OF CALIF/DFG M. MARTIN DTSC LONG BEACH A. GUTIERREZ	COMMENTS ON THE DRAFT RI REPORT IR PROGRAM FOR SITE 7	ADMIN RECORD	COMMENTS ER RI	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010601 IMAGED LBNS_005
N68311 / 000796 CTO-0026/0379 LTR N68711-92-D-4670 00003	09-10-1996 06-18-1996 00026 01.6	BNI SAN DIEGO J.W. KLUESENER NAVFAC - SOUTHWEST DIVISION P. KENNEDY	COPY OF MEMORANDUM REGARDING TRANSMITTAL OF SEDIMENT TOXICITY FOR SITE 7 DATA VALIDATION	ADMIN RECORD	DATA SEDIMENTS VOA	007	SOUTHWEST DIVISION - BLDG. 1 PROBLEM FILE CABINET

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CTO-0026/0381 XMTL N68711-92-D-4670	09-10-1996 06-18-1996 00026 09.3	BNI SAN DIEGO J.W. KLUESENER NAVFAC - SOUTHWEST DIVISION	QUALITY ASSURANCE PROJECT PLAN FOR SITE 7 TO ROY F WESTON, INC. THE DESIGNATED DATA VALIDATOR FOR U.S. EPA REGION 9 W/ENCL	ADMIN RECORD	DATA QAPP	007	SOUTHWEST DIVISION - BLDG. 1 PROBLEM FILE
00085		P. KENNEDY					CABINET
CTO-0026/0383 XMTL	09-10-1996 06-18-1996 00026	BNI SAN DIEGO J.W. KLUESENER NAVFAC - SOUTHWEST	COPY OF MEMORANDUM REGARDING TRANSMITTAL OF ELECTRONIC DATABASE FOR CHEMISTRY AND BIOASSAY	ADMIN RECORD	BIOASSAY	007	SOUTHWEST DIVISION - BLDG. 1
N68711-92-D-4670 00003	01.6	DIVISION P. KENNEDY					PROBLEM FILE CABINET
CTO-0026/0382 XMTL	09-10-1996 06-18-1996 00026 01.6	BNI SAN DIEGO J.W. KLUESENER NAVFAC - SOUTHWEST	COPY OF MEMORANDUM REGARDING TRANSMITTAL OF AN ELECTRONIC VERSION OF THE BIOASSAY DATA	ADMIN RECORD	BIOASSAY DATA	007	SOUTHWEST DIVISION - BLDG. 1
N68711-92-D-4670 00003	01.6	DIVISION P. KENNEDY					PROBLEM FILE CABINET
CTO-0026/0378	09-10-1996 06-18-1996 00026	BNI SAN DIEGO J.W. KLUESENER NAVFAC -	COPY OF MEMORANDUM REGARDING SEDIMENT CHEMISTRY DATA FOR VALIDATION	ADMIN RECORD	DATA SEDIMENTS	007	SOUTHWEST DIVISION - BLDG. 1
N68711-92-D-4670 00004	01.6	SOUTHWEST DIVISION P. KENNEDY					PROBLEM FILE CABINET

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N68311 / 000801 CTO-0026/0384 XMTL N68711-92-D-4670 00003	09-10-1996 06-18-1996 00026 01.6	BNI SAN DIEGO J.W. KLUESENER NAVFAC - SOUTHWEST DIVISION P. KENNEDY	COPY OF MEMORANDUM REGARDING TRANSMITTAL OF ELECTRONIC DATABASE FOR CHEMISTRY AND BIOASSAY	ADMIN RECORD	BIOASSAY DATA	007	SOUTHWEST DIVISION - BLDG. 1 PROBLEM FILE CABINET
N68311 / 000802 CTO-0026/0380 XMTL N68711-92-D-4670 00003	09-10-1996 06-18-1996 00026 01.6	BNI SAN DIEGO J.W. KLUESENER NAVFAC - SOUTHWEST DIVISION P. KENNEDY	COPY OF MEMORANDUM REGARDING TRANSMITTAL OF AGENCY COMMENTS ON DRAFT REMEDIAL INVESTIGATION REPORT	ADMIN RECORD	COMMENTS RI	007	SOUTHWEST DIVISION - BLDG. 1 PROBLEM FILE CABINET
N68311 / 000803 NONE MEMO NONE 00026	09-10-1996 06-20-1996 NONE 01.6	STATE OF CALIF/DFG M. MARTIN DTSC LONG BEACH A. GUTIERREZ	COMMENTS ON THE TOXICITY AND CHEMISTRY TEST DATA QA/QCREVIEW, DRAFT RI REPORT IR SITE 7 W/ATTACHMENTS (2)	ADMIN RECORD	COMMENTS QA QC RI	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010601 IMAGED LBNS_005
N68311 / 001099 NONE LTR NONE 00002	06-03-1999 06-21-1996 NONE 03.6	ROY F. WESTON R. McGINNIS USEPA REGION IX M. HAUSLADEN	DATA VALIDATION AND QUALIFIED DATA SUMMARY FORMS FOR INDEPENDENT VALIDATION, SITE 7 (W/O ENCLOSURE)	ADMIN RECORD	DATA	007	SOUTHWEST DIVISION - BLDG. 1 PROBLEM SHELVING

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N68311 / 001100 CTO-0026/0408 MM N68711-92-D-4670 00015	06-03-1999 06-25-1996 00026 03.6	BECHTEL NATIONAL INC S. BAGHDIKIAN NAVFAC - SOUTHWEST DIVISION	MINUTES FROM JUNE 25, 1996 MEETING - RESULTS OF USEPA VALIDATON OF CHEMISTRY DATA AND CAL-DFG QA/QC EVALUATION OF CHEMISTRY AND BIOASSAY DATA	ADMIN RECORD	BIOASSAY MTG MINS QA QC	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 -
		M. RADECKI					SW04011501 IMAGED LBNS_005
N68311 / 000806 NONE LTR NONE	09-10-1996 07-01-1996 NONE 10.1	DTSC LONG BEACH A. GUTIERREZ NAVFAC - SOUTHWEST	COMMENTS FROM DTSC AND DFG ON THE DRAFT RI REPORT IRP FOR SITE 7 W/ENCL	ADMIN RECORD	COMMENTS IRP RI	007	SOUTHWEST DIVISION - BLDG. 12
00061		DIVISION M. RADECKI					PALLET 16 - SW04010601 IMAGED LBNS_005
N68311 / 000777 NONE LTR NONE	09-09-1996 07-15-1996 NONE 10.1	DTSC LONG BEACH S. LEMIEUX PORT OF LONG BEACH	COMMENTS ON THE PORT OF LONG BEACH PIER "T" MARINE TEMINAL DRAFT ENVIRONMENTAL IMPACT REPORT	ADMIN RECORD	EIR IRP	004 007	SOUTHWEST DIVISION - BLDG. 12
00004		G. KNATZ					PALLET 16 - SW03120404 IMAGED LBNS_002
N68311 / 001101 NONE MEMO NONE	06-03-1999 07-26-1996 NONE 03.6	NAVFAC - SOUTHWEST DIVISION A. LEE NAVSTA LB RAB	REQUEST, BY RAB MEMBER, FOR ADDITIONAL EXTENSION OF TIME TO REVIEW DRAFT REMEDIAL INVESTIGATION REPORT	ADMIN RECORD	RAB RI	007	SOUTHWEST DIVISION - BLDG. 12
00001		D. DIROCCO					PALLET 16 - SW04010602 IMAGED LBNS_005

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N68311 / 000821 NONE LTR NONE 00002	09-13-1996 08-22-1996 NONE 10.1	DREADNAUGHT CONSULTG R. LANDGRAFF NAVFAC - SOUTHWEST DIVISION A. LEE	POINT/COUNTERPOINT ON COMMENTS ON DRAFT REMEDIAL INVESTIGATION REPORT FOR SITE 7 FROM THE RESTORATION ADVISORY BOARD MEETING (RAB) OF 20 AUGUST 1996	ADMIN RECORD	COMMENTS RAB RI	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03121801 IMAGED LBNS_003
N68311 / 001016 NONE MM NONE 00010	12-10-1998 09-17-1996 NONE 10.4	RESTORATION ADVISORY BOARD PUBLIC INTEREST	17 SEPTEMBER 1996 RESTORATION ADVISORY BOARD MEETING NOTICE, AGENDA AND MEETING MINUTES	ADMIN RECORD	MTG MINS RAB	005 007 AOPC 5	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04042202 IMAGED LBNS_002
N68311 / 001105 SWDIV SER 09C.AA/5347 LTR NONE 00004	06-04-1999 10-03-1996 NONE 01.6	NAVFAC - SOUTHWEST DIVISION A. ALVAREZ LAW OFFICE OF J. COHEN J. COHEN	NAVY'S RESPONSE TO NOTICE OF INTENT TO SUE DATED 20 AUGUST 1996	ADMIN RECORD	BRAC CERCLA FS IRP NEPA RI	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04011501 IMAGED LBNS_005
N68311 / 000862 SER 1832.AL/070 LTR NONE 00003	03-25-1997 11-04-1996 NONE 01.6	NAVFAC - SOUTHWEST DIVISION A. LEE CALIF. EARTH CORPS D. MAY	RESPONSE TO OCTOBER 29, 1996 TELEPHONE CONFERENCE ON UPDATE OF IRP RELATED TO SITE 7 (PORTION OF MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL	IRP	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120404 IMAGED LBNS_002

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N68311 / 000870 1832.AL/125 LTR NONE 00003	03-25-1997 12-04-1996 NONE 03.6	NAVFAC - SOUTHWEST DIVISION A. LEE CALIF. EARTH CORPS D. MAY	RESPONSE TO REQUEST FOR SITE 7 TECHNICAL WORKSHOP (PORTION OF MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL	REQUEST RESPONSE	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120404 IMAGED LBNS_002
N68311 / 000881 NONE LTR NONE 00002	03-25-1997 12-05-1996 NONE 10.1	DTSC LONG BEACH S. LEMIEUX PORT OF LONG BEACH G. KNATZ	COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT	ADMIN RECORD	EIR	006A 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120404 IMAGED LBNS_002
N68311 / 001106 CTO-0026/0429 MM N68711-92-D-4670 00008	06-04-1999 12-09-1996 00026 03.6	BECHTEL NATIONAL INC O. KADASTER NAVFAC - SOUTHWEST DIVISION M. RADECKI	MEETING MINTUES FROM 09 DECEMBER 1996 PROJECT STATUS TELECONFERENCE FOR WEST BASIN	ADMIN RECORD	MTG MINS	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04011501 IMAGED LBNS_005
N68311 / 001018 NONE MM NONE 00007	12-10-1998 01-21-1997 NONE 10.4	RESTORATION ADVISORY BOARD PUBLIC INTEREST	21 JANUARY 1997 RESTORATION ADVISORY BOARD MEETING NOTICE, AGENDA AND MEETING MINUTES	ADMIN RECORD	RAB UST	001 007 BLDG. 128	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04011501 IMAGED LBNS_005

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N68311 / 001108 NONE LTR NONE 00002	06-04-1999 01-21-1997 NONE 03.6	DREADNAUGHT CONSULTING R. LANDGRAFF NAVFAC - SOUTHWEST	REVIEW BY RESTORATION ADVISORY BOARD MEMBER OF RESPONSES TO AGENCY COMMENTS ON THE DRAFT REMEDIAL INVESTIGATION FOR SITE 7	ADMIN RECORD	COMMENTS RESPONSE RI	007	SOUTHWEST DIVISION - BLDG. 12
00002		DIVISION A. LEE					PALLET 16 - SW04011501 IMAGED LBNS_005
N68311 / 001109 SWDIV SER 56CM.AL/185 MISC	06-04-1999 01-27-1997 NONE 10.1	NAVFAC - SOUTHWEST DIVISION A. LEE VARIOUS	TRANSMITTAL OF PRELIMINARY RESULTS OF ADDITIONAL ANALYSES FOR WEST BASIN (W/ OUT ENCLOSURE) [SEE AR #925 - PRELIMINARY DRAFT]	ADMIN RECORD	COMMENTS DATA RESPONSE	007	SOUTHWEST DIVISION - BLDG. 12
NONE 00003		AGENCIES					PALLET 16 - SW04011501 IMAGED LBNS_005
N68311 / 001248 4900-06-08-AABF MEMO NONE	01-23-2004 02-04-1997 NONE	ROY F. WESTON, INC. R. MCGINNIS U.S. EPA - SAN	MEMORANDUM REGARDING THE REVISED VALIDATION OF OPERABLE UNIT (OU) 7 ORGANOTIN DATA	ADMIN RECORD INFO REPOSITORY		007 OU 7	SOUTHWEST DIVISION - BLDG. 1
00030		FRANCISCO M. HAUSLADEN					PROBLEM FILE CABINET
N68311 / 001110 CTO-0026/0445 MM N68711-92-D-4670	06-04-1999 02-13-1997 00026 03.6	BECHTEL NATIONAL INC O. KADASTER NAVFAC	MEETING MINUTES OF 13 FEBRUARY 1997 PROJECT STATUS TELECONFERENCE FOR WEST BASIN	ADMIN RECORD	MTG MINS	007	SOUTHWEST DIVISION - BLDG. 12
00013		SOUTHWEST DIVISION M. RADECKI					PALLET 16 - SW04011501 IMAGED LBNS_005

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N68311 / 001247 4900-006-008-AABI MEMO NONE 00002	01-23-2004 02-13-1997 NONE	ROY F. WESTON, INC. R. MCGINNIS U.S. EPA - SAN FRANCISCO	MEMORANDUM REGARDING ANALYTICAL DATA QUALITY	ADMIN RECORD INFO REPOSITORY		007	SOUTHWEST DIVISION - BLDG. 12
		M. HAUSLADEN					PALLET 16 - SW04032501 IMAGED LBNS_002
N68311 / 001111 NONE MISC NONE	06-04-1999 02-17-1997 NONE 10.1	USEPA REGION IX M. HAUSLADEN ROY F. WESTON, INC. K. BRASAEMLE	REVIEW OF THE RESPONSE TO COMMENTS ON THE DRAFT REMEDIAL INVESTIGATION REPORT	ADMIN RECORD	COMMENTS RESPONSE	007	SOUTHWEST DIVISION - BLDG. 12
00007		N. DRASAEMLE					PALLET 16 - SW04011501 IMAGED LBNS_005
N68311 / 000925 CTO-0026/0446 MISC N68711-92-D-4670	05-13-1997 02-27-1997 00026 01.6	NAVFAC - SOUTHWEST DIVISION A. LEE VARIOUS	TRANSMITTAL OF PRELIMINARY RESULTS OF ADDITIONAL ANALYSES, FEBRUARY 13, 1997 TELECONFERENCE MINUTES, AND REPSONSE TO COMMENTS ON DRAFT RI REPORT	ADMIN RECORD	COMMENTS IR MTG MINS RESPONSE	007	SOUTHWEST DIVISION - BLDG. 12
00234		AGENCIES			RESULTS RI		PALLET 16 - SW04011501 IMAGED LBNS_005

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N68311 / 000845 CTO-0118/0016 PLAN N68711-92-D-4670 00151	03-13-1997 03-01-1997 00118 03.3	BECHTEL NATIONAL INC J. KLUESENER NAVFAC - SOUTHWEST DIVISION R. SELBY	BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP PLAN. ***COMMENTS: PDCC# 0016***		BCP BRAC CLEANUP IRP	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 AOPC 1 AOPC 10 AOPC 11 AOPC 12 AOPC 13 AOPC 14 AOPC 15 AOPC 16 AOPC 17 AOPC 18 AOPC 20 AOPC 21 AOPC 22 AOPC 23 AOPC 3 AOPC 4	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03121801 IMAGED LBNS_003
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						AOPC 8	
						AOPC 9	
						BLDG. 14	3
						BLDG. 14	4
						BLDG. 15	
						BLDG. 22	0
						BLDG. 27	
						BLDG. 29	9
						BLDG. 30	7
						BLDG. 32	
						BLDG. 39	8
						BLDG. 4	
						BLDG. 40	
						BLDG. 40	1
						BLDG. 41	9
						BLDG. 42	
						BLDG. 42	2
						BLDG. 46	
						BLDG. 65	0
						BLDG. 66	9
						BLDG. 67	1
						BLDG. 67	6
						BLDG. 74	1
						BLDG. 74	9
						BLDG. 75	6
						BLDG. 8	
						BLDG. 82	1
						BLDG. 83	1
						BLDG. 88	8
						BLDG. 95	

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N68311 / 001178 NONE FAX NONE 00002	06-10-1999 03-12-1997 NONE 10.1	NAVFAC - SOUTHWEST DIVISION A. LEE USEPA REGION IX M. HAUSLADEN	REVIEW OF WESTON COMMENTS ON SITE 7 DATED 17 FEBRUARY 1997	ADMIN RECORD	COMMENTS	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04011501 - PACKAGE IMAGED LBNS_005
N68311 / 000922 CTO-0111/0077 RPT N68711-92-D-4670 00108	05-05-1997 03-20-1997 00111 02.1	BECHTEL NATIONAL, INC. J. KLUESENER NAVFAC - SOUTHWEST DIVISION R. SELBY	FINAL SUPPLEMENTAL ENVIRONMENTAL BASELINE SURVEY (SEE AR #286 - REVISED FINAL CERFA/EBS)	ADMIN RECORD	EBS	001 002 003 004 005 006A 007 014 AOPC 17 AOPC 21 AOPC 21 AOPC 6 AOPC 9 APOC 5	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04011501 IMAGED LBNS_005
N68311 / 001179 NONE MISC NONE 00003	06-10-1999 03-31-1997 NONE 01.1	NAVFAC - SOUTHWEST DIVISION C. LEADON NAVFAC - SOUTHWEST DIVISION M. RADECKI	TECHNICAL POSITION ON BACKGROUND REFERENCE STATION 10, HARBOR SEDIMENTS ECO-RISK ASSESSMENT	ADMIN RECORD	RA SEDIMENTS	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04011501 - PACKAGE IMAGED LBNS_005

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N68311 / 001112 CTO-0026/0445 MM N68711-92-D-4670 00008	06-04-1999 04-01-1997 00026 03.6	BECHTEL NATIONAL INC O. KADASTER NAVFAC - SOUTHWEST DIVISION	MEETING MINUTES FROM THE 01 APRIL 1997 TECHNICAL WORKSHOP FOR WEST BASIN	ADMIN RECORD	MTG MINS	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 -
							SW04011501 IMAGED LBNS_005
N68311 / 000921 CTO-0026/0452 XMTL N68711-92-D-4670	05-05-1997 04-08-1997 00026 02.1	NAVFAC - SOUTHWEST DIVISION A. LEE VARIOUS	PRELIMINARY RESULTS OF ADDITIONAL ANALYSES; STATION-BY-STATION COMPARISON WITH REFERENCE, ER-LS & ER-MS (W/ENCLOSURE, TABLE 1 & 2). ***COMMENTS: PDCC #0452***	ADMIN RECORD	IR RESULTS	007 WEST BASIN	SOUTHWEST DIVISION - BLDG. 12
00012		AGENCIES					PALLET 16 - SW03121802 IMAGED LBNS_004
N68311 / 001113 NONE MISC N68711-92-D-4670	06-04-1999 04-28-1997 00026 03.6	BECHTEL NATIONAL INC O. KADASTER NAVFAC - SOUTHWEST	AGENDA AND LOCATION MAP FOR THE 28 APRIL 1997 TECHNICAL WORKSHOP	ADMIN RECORD		007	SOUTHWEST DIVISION - BLDG. 12
00004		DIVISION M. RADECKI					PALLET 16 - SW04011501 IMAGED LBNS_005
N68311 / 001114 CTO-0026/0445 MM N68711-92-D-4670	06-04-1999 04-28-1997 00026 03.6	BECHTEL NATIONAL INC O. KADASTER NAVFAC -	MEETING MINUTES FROM THE 28 APRIL 1997 TECHNICAL WORKSHOP FOR WEST BASIN	ADMIN RECORD	DATA MTG MINS	007	SOUTHWEST DIVISION - BLDG. 12
00019		SOUTHWEST DIVISION M. RADECKI					PALLET 16 - SW04011501 IMAGED LBNS_005

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N68311 / 001115 SWDIV SER 56LB.AL/0729 XMTL NONE 00003	06-04-1999 05-19-1997 NONE 03.6	NAVFAC - SOUTHWEST DIVISION A. LEE VARIOUS AGENCIES	TRANSMITTAL OF 01 APRIL 1997 WORKSHOP MINUTES AND 28 APRIL 1997 WORKSHOP MINUTES W/STATION CATEGORY DEFINITIONS, LISTINGS AND DATA (SEE AR #1112 - 4/1/97 WORKSHOP MINUTES AND AR #1114 - 4/28/97 WORKSHOP MINUTES)	ADMIN RECORD	DATA MTG MINS	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04012901 IMAGED LBNS_005
N68311 / 000963 CTO-0095/0163 RPT N68711-92-D-4670 00515	09-23-1997 06-05-1997 00095 01.2	BECHTEL NATIONAL INC K. KAPUR NAVFAC - SOUTHWEST DIVISION R. SELBY	FINAL SITE INSPECTION REPORT FOR AREA OF POTENTIAL CONCERN 5 (INCLUDES COMPILED RESPONSE TO COMMENTS ON DRAFT SITE INSPECTION REPORT FOR AREA OF POTENTIAL CONCERN 5)	ADMIN RECORD	GW IDW MONITORING PCE PRG SI SOIL UST VOC WELLS	007 AOPC 5 BLDG. 46 BLDG. 8	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03121802 IMAGED LBNS_004
N68311 / 001116 4900-06-08-AABT FAX NONE 00005	06-04-1999 06-16-1997 NONE 03.6	ROY F. WESTON, INC. K. BRASAEMLE USEPA - SAN FRANCISCO M. HAUSLADEN	RESOLUTION OF TRIBUTYLTIN DATA VALIDATION ISSUES	ADMIN RECORD	DATA	007	SOUTHWEST DIVISION - BLDG. 1 PROBLEM SHELVING

Record Type Re Contr./Guid. No. C1	rc. Date ecord Date TO No. PA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject/Comments	Classification	Keywords		Location FRC Access. No. RC/SWDIV Box No. RC Warehouse Loc. CD No.
CTO-0026/0473 06 RPT 00	9-25-1997 6-30-1997 0026 3.4	NAVFAC - SOUTHWEST DIVISION A. LEE VARIOUS AGENCIES	DRAFT FINAL REMEDIAL INVESTIGATION REPORT (VOLUMES I-IV)	ADMIN RECORD	ARAR DATA DISPOSAL DREDGING HABITAT HERBICIDE IRP PCB PESTICIDES PIPELINE RI SEDIMENTS WATER	003 007 007A 007B BLDG. 104 BLDG. 109 BLDG. 128 BLDG. 129 BLDG. 130 BLDG. 132 BLDG. 143 BLDG. 143 BLDG. 144 BLDG. 145 BLDG. 162 BLDG. 8 BLDG. 8 BLDG. 800 DRY DOCK 2 DRY DOCK 2 DRY DOCK 2 DRY DOCK 3 OU 3 PIER 9 SHOP 3 SHOP 3 SHOP 3 SHOP 3 SHOP 7 SHOP 71 SHOP 71	2

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N68311 / 001022 NONE MM NONE	12-10-1998 07-15-1997 NONE 10.4	NAVSTA RAB INTERESTED PARTIES	NOTICE, MINUTES AND AGENDA FROM JULY 15, 1997 RESTORATION ADVISORY BOARD MEETING	ADMIN RECORD	MTG MINS RAB	007	SOUTHWEST DIVISION - BLDG. 12
00005							PALLET 16 - SW04011501 IMAGED LBNS_005
N68311 / 001118 NONE MISC NONE	06-04-1999 07-30-1997 NONE 10.1	US FISH AND WILDLIFE SERVICE G. KOBETICH NAVFAC -	COMMENTS ON DRAFT FINAL REMEDIAL INVESTIGATION	ADMIN RECORD	COMMENTS RI	007	SOUTHWEST DIVISION - BLDG. 12
00003		SOUTHWEST DIVISION A. LEE					PALLET 16 - SW04011501 IMAGED LBNS_005
N68311 / 001119 NONE FAX NONE	06-04-1999 08-04-1997 NONE 10.1	USEPA - TECH SUPPORT TEAM N. BLACK USEPA	COMMENTS ON THE DRAFT FINAL REMEDIAL INVESTIGATION REPORT FOR WEST BASIN	ADMIN RECORD	COMMENTS RI	007	SOUTHWEST DIVISION - BLDG. 12
00001		M. HAUSLADEN					PALLET 16 - SW04011501 IMAGED LBNS_005
N68311 / 001246 4900-06-08-AACA LTR NONE	01-23-2004 08-05-1997 NONE	ROY F. WESTON, INC. K. BRASAEMLE NAVFAC -	COMMENTS ON THE FINAL RESOLUTION OF ORGANOTIN DATA VALIDATIONS ISSUES FOR SITE 7	ADMIN RECORD INFO REPOSITORY	COMMENTS	007	SOUTHWEST DIVISION - BLDG. 12
00002		SOUTHWEST DIVISION					PALLET 16 - SW04032501 IMAGED LBNS_002

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N68311 / 001120 NONE FAX NONE	06-04-1999 08-14-1997 NONE 10.1	USEPA REGION IX M. HAUSLADEN NAVFAC - SOUTHWEST DIVISION	COMMENTS ON THE DRAFT FINAL REMEDIAL INVESTIGATION REPORT	ADMIN RECORD	COMMENTS DATA TOC	007	SOUTHWEST DIVISION - BLDG. 12
00005		A. LEE					PALLET 16 - SW04011501 IMAGED LBNS_005
N68311 / 001121 NONE MISC NONE	06-04-1999 10-07-1997 NONE 10.1	NOAA L. SULLIVAN NAVFAC - SOUTHWEST	NOAA COMMENTS ON THE DRAFT FINAL REMEDIAL INVESTIGATION REPORT	ADMIN RECORD	COMMENTS RI	007	SOUTHWEST DIVISION - BLDG. 12
00004		DIVISION M. RADECKI					PALLET 16 - SW04011501 IMAGED LBNS_005
N68311 / 001122 CTO-0026/0492 MISC N68711-92-D-4670	06-04-1999 11-06-1997 00026 10.1	BECHTEL NATIONAL INC O. KADASTER VARINOISC	DRAFT - RESPONSES TO AGENCY AND TRUSTEE COMMENTS ON DRAFT FINAL REMEDIAL INVESTIGATION REPORT FOR WEST BASIN	ADMIN RECORD	COMMENTS RESPONSE RI	007	SOUTHWEST DIVISION - BLDG. 12
00026		AGENCIES					PALLET 16 - SW04011501 IMAGED LBNS_005
N68311 / 001123 NONE MISC	06-04-1999 11-06-1997 NONE	DTSC LONG BEACH A.GUTIERREZ NAVFAC -	COMMENTS ON THE DRAFT FINAL REMEDIAL INVESTIGATION REPORT	ADMIN RECORD	COMMENTS RI	007	SOUTHWEST DIVISION - BLDG. 1
NONE 00005	10.1	SOUTHWEST DIVISION M. RADECKI					PROBLEM SHELVING

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N68311 / 001023 NONE MM NONE 00006	12-10-1998 11-18-1997 NONE 10.4	RESTORATION ADVISORY BOARD PUBLIC INTEREST	18 NOVEMBER 1997 RESTORATION ADVISORY BOARD MEETING NOTICE, AGENDA AND MEETING MINUTES	ADMIN RECORD	MTG MINS RAB	001 002 003 004 005	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 -
						006A 007 014	SW04042202 IMAGED LBNS_002
N68311 / 001177 CTO-0026/0496 TEL N68711-92-D-4670	06-10-1999 11-19-1997 00026 03.6	BECHTEL NATIONAL, INC. O. KADASTER NAVFAC - SOUTHWEST	CONTACT REPORT - INQUIRY OF NAVY'S REVIEW OF RESPONSE TO VARIOUS AGENCY COMMENTS ON THE DRAFT AND DRAFT FINAL REMEDIAL INVESTIGATION REPORTS	ADMIN RECORD	COMMENTS RESPONSE RI	007	SOUTHWEST DIVISION - BLDG. 12
00001	SOUTHWEST DIVISION A. LEE					PALLET 16 - SW04011501 - PACKAGE IMAGED LBNS_005	
N68311 / 001175 CTO-0026/0499 MISC N68711-92-D-4670	06-10-1999 12-02-1997 00026 10.1	BECHTEL NATIONAL, INC. O. KADASTER NAVFAC - SOUTHWEST	FINAL RESPONSES TO USEPA/WESTON COMMENTS ON RESOLUTION OF ORGANOTIN DATA VALIDATION ISSUES; DRAFT FINAL REMEDIAL INVESTIGATION REPORT	ADMIN RECORD	COMMENTS DATA RESPONSE RI	007	SOUTHWEST DIVISION - BLDG. 12
00004		DIVISION					PALLET 16 - SW04011501 - PACKAGE IMAGED LBNS_005
N68311 / 001176 CTO-0026/0501 MISC N68711-92-D-4670	06-10-1999 12-03-1997 00026 10.1	BECHTEL NATIONAL INC O. KADASTER NAVFAC - SOUTHWEST	DRAFT RESPONSES TO CA DEPARTMENT OF FISH & GAME COMMENTS ON DRAFT FINAL REMEDIAL INVESTIGATION REPORT	ADMIN RECORD	COMMENTS RESPONSE RI	007	SOUTHWEST DIVISION - BLDG. 12
00006		DIVISION					PALLET 16 - SW04011501 - PACKAGE IMAGED LBNS_005
Tuesday, September	r 26, 2006		trative Record (AR) Index includes references to o citations are considered to be part of this AR but			Pa	age 42 of 85

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N68311 / 001173 NONE MISC NONE	06-10-1999 12-05-1997 NONE 10.1	DTSC LONG BEACH A. GUTIERREZ NAVFAC - SOUTHWEST	COMMENTS FROM CALIFORNIA DEPARTMENT OF FISH AND GAME ON THE DRAFT FINAL REMEDIAL INVESTIGATION REPORT (SENT VIA DTSC) (SEE AR #966)	ADMIN RECORD	COMMENTS RI	007	SOUTHWEST DIVISION - BLDG. 12
00006		DIVISION A. LEE					PALLET 16 - SW04011501 - PACKAGE IMAGED LBNS_005
N68311 / 001003 SWDIV SER 56LB.AL/1032-1035 LTR	03-16-1998 12-11-1997 NONE 01.6	NAVFAC - SOUTHWEST DIVISION A. LEE VARIOUS	IDENTIFICATION OF STATE ARARS FOR THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) OF IR SITE 7	ADMIN RECORD	ARAR FS RI	007	SOUTHWEST DIVISION - BLDG. 12
N47408-95-D-0730 00008		AGENCIES					PALLET 16 - SW04010601 IMAGED LBNS_005
N68311 / 001174 NONE FAX NONE	06-10-1999 12-12-1997 NONE 10.1	BECHTEL NATIONAL INC O. KADASTER NAVFAC - SOUTHWEST	FACSIMILE TRANSMITTAL OF WESTON LABORATORY COMMENTS ON BECHTEL'S FINAL RESPONSE TO COMMENTS ON ORGANOTIN DATA VALIDATION ISSUES	ADMIN RECORD	COMMENTS DATA RESPONSE	007	SOUTHWEST DIVISION - BLDG. 12
00004		DIVISION A. LEE					PALLET 16 - SW04011501 - PACKAGE IMAGED LBNS_005
N68311 / 000984 CTO-0026/0502 RPT N68711-92-D-4670	02-27-1998 12-30-1997 00026 03.4	NAVFAC - SOUTHWEST DIVISION A. LEE VARIOUS	FINAL REMEDIAL INVESTIGATION (RI) REPORT (VOLUMES I THROUGH IX OF IX)	ADMIN RECORD	IRP RI RISK SEDIMENTS	007	SOUTHWEST DIVISION - BLDG. 12
03000		AGENCIES					PALLET 16 - SW04042202

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N68311 / 001027 SWDIV SER 56LB.AL/0071 PLAN NONE 00172	12-10-1998 02-25-1998 NONE 01.1	NAVFAC - SOUTHWEST DIVISION A. LEE VARIOUS AGENCIES	BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP PLAN UPDATE	ADMIN RECORD	BCP BCT BRAC CERCLA CERFA NEPA RCRA SARA	001 002 003 004 005 006A 007 014 BLDG. 816	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03121803 IMAGED LBNS_004
N68311 / 000988 CTO-0026/0524 MISC N68711-92-D-4670 00018	03-16-1998 03-03-1998 00026 03.4	BECHTEL NATIONAL, INC. K. KAPUR VARIOUS AGENCIES	TRANSMITTAL OF REPLACEMENT PAGES FOR "FINAL REMEDIAL INVESTIGATION (RI) REPORT: INSTALLATION RESTORATION PROGRAM FOR SITE 7 (VOLS I-IX) DATED DECEMBER 1997	ADMIN RECORD	IRP RI	007	SOUTHWEST DIVISION - BLDG. 1 PROBLEM SHELVING
N68311 / 001042 CTO-0160/0008 XMTL N68711-92-D-4670 00299	12-14-1998 04-22-1998 00160 04.2	BECHTEL NATIONAL INC O. KADASTER NAVFAC - SOUTHWEST DIVISION	DRAFT FEASIBILITY STUDY WORK PLAN FOR THE PERIMETER ROAD, CLEAN FILL DISPOSAL AREA, & THE EXPLOSIVES BURNING GROUND (SEE AR #101, #107, #1053 & #1125 - COMMENTS)	ADMIN RECORD	ARAR COEC DMP DQO FS FSP IDWMP PCB RA RAB ROD SARA SEDIMENTS SOIL WORK PLAN	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03121804 IMAGED LBNS_004

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N68311 / 001043 NONE MISC NONE 00005	12-14-1998 04-29-1998 NONE 10.6	NAVFAC - SOUTHWEST DIVISION F. ALJABI VARIOUS AGENCIES	SUBMITTAL OF DRAFT ENVIRONMENTAL FACT SHEET #1, DATED MAY 1998, FOR REVIEW AND COMMENTS	ADMIN RECORD	COMMENTS IRP	001 002 003 004 005 006A 006B 007 008 009 010 011 012 013 014	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04011501 IMAGED LBNS_005
N68311 / 000114 NONE MM NONE 00003	12-20-2000 05-19-1998 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON MAY 19, 1998	ADMIN RECORD INFO REPOSITORY	AOC FS MTG MINS RAB	003 004 005 006A 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110501 IMAGED LBNS_001
N68311 / 000107 CTO-0160/0005 MEMO N68711-92-D-4670 00003	11-21-2000 05-29-1998 00160	NAVFAC - SOUTHWEST DIVISION C. LEADON NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	TECHNICAL REVIEW OF THE DRAFT FEASIBILITY STUDY WORK PLAN (SEE AR #1042 - DRAFT FS) - DATED 22 APR 1998	ADMIN RECORD	AOEC COMMENTS DQO FS FSP SEDIMENTS WORK PLAN	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03101602 IMAGED LBNS_001

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N68311 / 001125 NONE MISC NONE 00003	06-04-1999 05-29-1998 NONE 10.1	FISH & WILDLIFE SERVICE E. STEVENS NAVFAC - SOUTHWEST	USFWS COMMENTS ON THE DRAFT FEASIBILITY STUDY WORK PLAN (SEE AR #1042 - DRAFT FS)	ADMIN RECORD	COMMENTS FS WORK PLAN	007	SOUTHWEST DIVISION - BLDG. 12
00003		DIVISION T. MACCHIARELLA					PALLET 16 - SW04011501 IMAGED LBNS_005
N68311 / 000101 NONE FAX NONE	11-21-2000 06-01-1998 00160	US EPA SAN FRANCISCO M. HAUSLADEN NAVFAC - SOUTHWEST	COMMENTS ON THE DRAFT FEASIBILITY STUDY WORK PLAN (SEE AR #1042 - DRAFT FS)	ADMIN RECORD	AOEC ARAR COC COEC	007	SOUTHWEST DIVISION - BLDG. 12
00005		DIVISION			COMMENTS FS SEDIMENTS WATER WORK PLAN		PALLET 16 - SW03101602 IMAGED LBNS_001
N68311 / 001051 NONE LTR NONE	12-14-1998 06-17-1998 NONE 10.1	CRWQCB LOS ANGELES J. ROSS NAVFAC - SOUTHWEST	CRWQCB REVIEW OF DRAFT FEASIBLITY STUDY WORK PLAN, IR SITE 7, WITH COMMENTS	ADMIN RECORD	COMMENTS FS WORK PLAN	007	SOUTHWEST DIVISION - BLDG. 12
00002		DIVISION T. MACCHIARELLA					PALLET 16 - SW04010601 IMAGED LBNS_005
N68311 / 001053 NONE LTR NONE	12-14-1998 06-20-1998 NONE 10.1	NOAA L. SULLIVAN NAVFAC - SOUTHWEST DIVISION	NOAA COMMENTS ON DRAFT FEASIBILITY STUDY WORK PLAN (SEE AR #1042 - DRAFT FS)	ADMIN RECORD	COMMENTS FS SEDIMENTS WORK PLAN	007	SOUTHWEST DIVISION - BLDG. 12
00002		A. LEE					PALLET 16 - SW04010601 IMAGED LBNS_005

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N68311 / 001057 NONE LTR NONE	12-14-1998 07-07-1998 NONE 10.1	DTSC CYPRESS A. GUTIERREZ NAVFAC - SOUTHWEST DIVISION	DTSC COMMENTS ON THE DRAFT FEASIBILITY STUDY	ADMIN RECORD	COMMENTS FS	007	SOUTHWEST DIVISION - BLDG. 12
00003		T. MACCHIARELLA					PALLET 16 - SW04011501 IMAGED LBNS_005
N68311 / 000121 NONE MM NONE	12-20-2000 07-21-1998 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON JULY 21, 1998	ADMIN RECORD INFO REPOSITORY	EE/CA MTG MINS NFA RAB	007 014	SOUTHWEST DIVISION - BLDG. 12
00004		DIVISION			VOC		PALLET 16 - SW03110501 IMAGED LBNS_001
N68311 / 001066 CTO-0160/0032 PLAN N68711-92-D-4670	12-14-1998 08-20-1998 00160 04.0	BECHTEL NATIONAL, INC. K. KAPUR NAVFAC - SOUTHWEST	FINAL FEASIBILITY STUDY WORK PLAN (SEE AR #1255 - SWDIV TRANSMITTAL LETTER)	ADMIN RECORD	FS SEDIMENTS SOW WORK PLAN	007	SOUTHWEST DIVISION - BLDG. 12
00337		DIVISION					PALLET 16 - SW04011501 IMAGED LBNS_005
N68311 / 001255 SWDIV SER 56LB.TM/0322 XMTL NONE 00003	04-06-2004 08-21-1998 NONE	NAVFAC - SOUTHWEST DIVISION A. LEE DTSC - CYPRESS A. GUTIERREZ	TRANSMITTAL LETTER TO THE FINAL FEASIBILITY STUDY (FS) WORK PLAN (SEE AR #1066 - FINAL WORK PLAN)	ADMIN RECORD INFO REPOSITORY		007	SOUTHWEST DIVISION - BLDG. 1

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N68311 / 000123 NONE MM NONE 00012	12-20-2000 09-15-1998 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON SEPTEMBER 15, 1998	ADMIN RECORD INFO REPOSITORY	BCT BRAC EIR MTG MINS RAB ROD VOC	001 002 006A 007 009 012 013 014	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110501 IMAGED LBNS_001
N68311 / 000124 NONE MM NONE 00005	12-20-2000 11-17-1998 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON NOVEMBER 17, 1998	ADMIN RECORD INFO REPOSITORY	FS MTG MINS RAB ROD UST	001 002 003 004 005 006A 007 008 009 010 011 012 013 014	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110501 IMAGED LBNS_001
N68311 / 001136 SWDIV SER 05BL.DR/0472 MISC NONE 00007	06-04-1999 12-01-1998 NONE 10.6	NAVFAC - SOUTHWEST DIVISION F. ALJABI VARIOUS AGENCIES	DRAFT ENVIRONMENTAL FACT SHEET #3 FOR REVIEW AND COMMENTS	ADMIN RECORD	FACT SHEET FS RAB RI	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010602 IMAGED LBNS_005

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N68311 / 001138 NONE LTR NONE 00001	06-04-1999 12-09-1998 NONE 10.6	CRWQCB LOS ANGELES J. ROSS NAVFAC - SOUTHWEST DIVISION D. ROLLEFSON	RECEIPT AND REVIEW OF ENVIRONMENTAL FACT SHEET #3 WITH NO FURTHER COMMENTS	ADMIN RECORD	FACT SHEET	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010602 IMAGED LBNS_005
N68311 / 001140 NONE MISC NONE 00008	06-04-1999 12-22-1998 NONE 10.1	DTSC CYPRESS A. GUTIERREZ NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	DTSC COMMENTS ON THE DRAFT PUBLIC NOTICE "RECORD OF DECISION FOR SITES 3, 4, 5 AND 6A", DRAFT FACT SHEET #3 AND DRAFT PUBLIC NOTICE SITES 1, 2, 14	ADMIN RECORD	COMMENTS FACT SHEET PUBNOT	001 002 003 004 005 006A 007 014	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010602 IMAGED LBNS_005
N68311 / 001142 SWDIV SER 05BL.DR/0519 MISC NONE 00007	06-04-1999 01-01-1999 NONE 10.6	NAVFAC - SOUTHWEST DIVISION F. ALJABI VARIOUS AGENCIES	FINAL ENVIRONMENTAL FACT SHEET #3	ADMIN RECORD	FACT SHEET FS RAB RI	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010602 IMAGED LBNS_005
N68311 / 000125 NONE MM NONE 00011	12-20-2000 01-20-1999 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON JANUARY 20, 1999	ADMIN RECORD INFO REPOSITORY	AOC BCP BCT BRAC MTG MINS RAB	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110501 IMAGED LBNS_001

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N68311 / 000134 NONE MM NONE 00008	12-20-2000 03-17-1999 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON MARCH 17, 1999	ADMIN RECORD INFO REPOSITORY	AOEC FS MTG MINS RAB	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110501 IMAGED LBNS_001
N68311 / 001164 CTO-0160/0065 AND SWDIV SER 05BL.AL/0555 RPT N68711-92-D-4670 01437	06-07-1999 03-17-1999 00160 04.2	NAVFAC - SOUTHWEST DIVISION A. K. LEE VARIOUS REGULATORS	DRAFT FEASIBILITY STUDY REPORT (VOLUMES 1 & 2 OF 2)	ADMIN RECORD	FS	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03121804 IMAGED LBNS_004
N68311 / 001334 NONE COMMENTS NONE 00002	09-01-2006 05-06-1999 NONE	CRWQCB - LOS ANGELES J. LYONS NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT FEASIBILITY STUDY (FS)	ADMIN RECORD	FS	007	SOUTHWEST DIVISION - BLDG. 1
N68311 / 000136 NONE MM NONE 00009	12-20-2000 05-19-1999 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON MAY 19, 1999	ADMIN RECORD INFO REPOSITORY	AOC FS MTG MINS RAB ROD SVOC VOC	001 002 007 009 012 013 014	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110501 IMAGED LBNS_001

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N68311 / 000154 NONE MM NONE 00008	12-20-2000 07-21-1999 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON JULY 21, 1999	ADMIN RECORD INFO REPOSITORY	BCT BRAC EIS MTG MINS RAB ROD	001 002 007 014 AOPC SWS2 BLDG. 401 BLDG. 816	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110501 IMAGED LBNS_001
N68311 / 001335 NONE COMMENTS NONE 00004	09-01-2006 07-30-1999 00160	DTSC - CYPRESS A. GUTIERREZ NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT FEASIBILITY STUDY (FS) REPORT	ADMIN RECORD	DDD DDE DDT FS PAH PCB	007	SOUTHWEST DIVISION - BLDG. 1
N68311 / 000157 NONE MM NONE 00007	12-20-2000 11-18-1999 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON NOVEMBER 18, 1999 - INCLUDES MEETING NOTICE FOR 17 NOV 99	ADMIN RECORD INFO REPOSITORY	BRAC FS MTG MINS RAB ROD	001 002 003 006A 007 008 009 010 011 012 013 014	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110501 IMAGED LBNS_001

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N68311 / 000085 CTO-0160/0125 MISC N68711-92-D-4670 00081	09-14-2000 11-30-1999 00160	BECHTEL NATIONAL, INC. O. KADASTER NAVFAC - SOUTHWEST DIVISION	DRAFT RESPONSES TO DTSC, USEPA - WESTON, USFWS, CRWQCB COMMENTS ON DRAFT FEASIBILITY STUDY REPORT	ADMIN RECORD INFO REPOSITORY	AOEC FS METALS PAH PCB	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110501 IMAGED LBNS_001
N68311 / 001345 NONE COMMENTS NONE 00001	09-13-2006 12-20-1999 NONE	FISH AND WILDLIFE J. BARTEL BRAC PMO WEST T. MACCHIARELLA	REVIEW AND COMMENTS ON THE DRAFT FEASIBILITY STUDY (FS) REPORT	ADMIN RECORD	FS	007	SOUTHWEST DIVISION - BLDG. 1
N68311 / 001351 NONE RESPONSE NONE 00001	09-19-2006 01-05-2000 NONE	U.S. EPA - SAN FRANCISCO M. HAUSLADEN NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND ACCEPTANCE OF THE DRAFT RESPONSE TO COMMENTS ON THE DRAFT FEASIBILITY STUDY (FS); NO FURTHER COMMENTS ON THE DRAFT FEASIBILITY STUDY	ADMIN RECORD	ARAR FS	007	SOUTHWEST DIVISION - BLDG. 1

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N68311 / 000171 NONE MM NONE 00007	12-20-2000 01-19-2000 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON JANUARY 19, 2000	ADMIN RECORD INFO REPOSITORY	ARAR BRAC EE/CA MTBE MTG MINS RAB RI SI	001 002 003 004 005 006 007 008 009 010 011 012 013 014	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110501 IMAGED LBNS_001
N68311 / 001352 NONE RESPONSE NONE 00001	09-19-2006 02-03-2000 NONE	CRWQCB - LOS ANGELES A. TOWNSEND NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW OF RESPONSE TO COMMENTS FOR THE DRAFT FEASIBILITY STUDY (FS); NO ADDITIONAL COMMENTS ON THE DRAFT FEASIBILITY STUDY	ADMIN RECORD	ARAR FS	007	SOUTHWEST DIVISION - BLDG. 1
N68311 / 000066 CTO-0160/0147 MISC N68711-92-D-4670 00016	09-14-2000 03-08-2000 00160	BECHTEL NATIONAL, INC. O. KADASTER NAVFAC - SOUTHWEST DIVISION	FINAL RESPONSES TO DTSC, USFWS, CRWQCB - LA, USEPA, CDFG, COMMENTS ON DRAFT FEASIBILITY STUDY REPORT INCLUDES TRANSMITTAL LETTER (SEE AR #1164 - DOCUMENT)	ADMIN RECORD INFO REPOSITORY	AOEC FS RESPONSE	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110501 IMAGED LBNS_001

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N68311 / 000072 SWDIV SER 06CA.TM/0166 LTR NONE 00005	09-14-2000 03-09-2000 NONE	NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA DTSC, CYPRESS J. RICH	TRANSMITTAL LETTER OF FINAL RESPONSE TO COMMENTS ON THE DRAFT FEASIBILITY STUDY (ENCLOSURE IS AR #66)	ADMIN RECORD INFO REPOSITORY	FS RESPONSE	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110501 IMAGED LBNS_001
N68311 / 000172 NONE MM NONE 00005	12-20-2000 03-29-2000 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON MARCH 29, 2000	ADMIN RECORD INFO REPOSITORY	AOC FFSRA MTG MINS PAH RAB RCRA ROD	001 002 007 009 012 013 014	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110501 IMAGED LBNS_001
N68311 / 000095 CTO-0160/0071 RPT N68711-92-D-4670 00040	09-19-2000 04-10-2000 00160	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	ADVANCED DRAFT ARARS (APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS) - APPENDIX B, FEASIBILITY STUDY REPORT	ADMIN RECORD	ARAR FS PAH PCB RI TPH	007	SOUTHWEST DIVISION - BLDG. 1 PROBLEM FILE CABINET

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N68311 / 000176 NONE MM NONE 00005	12-20-2000 08-30-2000 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON AUGUST 30, 2000	ADMIN RECORD INFO REPOSITORY	AOC BRAC FFSRA MTBE MTG MINS RAB RCRA ROD	001 002 003 004 005 006A 007 008 009 010 011 012 013 014	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110501 IMAGED LBNS_001
N68311 / 001356 NONE COMMENTS NONE 00004	09-19-2006 1 1-29-2000 NONE	CRWQCB - LOS ANGELES A. TOWNSEND NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND COMMENTS ON THE DRAFT APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS) - APPENDIX B, DRAFT FEASIBILITY STUDY (FS)	ADMIN RECORD	ARAR FS	007	SOUTHWEST DIVISION - BLDG. 1
N68311 / 001283 CTO-0044/0063 CORRESP N68711-95-D-7526 00014	02-01-2005 12-04-2000 00044	BECHTEL ENVIRONMENTAL, INC. NAVFAC - SOUTHWEST DIVISION	DRAFT RESPONSES TO RWQCB COMMENTS - ARARS FEASIBILITY STUDY REPORT [INCLUDES SWDIV TRANSMITTAL LETTER BY J. VALENZIA]	ADMIN RECORD	ARAR COMMENTS	007	SOUTHWEST DIVISION - BLDG. 1

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N68311 / 000226 NONE PLAN N68711-00-M-0109 00103	04-12-2001 03-30-2001 NONE	CDM FEDERAL PROGRAMS NAVFAC - SOUTHWEST DIVISION	DRAFT FINAL SITE MANAGEMENT PLAN FOR LONG BEACH NAVAL COMPLEX	ADMIN RECORD INFO REPOSITORY	AOC AOPC FFSRA FS GW MONITORING NFA ROD SMP SOIL TECH MEMO	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 BLDG. 101 BLDG. 128 BLDG. 129 BLDG. 210 BLDG. 314 BLDG. 314 BLDG. 401 BLDG. 816	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03101602 IMAGED LBNS_001
N68311 / 000232 CTO-0160/0188 & SWDIV SER 06CA.TM/0408 MEMO N68711-92-D-4670 00107	04-25-2001 04-01-2001 00160	BECHTEL NATIONAL, INC. O. KADASTER NAVFAC - SOUTHWEST DIVISION	DRAFT TECHNICAL MEMORANDUM NO. 1 - DEVELOPMENT OF SEDIMENT MANAGEMENT OBJECTIVES - INCLUDES SWDIV TRANSMITTAL LETTER BY T. MACCHIARELLA	ADMIN RECORD INFO REPOSITORY	AOEC BRAC DDT FS PAH PCB REMOVAL SEDIMENTS TECH MEMO TOC TRC	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03101602 IMAGED LBNS_001

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N68311 / 000267 NONE MISC NONE 00003	06-20-2001 04-12-2001 NONE	CDM FEDERAL PROGRAMS NAVFAC - SOUTHWEST DIVISION	RESPONSE TO AGENCY COMMENTS ON THE DRAFT FINAL SITE MANAGEMENT PLAN FOR LONG BEACH NAVAL COMPLEX [COMMENTS BY DTSC & CRWQCB] (SEE AR #226 - SMP)	ADMIN RECORD INFO REPOSITORY	AOC COMMENTS DRUMS FFSRA MONITORING REMEDIAL ACTIO REMOVAL RESPONSE ROD SMP SOIL	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 BLDG. 101	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110502 IMAGED LBNS_001
N68311 / 001368 NONE COMMENTS NONE 00002	09-21-2006 05-02-2001 NONE	U.S. EPA - SAN FRANCISCO N. BLACK NAVFAC - SOUTHWEST DIVISION M. HAUSLADEN	REVIEW AND COMMENTS ON THE DRAFT TECHNICAL MEMORANDUM (TM) NO. 1, DEVELOPMENT OF SEDIMENT MANAGEMENT OBJECTIVES	ADMIN RECORD	PCB TM	007	SOUTHWEST DIVISION - BLDG. 1
N68311 / 001370 NONE COMMENTS NONE 00008	09-21-2006 05-16-2001 NONE	DTSC - CYPRESS S. HAKIM NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND COMMENTS ON THE DRAFT TECHNICAL MEMORANDUM (TM) NO. 1, DEVELOPMENT OF SEDIMENT OBJECTIVES (INCLUDES HERD COMMENTS DATED 05/18/01)	ADMIN RECORD	PCB TM	007	SOUTHWEST DIVISION - BLDG. 1

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N68311 / 001371 NONE COMMENTS NONE 00002	09-21-2006 05-30-2001 NONE	CRWQCB - LOS ANGELES M. LYONS NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND COMMENTS ON THE DRAFT TECHNICAL MEMORANDUM (TM) NO. 1, DEVELOPMENT OF SEDIMENT MANAGEMENT OBJECTIVES	ADMIN RECORD	ТМ	007	SOUTHWEST DIVISION - BLDG. 1
N68311 / 001372 NONE COMMENTS NONE 00002	09-21-2006 05-31-2001 NONE	PORT OF LONG BEACH R. KANTER DTSC - CYPRESS S. HAKIM	REVIEW AND RESPONSE TO DTSC COMMENTS ON THE TECHNICAL MEMORANDUM (TM) NO. 1. ***COMMENTS: (DTSC LETTER TO THE NAVY DATED 05/16/01 WAS NOT SUBMITTED TO THE ADMINISTRATIVE RECORDS)***	ADMIN RECORD	ТМ	007	SOUTHWEST DIVISION - BLDG. 1
N68311 / 000282 NONE LTR NONE 00003	09-05-2001 06-18-2001 NONE	DTSC - CYPRESS S. HAKIM NAVFAC - SOUTHWEST DIVISION J. VALENZIA	COMMENTS ON THE FINAL SITE MANAGEMENT PLAN (SEE AR #268 - SMP)	ADMIN RECORD	AIR COMMENTS DRUMS GW MONITORING NFA ROD SMP SVE	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 015 016	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110502 IMAGED LBNS_001

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N68311 / 000289 NONE LTR NONE 00001	09-05-2001 06-20-2001 NONE	CRWQCB - LOS ANGELES A. TOWNSEND NAVFAC - SOUTHWEST DIVISION J. VALENZIA	CRWQCB COMMENTS ON THE FINAL SITE MANAGEMENT PLAN FOR LONG BEACH NAVAL COMPLEX HAVE BEEN ADEQUATELY ADDRESSED AND THE NAVY IS AUTHORIZED TO IMPLEMENT THE DOCUMENT AS PROPOSED (SEE AR #268 - SMP)	ADMIN RECORD	AOC COMMENTS IRP SMP	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 015 016	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110503 IMAGED LBNS_001
N68311 / 000308 NONE LTR NONE 00002	09-05-2001 06-22-2001 NONE	DTSC - CYPRESS S. HAKIM NAVFAC - SOUTHWEST DIVISION J. VALENZIA	ADDITIONAL COMMENTS ON THE FINAL SITE MANAGEMENT PLAN FOR LONG BEACH NAVAL COMPLEX (SEE AR #268 - SMP)	ADMIN RECORD	COMMENTS FFSRA SMP	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 015 016	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03112001 IMAGED LBNS_002

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N68311 / 000268 NONE PLAN N68711-00-M-0109 00113	06-20-2001 08-28-2001 NONE	CDM FEDERAL PROGRAMS NAVFAC - SOUTHWEST DIVISION	FINAL SITE MANAGEMENT PLAN FOR LONG BEACH NAVAL COMPLEX (INCLUDES REVISION PAGES FOR SECTION 6, DATED 8/01, REV. 2). ***COMMENTS: [INSIDE THE ORIGINAL FINAL SITE MANAG. PLAN (SMP) DATED JUNE 15, 2001 ALSO INCLUDES RESPONSE TO DRAFT FINAL SITE MANAGEMENT PLAN DTD 5/30/2001]***	ADMIN RECORD INFO REPOSITORY	AOC AOPC BCP BRAC CYANIDE EE/CA FFSRA FS GW HAZ WASTE MONITORING MTBE MW NFA NPL PA PCB REMOVAL RI ROD SI SMP SOIL TPH UST	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 129 BLDG. 210 BLDG. 314 BLDG. 816	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03110502 IMAGED LBNS_002

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N68311 / 000312 CTO-0160/0202 MEMO N68711-92-D-4670 00275	09-19-2001 09-14-2001 00160	BECHTEL NATIONAL, INC. O. KADASTER NAVFAC - SOUTHWEST DIVISION	DRAFT FINAL TECHNICAL MEMORANDUM NO. 1; DEVELOPMENT OF SEDIMENT MANAGEMENT OBJECTIVES - INCLUDES RESPONSE TO COMMENTS ON THE DRAFT VERSION	ADMIN RECORD INFO REPOSITORY	AOEC BRAC COE COEC DATA DDT METALS NFA NPL PAH PCB RCRA SEDIMENTS TECH MEMO TOC TRC	007	SOUTHWEST DIVISION - BLDG. 1 PROBLEM FILE CABINET

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N68311 / 000513 SWDIV SER 06CM.JV\1076 PLAN NONE 00037	10-31-2001 10-10-2001 NONE	NAVFAC - SOUTHWEST DIVISION DTSC - CYPRESS	SITE MANAGEMENT PLAN - QUARTERLY PROGRESS REPORT FOR JUNE 16, 2001 THROUGH SEPTEMBER 15, 2001 AT THE NAVAL COMPLEX (WITH NAVY TRANSMITTAL LETTER)	ADMIN RECORD INFO REPOSITORY	AOC BCT BRAC FFSRA FS GW MONITORING ROD SMP SOIL SVE TPH WORK PLAN	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 129 BLDG. 314 BLDG. 816 OU 1	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03112002 IMAGED LBNS_002
N68311 / 001382 NONE CORRESP NONE 00002	09-21-2006 10-12-2001 NONE	CRWQCB - LOS ANGELES M. LYONS NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	LETTER RECOMMENDING TO HOLD A MEETING WITH THE AGENCIES TO FURTHER DISCUSS SEDIMENT MANAGEMENT OBJECTIVES IN REFERENCE TO THE DRAFT FINAL TECHNICAL MEMORNADUM (TM) NUMBER 1	ADMIN RECORD	SMO TM	007	SOUTHWEST DIVISION - BLDG. 1
N68311 / 001383 NONE CORRESP NONE 00001	09-21-2006 10-15-2001 NONE	U.S. EPA - SAN FRANCISCO N. BLACK NAVFAC - SOUTHWEST DIVISION M. HAUSLADEN	LETTER REVIEWING THE DRAFT FINAL TECHNICAL MEMORANDUM (TM) NO. 1 AND CONDITIONALLY ACCEPTING ITS TECHNICAL CONCLUSIONS	ADMIN RECORD	SMO TM	007	SOUTHWEST DIVISION - BLDG. 1
Tuesday, Septembe	er 26, 2006		strative Record (AR) Index includes references to c citations are considered to be part of this AR but r			Pa	ge 62 of 85

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N68311 / 000447 CTO-0177/0201 MM N68711-92-D-4670 00020	10-25-2001 10-24-2001 00177	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	NAVAL COMPLEX RESTORATION ADVISORY BOARD MEETING AGENDA MAILER WHICH INCLUDES DRAFT MINUTES FROM 7/25/01 MEETING AND FINAL MINUTES FROM 5/23/01 MEETING (ALSO CONTAINS MAILING LIST PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL	FOST FS GW METALS MTG MINS NFA RAB ROD SMP SOIL SVE SVOC TECH MEMO VOC	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 128 BLDG. 210	
N68311 / 000454 CTO-0177/0202 MM N68711-92-D-4670 00010	10-25-2001 10-25-2001 00177	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	BASE REALIGNMENT AND CLOSURE TEAM MEETING AGENDA WITH DRAFT MINUTES FROM 7/26/01 MEETING	ADMIN RECORD	ARAR BCT BRAC FOST FS MTBE MTG MINS REMEDIAL ACTIO SMP SOIL TECH MEMO	001 002 003 004 005 006A 006B 007 008 009 010 011 012 013 BLDG. 101 BLDG. 816	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120401 IMAGED LBNS_002

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/Comments	Classification	Keywords		Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
N68311 / 001384 NONE CORRESP NONE 00029	09-21-2006 11-02-2001 NONE	DEPT. OF FISH AND GAME C. HUANG NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW OF THE DRAFT FINAL TECHNICAL MEMORANDUM (TM) NO. 1, FEASIBILITY STUDY (FS) REPORT (W/ ENCLOSURES)	ADMIN RECORD	FS TM	007	SOUTHWEST DIVISION - BLDG. 1
N68311 / 000545 CTO-0177/0207 XMTL N68711-92-D-4670 00011	12-14-2001 11-20-2001 00177	BECHTEL NATIONAL, INC. C. RAYKOWSKI REGULATORY AGENCIES VARIOUS	TRANSMITTAL VIA E-MAIL OF THE BASE REALIGNMENT AND CLOSURE CLEANUP TEAM DRAFT MEETING MINUTES OF 25 OCTOBER, 2001 AND AGENDA FOR 28 NOVEMBER, 2001 MEETING SENT TO BCT MEMBERS	ADMIN RECORD INFO REPOSITORY	BCP BCT BRAC MTBE MTG MINS ORDNANCE PIM REMEDIAL ACTIO SMP TECH MEMO TSDF UXO	001 002 007 008 009 010 011 012 013 014 016 BLDG. 101	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03112002 IMAGED LBNS_002

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N68311 / 000552 CTO-0177/0208 MM N68711-92-D-4670 00016	12-14-2001 11-28-2001 00177	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD DRAFT MEETING MINUTES FROM 24 OCTOBER 2001 & AGENDA AND MAILER FOR 28 NOVEMBER 2001 MEETING (MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	AOC ARAR ARSENIC GW MTG MINS RAB SOIL TCE	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 210	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03112002 IMAGED LBNS_002
N68311 / 000585 SWDIV SER 06CM.TM/0013 XMTL N68711-92-D-4670 00018	01-31-2002 01-03-2002 00160	NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA DTSC & REGULATORY AGENCIES S. HAKIM & REGULATORS	TRANSMITTAL OF RESPONSES TO COMMENTS ON THE DRAFT FINAL TECHNICAL MEMORANDUM NO. 1; DEVELOPMENT OF SEDIMENT MANAGEMENT OBJECTIVES {COMMENTS BY CDFG, CRWQCB, DTSC, & US EPA} (SEE AR #312 - TECH MEMO). ***COMMENTS: BECHTEL DCN: CTO-0160/0224***	ADMIN RECORD INFO REPOSITORY	COMMENTS DREDGING FS METALS PCB RESPONSE RI SEDIMENTS TECH MEMO	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120401 IMAGED LBNS_002

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N68311 / 000581 CTO-0177/0214 XMTL N68711-92-D-4670 00015	01-17-2002 01-07-2002 00177	BECHTEL NATIONAL, INC. C. RAYKOWSKI REGULATORS AND NAVY PERSONNEL	TRANSMITTAL OF AGENDA FOR RESTORATION ADVISORY BOARD MEETING OF 23 JANUARY, 2002 INCLUDING DRAFT MINUTES FROM 28 NOVEMBER 2001 AND FINAL MINUTES FROM 24 OCTOBER 2001	ADMIN RECORD INFO REPOSITORY	ARAR BCT BRAC FS GW MTBE MTG MINS ORDNANCE PIM RAB REMEDIAL ACTIO SI SMP SOIL SOIL BORING SVE TECH MEMO TSDF UXO WELLS	001 002 007 008 009 010 011 012 013 014 016 BLDG. 10 ⁷	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03112002 IMAGED LBNS_002
N68311 / 000575 CTO-0177/0213 MM N68711-92-D-4670 00020	01-14-2002 01-23-2002 00177	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	AGENDA AND PUBLIC NOTICE FOR RESTORATION ADVISORY BOARD MEETING INCLUDING DRAFT MINUTES FROM 28 NOVEMBER 2001 AND FINAL MINUTES FROM 24 OCTOBER 2001 (CONTAINS MAILING LIST PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL)	ADMIN RECORD INFO REPOSITORY	ARSENIC COC FOST GW METALS MTG MINS PIM PUBNOT RAB SOIL TCE	001 002 006A 007 008 009 010 011 012 013 014 016 BLDG. 125	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03112002 IMAGED LBNS_002

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N68311 / 000598 SWDIV SER 06CM.JV/0104 AND 0130 PLAN NONE 00041	03-06-2002 01-30-2002 NONE	NAVFAC - SOUTHWEST DIVISION DTSC - CYPRESS S. HAKIM	SITE MANAGEMENT PLAN - QUARTERLY PROGRESS REPORT FOR 16 SEPTEMBER 2001 THROUGH 15 DECEMBER 2001 AT THE NAVAL COMPLEX (INCLUDES REVISION PAGES AND SWDIV TRANSMITTAL LETTER BY T. MACCHIARELLA). ***COMMENTS: THIS DOCUMENT HAS REVISED PAGES: FIGURE 3-1 (MASTER SCHEDULE) & FIGURE 3-2 (DETAILED SCHEDULE); REPLACEMENT PAGES 3-3 THROUGH 3-22***	ADMIN RECORD	AOC BCT BRAC FFSRA FS GW HAZ WASTE IAS IRP MONITORING MW RCRA REMEDIAL ACTIO ROD SMP SOIL SVE WELLS WORK PLAN	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118 BLDG. 314 BLDG. 314	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120401 IMAGED LBNS_002
N68311 / 000639 CTO-0177/0225 MM N68711-92-D-4670 00015	04-04-2002 02-25-2002 00177	BECHTEL NATIONAL, INC. C. RAYKOWSKI BCT MEMBERS	AGENDA FOR 28 FEBRUARY 2002 BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING WITH DRAFT MINUTES FROM 23 JANUARY 2002, AND FINAL MINUTES FROM 28 NOVEMBER 2001	ADMIN RECORD	ARAR BCT BRAC FS GW MTBE MTG MINS RAB ROD SI SOIL TECH MEMO TSDF	001 002 007 008 009 010 011 012 013 014 016 BLDG. 101	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120402 IMAGED LBNS_002

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N68311 / 000592 CTO-0160/0229 MEMO N68711-92-D-4670 00266	03-05-2002 02-27-2002 00160	BECHTEL NATIONAL, INC. O. KADASTER NAVFAC - SOUTHWEST	FINAL TECHNICAL MEMORANDUM NO. 1; DEVELOPMENT OF SEDIMENT MANAGEMENT OBJECTIVES	ADMIN RECORD INFO REPOSITORY	AOEC BRAC DREDGING PAH	007	SOUTHWEST DIVISION - BLDG. 12
00200		DIVISION			PCB PESTICIDES SEDIMENTS TECH MEMO		PALLET 16 - SW03120401 IMAGED LBNS_002

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Approx. # Pages	EPA Cat. # 03-08-2002 03-06-2002 00160	Recipient BECHTEL NATIONAL, INC. O. KADASTER NAVFAC - SOUTHWEST DIVISION	Subject/Comments DRAFT FINAL FEASIBILITY STUDY REPORT DATED FEBRUARY 2002 (VOLUMES 1 & II OF II)	ADMIN RECORD	AOEC ARAR BRAC CHARACTERIZATI COEC DDD DDT DREDGING FFA FS GW METALS NCP NEPA NPL PAH PCB PESTICIDES RAB RCRA REMEDIAL ACTIO RI ROD SARA SEDIMENTS	007	CD No. SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120401 IMAGED LBNS_002
					SOIL SVOC TOC WATER		

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N68311 / 000630 CTO-0177/0224 MM N68711-92-D-4670 00019	04-04-2002 03-25-2002 00177	BECHTEL NATIONAL, INC. C. RAYKOWSKI BCT MEMBERS	AGENDA FOR 27 MARCH 2002 BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING WITH DRAFT MINUTES FROM 28 FEBRUARY 2002, FINAL MINUTES FROM 23 JANUARY 2002, AND REVISED FINAL MINUTES FROM 28 NOVEMBER 2001	ADMIN RECORD	BCT BRAC FOSET FOST FS GW MTBE MTG MINS PERMIT ROD SI SMP SOIL TSDF VOC WELLS	001 002 007 009 010 011 012 013 014 016 BLDG. 101 OU 1	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120402 IMAGED LBNS_002
N68311 / 000643 SWDIV SER 06CM.TM/360 PLAN NONE 00040	04-19-2002 04-10-2002 NONE	NAVFAC - SOUTHWEST DIVISION DTSC - CYPRESS S. HAKIM	SITE MANAGEMENT PLAN - QUARTERLY PROGRESS REPORT FOR DECEMBER 16, 2001 THROUGH MARCH 15, 2002 INCLUDES SWDIV TRANSMITTAL LETTER BY T. MACCHIARELLA	ADMIN RECORD INFO REPOSITORY	AOC ARSENIC BCT BRAC FFSRA FS GW HAZ WASTE MONITORING RCRA ROD SI SMP SOIL SVE WORK PLAN	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118 BLDG. 314 OU 1	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120402 IMAGED LBNS_002

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N68311 / 000660 CTO-0177/0229 MM N68711-92-D-4670 00018	04-24-2002 04-22-2002 00177	BECHTEL NATIONAL, INC. C. RAYKOWSKI BCT MEMBERS	DRAFT BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MINUTES FROM 27 MARCH 2002 MEETING, AGENDA FOR 24 APRIL 2002 MEETING, AND FINAL MINUTES FROM 28 FEBRUARY 2002 MEETING; ALSO INCLUDES DOCUMENT REVIEW STATUS TABLE	INFO	BCT BRAC FOSL FOST GW MTBE MTG MINS ROD SI SMP SOIL TSDF WELLS	001 002 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118 BLDG. 314	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120402 IMAGED LBNS_002
N68311 / 000644 CTO-0177/0226 MISC N68711-92-D-4670 00011	04-19-2002 04-24-2002 00177	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	AGENDA & NOTICE FOR RESTORATION ADVISORY BOARD MEETING AND DRAFT MINUTES FROM 23 JANUARY 2002 MEETING (CONTAINS MAILING LIST PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	GW MONITORING MTG MINS PIM PUBNOT RAB ROD SOIL SOLVENTS SVE	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 118	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120402 IMAGED LBNS_002

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N68311 / 000774 CTO-0160/0237 & SWDIV SER 06CM.TM/0441 RPT N68711-92-D-4670 01857	05-03-2002 04-29-2002 00160	BECHTEL NATIONAL, INC. O. KADASTER NAVFAC - SOUTHWEST DIVISION	DRAFT FINAL FEASIBILITY STUDY REPORT FOR THE HARBOR SEDIMENTS AREA [INCLUDES SWDIV TRANSMITTAL LETTER FROM T. MACCHIARELLA]	ADMIN RECORD INFO REPOSITORY	AOEC ARAR ARSENIC BRAC CHARACTERIZATI COEC DREDGING FFA FS METALS NCP NEPA NPL PAH PCB PESTICIDES RAB RCRA REMOVAL RI ROD SARA SEDIMENTS SVOC TRC TSCA	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03120404 IMAGED LBNS_003

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N68311 / 000842 CTO-0177/0231 MM N68711-92-D-4670 00018	05-23-2002 05-14-2002 00177	BECHTEL NATIONAL, INC. C. RAYKOWSKI BCT MEMBERS	DRAFT BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MINUTES FROM 24 APRIL 2002 MEETING, AGENDA FOR 29 MAY 2002 MEETING, AND FINAL MINUTES FROM 27 MARCH 2002 MEETING; ALSO INCLUDES DOCUMENT REVIEW STATUS TABLE	ADMIN RECORD INFO REPOSITORY	FFSRA FOST FS GW MTBE PROPOSED PLAN RAB ROD SI SOIL TSDF WELLS	001 002 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118 BLDG. 314 OU 1	

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N68311 / 000846 SWDIV SER 06CM.JV/0618 PLAN N68711-00-D-0004 00104	08-13-2002 06-14-2002 DO 17	CDM FEDERAL PROGRAMS NAVFAC - SOUTHWEST DIVISION	DRAFT SITE MANAGEMENT PLAN ANNUAL UPDATE FOR LONG BEACH NAVAL COMPLEX - INCLUDES SWDIV TRANSMITTAL LETTER FROM T. MACCHIARELLA	ADMIN RECORD INFO REPOSITORY	AOC AOPC AST BCP BCT BRAC CLOSURE CYANIDE EE/CA FFSRA FS GW HRA NFA NPDES NPL PA PCB PERMIT PROPOSED PLAN RCRA REMEDIAL ACTIO RI ROD SI SMP SOIL SVE SVOC TPH UST WORK PLAN	001 002 003 004 005 006A 007 016 BLDG. 101 BLDG. 118 BLDG. 314 BLDG. 816	3 4

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N68311 / 000896 CTO-0177/0236 MM N68711-92-D-4670 00016	08-13-2002 07-10-2002 00177	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	DRAFT MINUTES FROM BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING OF 29 MAY 2002, FINAL MINUTES FROM BRAC CLEANUP TEAM MEETING OF 24 APRIL 2002 AND AGENDA FOR 10 JULY 2002 MEETING	ADMIN RECORD INFO REPOSITORY	BCT BRAC FFSRA FS GW MTBE MTG MINS PERMIT RCRA REMEDIAL ACTIO ROD SMP TSDF VOC	001 002 003 007 014 BLDG. 101 BLDG. 118 BLDG. 314	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03121801 IMAGED LBNS_004

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N68311 / 000985 NONE PLAN N68711-00-D-0004 00275	09-19-2002 09-16-2002 DO 17	CDM FEDERAL PROGRAMS NAVFAC - SOUTHWEST DIVISION	FINAL SITE MANAGEMENT PLAN ANNUAL UPDATE FOR LONG BEACH NAVAL COMPLEX - INCLUDES RESPONSE TO COMMENTS ON THE DRAFT SMP AND REVISION PAGES. ***COMMENTS: REVISION PAGES: FIGURE 6-1 (MASTER SCHEDULE PAGES 6-5 TO 6-8) AND FIGURE 6-2 (DETAILED SCHEDULE PAGES 6-11, 6-12, 6-17, AND 6-18)***	ADMIN RECORD INFO REPOSITORY	AOC AOPC AST BCP BCT BRAC FFSRA GW MONITORING PCB PROPOSED PLAN RCRA REMEDIAL ACTIO ROD SEDIMENTS SMP SOIL SVE SVOC TECH MEMO TPH UST VOC WORK PLAN	001 002 003 004 005 006A 007 016 BLDG. 101 BLDG. 118 BLDG. 314	SOUTHWEST DIVISION - BLDG. 1 POSSIBLE COMPLIANCE

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N68311 / 000002 NONE PLAN NONE 00037	10-16-2002 10-10-2002 NONE	NAVFAC - SOUTHWEST DIVISION DTSC - CYPRESS	SITE MANAGEMENT PLAN - QUARTERLY PROGRESS REPORT FOR JUNE 16 THROUGH SEPTEMBER 15, 2002 AT THE NAVAL COMPLEX, REVISION 0	ADMIN RECORD INFO REPOSITORY	BRAC FFSRA FS GW HAZ WASTE MONITORING RCRA REMEDIAL ACTIO ROD SMP SOIL SVE	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118 BLDG. 314	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW03101601 IMAGED LBNS_001

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/Comments	Classification	Keywords	Sites	Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
N68311 / 001214 SWDIV SER 06CM.TM/0336 RPT NONE 00039	04-02-2003 01-13-2003 NONE	NAVFAC - SOUTHWEST DIVISION DTSC, CYPRESS	SITE MANAGEMENT PLAN - QUARTERLY PROGRESS REPORT FOR 16 SEPTEMBER THROUGH 15 DECEMBER 2002 AT THE NAVAL COMPLEX, REVISION 0 [INCLUDES SWDIV TRANSMITTAL LETTER BY T. MACHIARELLA]	ADMIN RECORD INFO REPOSITORY	SMP	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118 BLDG. 314	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010602 IMAGED LBNS_005
N68311 / 001215 SWDIV SER 06CM.JV/0657 RPT NONE 00032	05-05-2003 04-10-2003 NONE	NAVFAC - SOUTHWEST DIVISION DTSC - CYPRESS	SITE MANAGEMENT PLAN, QUARTERLY PROGRESS REPORT FOR 16 DECEMBER 2002 THROUGH 15 MARCH 2003, REVISION 0 [INCLUDES SWDIV TRANSMITTAL LETTER BY T. MACHIARELLA]	ADMIN RECORD INFO REPOSITORY		001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04010602 IMAGED LBNS_005

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N68311 / 001231 CTO-0044/0011 & SWDIV SER 06CM.TM/1338 RPT N68711-95-D-7526 01869	10-03-2003 09-29-2003 00044	BECHTEL ENVIRONMENTAL, INC. O. KADASTER NAVFAC - SOUTHWEST DIVISION	FINAL FEASIBILITY STUDY REPORT FOR THE HARBOR SEDIMENTS AREA (VOLUMES I-II OF II) (CD COPY ENCLOSED) REPLACEMENT PAGES OF APPENDIX C1 ISSUED 06/26/2005 SWDIVSER BPMOW.SO/0858 [INCLUDES RESPONSES TO COMMENTS FROM AGENCIES AND TRUSTEES] {*** SEE COMMENTS}. ***COMMENTS: (SEE AR #1316 - DRAFT FS ADDENDUM AND AR #1324 - DRAFT FINAL FS ADDENDUM)***	ADMIN RECORD INFO REPOSITORY	DDD DDT PAH PCB SVOC T-HMWPAH T-LMWPAH T-PCB VOC	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04032501 IMAGED LBNS_006
N68311 / 001234 SWDIV SER 06CA.JV/1378 PLAN NONE 00020	12-04-2003 10-10-2003 NONE	NAVFAC - SOUTHWEST DIVISION DTSC - CYPRESS	SITE MANAGEMENT PLAN - QUARTERLY PROGRESS REPORT FOR 16 JUNE THROUGH 15 SEPTEMBER 2003 [INCLUDES SWDIV TRANSMITTAL LETTER BY T. MACCHIARELLA]	ADMIN RECORD INFO REPOSITORY	SMP	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118 OU 1	SOUTHWEST DIVISION - BLDG. 1 PROBLEM FILE CABINET

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N68311 / 001241 CTO-0044/0018 & SWDIV SER 06CA.JV/1581 PLAN N68711-95-D-7526 00017	01-12-2004 12-01-2003 00044	BECHTEL ENVIRONMENTAL, INC. NAVFAC - SOUTHWEST DIVISION	DRAFT PROPOSED PLAN/DRAFT REMEDIAL ACTION PLAN FOR INSTALLATION RESTORATION SITE 7 [INCLUDES SWDIV TRANSMITTAL LETTER BY J. VALENZIA]	ADMIN RECORD INFO REPOSITORY	RAP	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04032501 IMAGED LBNS_002
N68311 / 001239 SWDIV SER 06CM.JV/0021 PLAN NONE 00035	01-12-2004 01-09-2004 NONE	CDM FEDERAL DTSC - CYPRESS	SITE MANAGEMENT PLAN - QUARTERLY PROGRESS REPORT FOR 16 SEPTEMBER THROUGH 15 DECEMBER 2003 AT THE NAVAL COMPLEX, REVISION 0 [INCLUDES SWDIV TRANSMITTAL LETTER BY J. VALENZIA]	ADMIN RECORD	SMP	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118 OU 1	SOUTHWEST DIVISION - BLDG. 12 PALLET 16 - SW04032501 IMAGED LBNS_006
N68311 / 001253 CTO-0044/0029 PLAN N68711-95-D-7526 00020	04-06-2004 03-01-2004 00044	BECHTEL ENVIRONMENTAL, INC. NAVFAC - SOUTHWEST	DRAFT FINAL PROPOSED PLAN/DRAFT REMEDIAL ACTION PLAN FOR INSTALLATION RESTORATION SITE 7 - INCLUDES RESPONSE TO COMMENTS ON THE DRAFT VERSION AND SWDIV TRANSMITTAL LETTER BY J. VALENZIA	ADMIN RECORD INFO REPOSITORY	COMMENTS	007	SOUTHWEST DIVISION - BLDG. 1

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DIVISION

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.

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/Comments	Classification	Keywords		Location FRC Access. No. FRC/SWDIV Box No. RC Warehouse Loc. CD No.
N68311 / 001270 NONE RPT NONE 00020	10-19-2004 10-08-2004 NONE	NAVFAC - SOUTHWEST DIVISION DTSC - CYPRESS	SITE MANAGEMENT PLAN QUARTERLY PROGRESS REPORT FOR 16 JUNE 2004 THROUGH SEPTEMBER 2004, REVISION 0	ADMIN RECORD INFO REPOSITORY	GASOLINE HAZ WASTE SMP	001 002 003 004 005 007 008 009 010 011 012 013 014 016 06A BLDG. 101 BLDG. 118 OU 1	SOUTHWEST DIVISION - BLDG. 1
N68311 / 001272 CTO-0044/0063 CORRESP N68711-95-D-7526 00012	12-09-2004 12-06-2004 00044	BECHTEL ENVIRONMENTAL, INC. NAVFAC - SOUTHWEST DIVISION	DRAFT RESPONSES TO RWQCB COMMENTS ON THE ARARS FEASIBILITY STUDY REPORT	ADMIN RECORD INFO REPOSITORY	ARAR	007	SOUTHWEST DIVISION - BLDG. 1

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N68311 / 001281 NONE RPT NONE 00020	01-12-2005 01-10-2005 NONE	CDM FEDERAL PROGRAMS CORP. NAVFAC - SOUTHWEST DIVISION	SITE MANAGEMENT PLAN QUARTERLY PROGRESS REPORT FOR 16 SEPTEMBER 2004 THROUGH 15 DECEMBER 2004	ADMIN RECORD INFO REPOSITORY	OU SVE VOC	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118 OU1	SOUTHWEST DIVISION - BLDG. 1
N68311 / 001298 SWDIV SER BPMOW.SO/0717 CORRESP NONE 00003	05-27-2005 05-17-2005 NONE	BRAC - SAN DIEGO J. VALENZIA CRWQCB - LOS ANGELES A. TOWNSEND	REVIEW OF AND CONCURRENCE ON RESPONSES TO RESPONSE TO COMMENTS ON THE APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS)	ADMIN RECORD INFO REPOSITORY	ARAR COMMENTS ROD	007	SOUTHWEST DIVISION - BLDG. 1
N68311 / 001305 SWDIVSER BPMOW.JV/1023 LTR NONE 00004	08-19-2005 08-02-2005 NONE	NAVFAC - SOUTHWEST DIVISION J. VALENZIA DTSC - CYPRESS S. HAKIM	ANNOUNCEMENT OF NEW BASE REALIGNMENT AND CLOSURE (BRAC) ENVIRONMENTAL COORDINATOR ANDREA ESPINOZA SERVING AS THE FEDERAL FACILITIES SITE REMEDIATION AGREEMENT (FFSRA) PROJECT MANAGER (INCLUDES DELIVERABLE EXTENTION REQUEST FOR VARIOUS IR SITES)	ADMIN RECORD INFO REPOSITORY	BRAC FFSRA IR	007 008 010 012 013 016	SOUTHWEST DIVISION - BLDG. 1

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N68311 / 001314 BRAC SER BPOMW.SAO/1163 RESPONSE NONE 00002	10-13-2005 08-24-2005 NONE	BRAC A. ESPINOZA DTSC - CYPRESS S. HAKIM	RESPONSE TO COMMENTS ON THE FINAL APPENDIX C1,"APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS," (ARARS) OF THE FINAL FEASIBILITY STUDY REPORT	ADMIN RECORD INFO REPOSITORY	ARAR COMMENTS FS OU RESPONSE WATER	007	SOUTHWEST DIVISION - BLDG. 1
N68311 / 001316 NONE RPT N68711-00-D-0004 00285	12-20-2005 10-17-2005 00087	CDM L. DAVIDSON BRAC	DRAFT FEASIBILITY STUDY (FS) ADDENDUM (SEE AR #1231- FINAL FEASIBILITY STUDY REPORT AND AR #1324 - DRAFT FINAL FS ADDENDUM)	ADMIN RECORD INFO REPOSITORY	AOEC COEC DDT O&M OU PAH PCB	007	SOUTHWEST DIVISION - BLDG. 1
N68311 / 001319 NONE RPT NONE 00020	01-25-2006 01-10-2006 NONE	BRAC DTSC	SITE MANAGEMENT PLAN QUARTERLY PROGRESS REPORT FOR SEPTEMBER 16, 2005 THROUGH DECEMBER 15, 2005	ADMIN RECORD INFO REPOSITORY	BCTAOC BRAC COC DCE FS FSDCE IAS/SVE MW OU PCE SLERA TCE VC WP	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118 OU 1	SOUTHWEST DIVISION - BLDG. 1

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N68311 / 001323 BRAC SER BPMOW.SO/0176 LTR NONE 00003	03-14-2006 03-02-2006 NONE	BRAC A. ESPINOZA DTSC - CYPRESS S. HAKIM	TRANSMITTAL OF DRAFT FINAL FEASIBILITY STUDY ADDENDUM AND RESPONSE TO COMMENTS (SEE AR # 1324 - DRAFT FINAL)	ADMIN RECORD INFO REPOSITORY	ARAR BRAC OU PAH PCB	007	SOUTHWEST DIVISION - BLDG. 1
N68311 / 001324 NONE RPT N68711-00-D-0004 00200	03-14-2006 03-02-2006 00087	CDM L. DAVIDSON BRAC	DRAFT FINAL FEASIBILITY STUDY (FS) ADDENDUM (INCLUDES RESPONSE TO COMMENTS) [SEE AR # 1323 - TRANSMITTAL BY A. ESPINOZA] {SEE AR #1231 - FINAL FS REPORT AND AR #1316 - DRAFT FS ADDENDUM}	ADMIN RECORD INFO REPOSITORY	BRAC COEC NCP OU PAH PCB	007	SOUTHWEST DIVISION - BLDG. 1
N68311 / 001325 NONE RPT NONE 00030	06-21-2006 04-10-2006 NONE	BRAC PMO WEST CALIFORNIA EPA	SITE MANAGEMENT PLAN, QUARTERLY PROGRESS REPORT FOR DECEMBER 16, 2005 THROUGH MARCH 15, 2006 [SEE AR# 1330 - BRAC TRANSMITTAL LETTER BY A. ESPINOZA]	ADMIN RECORD INFO REPOSITORY	AOC OU WP	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 101 BLDG. 118 OU 1	

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N68311 / 000837 BRAC SER BPMOW.SO/0435 CORRESP NONE 00004	05-31-2006 05-15-2006 NONE	BRAC PMO WEST J. HILL DTSC - CYPRESS J. RICH	TRANSMITTAL OF RESPONSE TO ADDITIONAL COMMENTS ON DRAFT FINAL FEASIBILITY STUDY (FS) ADDENDUM (SEE AR #847 - RESPONSE TO ADDITIONAL COMMENTS)	ADMIN RECORD INFO REPOSITORY	COMMENTS FS RESPONSE	007	SOUTHWEST DIVISION - BLDG. 1
N68311 / 000847 7494 RESPONSE N68711-00-D-0004 00005	05-31-2006 05-15-2006 DO 0087	CDM L. DAVIDSON BRAC PMO WEST S. OHANNESSIAN	RESPONSE TO ADDITIONAL COMMENTS ON DRAFT FINAL FEASIBILITY STUDY (FS) ADDENDUM (SEE AR #837 - BRAC PMO WEST TRANSMITTAL LETTER BY J. HILL)	ADMIN RECORD INFO REPOSITORY	COMMENTS FS RESPONSE	007	SOUTHWEST DIVISION - BLDG. 1
Total Estima	ted Record	d Page Count:	30,519				
Total - Administrative Records:		Records:	230				
Total - Administrative Records: [UIC NUMBER]='N68311'		230					

No Keywords Sites=007;007A;007B;07A No Classification

ATTACHMENT A2

LONG BEACH NAVAL SHIPYARD (LBNSY)

LONG BEACH SHIPYARD

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

FILTERED DATA BY KEYWORDS/SITES

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N60258 / 000140 NONE MISC NONE 00002	08-31-1989 NONE	LONG BEACH NAVFAC - SOUTHWEST DIVISION	INSTALLATION RESTORATION PROGRAM AT LONG BEACH NAVAL COMPLEX		CERCLA DISPOSAL GW HAR IAS IRP LF PA	002 003 004 005 006 007 008 009	DIVISION - BLDG. 12 PALLET 14 - SW04011502 IMAGED LBSY_001
					POL RD REMEDIAL ACTIO SARA SEDIMENTS SOIL SOLVENTS SWAT TCE	010 011 012 BLDG. 129 BLDG. 210	

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N60258 / 000142 NONE MISC NONE 00003	06-04-2001 01-01-1990 NONE	LONG BEACH NAVAL COMPLEX NAVFAC - SOUTHWEST DIVISION	INFORMATION SHEET ON THE INSTALLATION RESTORATION PROGRAM AT LONG BEACH NAVAL COMPLEX	ADMIN RECORD	DISPOSAL GW HAZ WASTE IAS IRP PCB SEDIMENTS SI SOIL SOLVENTS TCE	001 002 003 004 005 006 007 008 009 010 011 012 BLDG. 129 BLDG. 210	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04012902 IMAGED LBSY_002
N60258 / 000710 CLE-C01-01F0017- B6-0002 LTR N68711-89-D-9296 00327	11-17-1994 04-26-1990 00017 03.3	JACOBS ENGINEERING B.W.C. WONG NAVFAC - SOUTHWEST DIVISION H. PADRO	DRAFT SITE INSPECTION (SI) WORK PLAN, INCLUDING THE FIELD QA/QC AND THE SITE HEALTH & SAFETY PLAN	ADMIN RECORD	FS GW H&SP HAZ WASTE IAS QA QC RI SAP SARA SI SSHP WORK PLAN	001 002 003 004 005 006 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04021203 IMAGED LBSY_003

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N60258 / 000202 CLE-CO1-01F017- B6-0010 RPT N68711-89-D-9296 00250	10-17-1994 07-10-1991 00017 03.3	JACOBS ENGINEERING GROUP NAVFAC - SOUTHWEST DIVISION B. WONG	REVISED FINAL SITE INSPECTION (SI) WORK PLAN, WHICH INCLUDES FIELD QA/QC PLAN, SITE HEALTH & SAFETY PLAN, & RCRA FACILITY INVESTIGATION	ADMIN RECORD	CERCLA GW H&SP HAZ WASTE IAS IRP QA QC QC RCRA RFI SARA SI TCE	007B 008 009 010 011 012	SOUTHWEST DIVISION - BLDG. 1 PROBLEM SHELVING
N60258 / 000204 SWDIV SER 410/32 LTR N68711-89-D-9296 00003	10-17-1994 € 08-07-1991 00017 03.3	NSY LONG BEACH T.G. AVGERINOS U.S. EPA C. DOUGLAS	TRANSMITTAL OF INSTALLATION RESTORATION PROGRAM (IRP) REVISED FINAL SITE INSPECTION (SI) WORKPLAN	ADMIN RECORD	IRP RCRA RFI SI	007B 008 009 010 011 012	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04021201 IMAGED LBSY_002
N60258 / 000205 SWDIV SER 410/32 LTR N68711-89-D-9296 00003	10-17-1994 7 08-08-1991 00017 03.3	NSY LONG BEACH T.G. AVGERINOS RWQCB J. ROSS	TRANSMITTAL OF INSTALLATION RESTORATION PROGRAM (IRP) REVISED FINAL SITE INSPECTION (SI) WORKPLAN	ADMIN RECORD	IRP RCRA RFI SI	007B 008 009 010 011 012	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04021201 IMAGED LBSY_002

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N60258 / 000780 CLE-C01-01F226-I2 0002 & PROJ NOTE NO. PN-0226-04 MM NONE 00006		JACOBS ENGINEERING NAVFAC - SOUTHWEST DIVISION	SITE MANAGEMENT MEETING NO. 1 PROJECT MANAGEMENT MEETING SITE MANAGEMENT PLAN	ADMIN RECORD	BRAC DERA FS HAZ WASTE IRP LAB OU RCRA RFP RI ROD SMP SWMU TANK UST	001 002 003 004 005 006A 006B 007A 007B 007B 007B 007B 008 009 010 011 012 013	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04021204 IMAGED LBSY_003
N60258 / 000746 PN-0249/250-16 & CLE-C01- 01F249/250-12-0007 MM NONE 00020	11-21-1994 03-02-1993 00249, 00250 04.3	JACOBS ENGINEERING K. BREWER NAVFAC - SOUTHWEST DIVISION	02-03 MARCH 1993 MEETING MINUTES FOR THE REMEDIAL INVESTIGATION/ FEASIBILITY STUDY (RI/FS) WORK PLAN DATA QUALITY OBJECTIVES (DQO'S) REVIEW MEETING	ADMIN RECORD	CHAR FS GW MONITORING MTG MINS RI WELLS	001 002 003 006 007 009 010 011 012 015 016	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04021203 IMAGED LBSY_003

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N60258 / 000173 CLE-C01-01F250- B7-0001 PLAN N68711-89-D-9296 00400	11-07-2001 04-02-1993 00250	JACOBS ENGINEERING GROUP K. BREWER NAVFAC - SOUTHWEST DIVISION	INSTALLATION RESTORATION PROGRAM DRAFT REMEDIAL INVESTIGATION/ FEASIBILITY STUDY WORK PLAN	ADMIN RECORD	AIR ARAR COC DCE DQO FS GW NCP PAH PCB RCRA RFA RFA RFI RI ROD SEDIMENTS SI SOIL TFH TRC TRPH UST VOC VSI	007 008 009 010 011 012	SOUTHWEST DIVISION - BLDG. 1 PROBLEM SHELVING
N60258 / 000738 PN-0249/250-27 & CLE-C01- 01F249/250-12-0013 MM NONE 00002	11-21-1994 05-18-1993 00249/250 10.0	JACOBS ENGINEERING K. BREWER NAVFAC - SOUTHWEST DIVISION	TECHNICAL REVIEW COMMITTEE (TRC) PLANNING MEETING REMEDIAL INVESTIGATION/ FEASIBILITY STUDY (RI/FS)	ADMIN RECORD	FS IRP RCRA RI TRC	003 007 011	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04021203 IMAGED LBSY_003

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N60258 / 000737 PN-0249/250-31 & CLE-C01- 01F249/250-12-0015 MM NONE 00007	11-21-1994 05-25-1993 00249/250 10.0	JACOBS ENGINEERING K. BREWER NAVFAC - SOUTHWEST DIVISION	TECHNICAL REVIEW COMMITTEE (TRC) MEETING REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) WORK PLANS	ADMIN RECORD	CHAR FS IRP RI SAP TRC VOC	003 007 011	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04021203 IMAGED LBSY_003
N60258 / 000739 NONE MISC NONE 00029	11-21-1994 05-25-1993 NONE 10.5		TECHNICAL REVIEW COMMITTEE (TRC) MEETING AGENDA, ROSTER, AND HANDOUT FOR 05/25/93 MEETING	ADMIN RECORD	TRC	001 002 003 004 005 006A 007 008 009 010 011 012 013	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04021203 IMAGED LBSY_003
N60258 / 000782 NONE LTR NONE 00004	11-21-1994 05-27-1993 NONE 10.0	CA DEPT OF FISH & GAME M. MARTIN NSY LONG BEACH B. JANOV	25 MAY 1993 TECHNICAL REVIEW COMMITTEE (TRC) MEETING	ADMIN RECORD	IRP PCB SI TRC	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04021204 IMAGED LBSY_003

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N60258 / 000296 NONE MEMO NONE 00011	10-18-1994 06-14-1993 NONE 04.3	NAVFAC - SOUTHWEST DIVISION C. LEADON NAVFAC - SOUTHWEST DIVISION J. JOYCE	TECHNICAL REVIEWS OF THE DRAFT RI/FS WORK PLANS, DRAFT PRELIMINARY ASSESSMENT FOR SITE 6B AND DRAFT SITE MANAGEMENT PLAN. ***COMMENTS: INTERIM FINAL, EPA/540/G-89/004, WASHINGTON D.C. DTD 10/88; SMUCKER, S.J. REGION IX PRG'S SECOND QTR '93; US EPA INT. FINAL, PB92-963334, PUB. 9285.7- 01C, DATED 12/91***	ADMIN RECORD	ARAR COMMENTS FS IRA PA RI SMP	001 002 004 006A 006B 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04021201 IMAGED LBSY_002
N60258 / 000764 PN-0249/250-39, CLE-C01- 01F249/250-I2-0021 MM NONE 00007	11-21-1994 07-19-1993 00249, 00250 04.3	JACOBS ENGINEERING K. BREWER NAVFAC - SOUTHWEST DIVISION	19 JULY 1993 COMMENT RESOLUTION MEETING MINUTES FOR THE DRAFT REMEDIAL INVESTIGATION/FEASIBILITY (RI/FS) STUDY WORK PLANS & SAMP & ANAL PLANS (SAPS)	ADMIN RECORD	CHAR COMMENTS DATA FS GW MONITORING MTG MINS RI SAP WATER WELLS	003 004 006A 007 008 012 013	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04021204 IMAGED LBSY_003
N60258 / 000765 NONE MEMO NONE 00005	11-21-1994 07-20-1993 NONE 04.3	CH2M HILL K. BREWER NAVFAC - SOUTHWEST DIVISION J. JOYCE	LIST OF PROPOSED ADDITIONS OR CHANGES TO THE PROJECT REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) WORK PLANS - PROJECT: SCO70147.RF/SCO70148.RF	ADMIN RECORD	FS GW PCB RI TPH VOC	001 002 003 004 005 006A 007 008 009 010 011 012 013	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04021204 IMAGED LBSY_003

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N60258 / 000307 NONE RPT N68711-92-D-4670 00005	10-20-1994 12-18-1993 00015 03.0	BECHTEL NATIONAL, INC. K. KAPUR NAVFAC - SOUTHWEST DIVISION	DRAFT INVESTIGATION DERIVED WASTE (IDW) MANAGEMENT PLAN (CTO-0015, 0016, 0026)	ADMIN RECORD	DRUMS FS GW HAZ WASTE IDWMP RI SB WATER WELLS	001 002 003 004 005 006A 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04021201 IMAGED LBSY_002
N60258 / 000795 NONE RPT N68711-92-D-4670 00016	11-21-1994 01-30-1994 00026 03.1	BECHTEL NATIONAL K. KAPUR NAVFAC - SOUTHWEST DIVISION	FINAL FISH SAMPLING AND ANALYSIS PLAN	ADMIN RECORD	FS RA RI RISK	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04022601 IMAGED LBSY_003
N60258 / 000796 NONE RPT N68711-92-D-4670 00005	11-21-1994 01-30-1994 15, 16, 26 03.3	BECHTEL NATIONAL K. KAPUR NAVFAC - SOUTHWEST DIVISION	FINAL INVESTIGATION DERIVED WASTE (IDW) MANAGEMENT PLAN	ADMIN RECORD	GW HAZ WASTE IDWMP SB WELLS	001 002 003 004 005 006A 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04022601 IMAGED LBSY_003

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N60258 / 000756 NONE MISC NONE 00001	11-21-1994 02-03-1994 NONE 10.6	PRESS- TELEGRAM NAVFAC - SOUTHWEST DIVISION	NEWSARTICLE: PANEL LOOKING FOR A FEW GOOD MEMBERS	ADMIN RECORD INFO REPOSITORY	NEWSART PUBNOT	001 002 003 004 005 006 007 008 009 010 011 012 013	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04021203 IMAGED LBSY_003
N60258 / 000789 NONE RPT N68711-92-D-4670 00018	11-21-1994 05-01-1994 00015 04.3	BECHTEL NATIONAL K. KAPUR	TECHNICAL MEMORANDUM NO. 2 REVISED FINAL TECHNICAL MEMORANDUM PROPOSED MODIFICATION TO FINAL RI/FS PLAN	ADMIN RECORD	FS GW RI SAP TECH MEMO WELLS	001 002 003 004 005 006A 007	SOUTHWEST DIVISION - BLDG. 1 PROBLEM FILE CABINET
N60258 / 000865 NONE LTR N68711-92-D-4670 00075	08-19-1996 05-24-1995 00026 03.6	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	FINAL ADDENDUM TO REMEDIAL INVESTIGATION/FEASIBILITY STUDY WORK PLAN AND RISK ASSESSMENT WORK PLAN	ADMIN RECORD	FS RI RISK WORK PLAN	007	SOUTHWEST DIVISION - BLDG. 1 PROBLEM SHELVING

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N60258 / 000857 NONE MISC N68711-92-D-4670 00033	06-05-1996 02-22-1996 00017 10.3		PRELIMINARY RESPONSE TO RESTORATION ADVISORY BOARD AND PUBLIC COMMENTS RECEIVED ON THE DRAFT REMEDIAL INVESTIGATION RPT	ADMIN RECORD INFO REPOSITORY	CERCLA COMMENTS IAS IRP NPL RAB RI SAP SARA	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04031101 IMAGED LBSY_004
N60258 / 000855 NONE MISC N68711-92-D-4670 00031	06-05-1996 03-19-1996 00017 10.5		RAB MEETING NOTICE, AGENDA, MINUTES OF MEETING, AND REMEDIAL INVESTIGATION PRESENTATION FOR IRP SITE 7 - HARBOR	ADMIN RECORD INFO REPOSITORY	RAB RI	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04022601 IMAGED LBSY_004
N60258 / 000858 NONE MISC N68711-92-D-4670 00015	06-05-1996 05-07-1996 00017 10.3		TECHNICAL WORKSHOP IRP SITE 7 LONG BEACH HARBOR PRESENTATION HANDOUT, AGENDA, AND SIGN-IN SHEET	ADMIN RECORD INFO REPOSITORY	IRP LAB RA RCRA SAP	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04022601 IMAGED LBSY_004
N60258 / 000864 NONE LTR N68711-92-D-4670 00227	08-19-1996 05-19-1996 00026 03.6	BECHTEL NATIONAL INC NAVFAC - SOUTHWEST DIVISION	REVIEW DRAFT INTERIM STATUS OF RI FOR SITE 7	ADMIN RECORD	RI	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04022602 IMAGED LBSY_004

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N60258 / 000953 NONE MM NONE 00009	09-19-1997 07-16-1996 NONE 10.4	BECHTEL NATIONAL INC DISTRIBUTION	16 JULY 1996 RESTORATION ADVISORY BOARD MEETING MINUTES - INCLUDES MEETING NOTICE, AGENDA, ATTENDANCE, AND SIGN-IN SHEET	ADMIN RECORD	COMMENTS DATA MTG MINS PUB. PARTICIPATI RAB RESPONSE RI	007 008 009 010 011 012 013	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04022602 IMAGED LBSY_004
N60258 / 000959 NONE MISC NONE 00010	09-22-1997 08-20-1996 NONE 10.4	BECHTEL NATIONAL INC DISTRIBUTION	20 AUGUST 1996 RESTORATION ADVISORY BOARD MEETING MINUTES - INCLUDES MEETING NOTICE, AGENDA, ATTENDANCE, AND SIGN-IN SHEET	ADMIN RECORD	ARSENIC GW MONITORING MTG MINS PUB. PARTICIPATI RAB REMOVAL RI SOIL WELLS	001 002 003 004 006A 006B 007 008 009 010 011 012 013	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04022603 - PACKAGE IMAGED LBSY_004
N60258 / 000960 NONE MISC NONE 00013	09-22-1997 09-17-1996 NONE 10.4	BECHTEL NATIONAL INC DISTRIBUTION	19 NOVEMBER 1996 RESTORATION ADVISORY BOARD MEETING MINUTES - INCLUDES MEETING NOTICE, AGENDA, ATTENDANCE, AND SIGN-IN SHEET	ADMIN RECORD	MTG MINS PUB. PARTICIPATI RAB	001 002 003 004 005 006A 006B 007 014 AOPC 5	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04022603 - PACKAGE IMAGED LBSY_004

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N60258 / 000891 NSY LB SER 1170/4841 PLAN NONE 00228	03-06-1997 1 0-17-1996 NONE 00.0	NSY LONG BEACH C. ULASZEWSKI NAVFAC - SOUTHWEST DIVISION	FINAL BASE REALIGNMENT AND CLOSURE CLEANUP PLAN (BCP) - INCLUDES NSY LB TRANSMITTAL LETTER	ADMIN RECORD	BCP BRAC CLOSURE	006A 006B 007 008 009 010 011 012 013	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04022602 IMAGED LBSY_004
N60258 / 000917 NONE LTR NONE 00005	04-24-1997 10-24-1996 NONE 10.1	DTSC LONG BEACH A. GUTIERREZ NAVFAC - SOUTHWEST DIVISION K. BAER	REVIEW OF RESPONSE TO COMMENTS ON DRAFT REMEDIAL INVESTIGATION DATED 20 JUNE 1996. ***COMMENTS: RESPONSE TO COMMENTS ON DRAFT REMEDIAL INVESTIGATION DATED 20 JUNE 1996 WAS NOT SUBMITTED TO ADMINISTRATIVE RECORDS.***	ADMIN RECORD	COMMENTS RESPONSE RI	007 OU 3	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04022602 IMAGED LBSY_004
N60258 / 000918 NONE LTR NONE 00003	04-24-1997 10-28-1996 NONE 10.1	DTSC LOONG BEACH S. LEMIEUX NAVFAC - SOUTHWEST DIVISION M. AULT	COMMENTS TO DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE DISPOSAL AND REUSE OF NAVSHIPYARD. ***COMMENTS: DRAFT IMPACT STATEMENT FOR THE DISPOSAL AND REUSE WAS NOT SUBMITTED TO ADMINISTRATIVE RECORDS.***	ADMIN RECORD	BRAC COMMENTS DISPOSAL EIS IRP	006A 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04022602 IMAGED LBSY_004

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N60258 / 000961 NONE MISC NONE 00009	09-22-1997 11-19-1996 NONE 10.4	BECHTEL NATIONAL INC	19 NOVEMBER 1996 RESTORATION ADVISORY BOARD MEETING MINUTES - INCLUDES MEETING NOTICE, AGENDA, ATTENDANCE, AND SIGN-IN SHEET	ADMIN RECORD	CERCLA GW INVESTIGATION MTG MINS PUB. PARTICIPATI RAB REMOVAL RI SOIL	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 AOPC 1 AOPC 5 BLDG. 46	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04022603 - PACKAGE IMAGED LBSY_004
N60258 / 000902 NONE RPT N68711-95-P-0054 00900	03-11-1997 11-21-1996 NONE 03.4	NSY ENVIRON. PROTECTION DIV. C. ULASZEWSKI NAVFAC - SOUTHWEST DIVISION	FINAL ENVIRONMENTAL BASELINE SURVEY (EBS) VOLUMES I OF II (SEE AR #903 - VOLUME II). ***COMMENTS: AR #903 IS MISSING AT SWDIV***	ADMIN RECORD	EBS GW METALS PAH PCB PCE PESTICIDES RFA SOIL SVOC SWMU VOC VSI	006A 007 008 009 010 011 012 013	SOUTHWEST DIVISION - BLDG. 1 PROBLEM SHELVING

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N60258 / 000952 NONE RPT N68711-92-D-4670 02000	09-19-1997 01-01-1997 00037 03.4	BECHTEL NATIONAL INC K. KAPUR NAVFAC - SOUTHWEST DIVISION R. SELBY	STRIKEOUT TEXT AND RESPONSE TO COMMENTS FOR DRAFT REMEDIAL INVESTIGATION REPORT AND APPENDIX P FOR SITES 8 THRU 13)	ADMIN RECORD	BACKGROUND COMMENTS GW HAZ WASTE INVESTIGATION MONITORING RESPONSE RI SOIL TCE TOC VOC WELLS	007 008 009 010 011 012 013 AOPC 1 AOPC 1 AOPC 2 AOPC 4 BLDG. 129 OU 3	SOUTHWEST DIVISION - BLDG. 1 PROBLEM SHELVING
N60258 / 000954 NONE MM NONE 00009	09-19-1997 01-21-1997 NONE 10.4	BECHTEL NATIONAL INC	21 JANUARY 1997 RESTORATION ADVISORY BOARD MEETING MINUTES - INCLUDES MEETING NOTICE, AGENDA, ATTENDANCE, AND SIGN-IN SHEET	ADMIN RECORD	BRAC EIS MTG MINS RAB REMOVAL SEDIMENTS UST	001 007 BLDG. 128	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04022602 IMAGED LBSY_004
N60258 / 000976 NONE MM NONE 00007	12-15-1998 05-20-1997 NONE 10.4	LONG BEACH NSY RAB INTERESTED PARTIES	NOTICE, AGENDA AND MINUTES OF MAY 20, 1997 RAB MEETING	ADMIN RECORD	GW MTG MINS PCE RAB SOIL	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04022603 - PACKAGE IMAGED LBSY_004

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N60258 / 000968 NONE LTR N68711-92-D-4670 00027	09-24-1997 05-21-1997 00026 10.4	BECHTEL NATIONAL INC K. KAPUR VARIOUS AGENCIES	TRANSMITTAL OF APRIL 1 AND 28 1997 WORKSHOP MINUTES, RESULTS OF UN- IONIZED AMMONIA AND HYDROGEN SULFIDE CALCULATIONS AND DEFINITIONS AND LISTING	ADMIN RECORD	AOC BACKGROUND DATA MTG MINS PCB	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04022603 - PACKAGE IMAGED LBSY_004
N60258 / 000977 NONE MM NONE 00005	12-15-1998 07-15-1997 NONE 10.4	LONG BEACH NSY RAB INTERESTED PARTIES	NOTICE, AGENDA AND MINUTES OF JULY 15, 1997 RAB MEETING	ADMIN RECORD	MTG MINS RAB	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04022603 - PACKAGE IMAGED LBSY_004
N60258 / 000978 NONE MM NONE 00005	12-15-1998 11-18-1997 NONE 10.4	LONG BEACH NSY RAB INTERESTED PARTIES	NOTICE, AGENDA AND MINUTES OF NOVEMBER 18, 1997 RAB MEETING	ADMIN RECORD	MTG MINS RAB	006B 007 008 009 010 011 012 013	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04022603 - PACKAGE IMAGED LBSY_004

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N60258 / 000980 SWDIV SER 26LB/AL/1029 PLAN NONE 00186	12-15-1998 12-17-1997 NONE 01.1	NAVFAC - SOUTHWEST DIVISION A. LEE VARIOUS AGENCIES	DRAFT BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP PLAN FOR LONG BEACH NAVAL SHIPYARD AND ASSOCIATED HOUSING - INCLUDES SWDIV TRANSMITTAL LETTER	ADMIN RECORD	AST BRAC GW PCB SWMU UST	006A 006B 007 008 009 010 011 012 013	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04022603 - PACKAGE IMAGED LBSY_004
N60258 / 000984 SWDIV SER 56LB.AL/0071 PLAN NONE 00202	12-15-1998 02-25-1998 NONE 01.1	NAVFAC - SOUTHWEST DIVISION A. LEE VARIOUS AGENCIES	BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP PLAN (BCP) UPDATE FOR LONG BEACH NAVAL SHIPYARD AND ASSOCIATED HOUSING - INCLUDES SWDIV TRANSMITTAL LETTER	ADMIN RECORD	AST BCP BRAC GW PCB SWMU UST	006A 006B 007 008 009 010 011 012 013	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04022603 - PACKAGE IMAGED LBSY_004
N60258 / 000997 SWDIV SER 56LB.DR/0149 MISC NONE 00006	12-15-1998 04-29-1998 NONE 01.6	NAVFAC - SOUTHWEST DIVISION F. ALJABI DTSC - LONG BEACH A. GUTIERREZ	DRAFT ENVIRONMENTAL FACT SHEET NO. 1 FOR THE LONG BEACH NAVAL COMPLEX FOR REVIEW AND COMMENT	ADMIN RECORD	COMMENTS	006A 006B 007 008 009 010 011 012 013	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04031101 IMAGED LBSY_004

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N60258 / 000100 NONE MM NONE 00003	12-11-2000 05-19-1998 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON MAY 19, 1998	ADMIN RECORD INFO REPOSITORY	AOC FS IR MTG MINS RAB	003 004 005 006A 007	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04011502 IMAGED LBSY_001
N60258 / 000101 NONE MM NONE 00004	12-11-2000 07-21-1998 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON JULY 21, 1998	ADMIN RECORD INFO REPOSITORY	EE/CA IR MTG MINS NFA RAB VOC	007 014	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04011502 IMAGED LBSY_001
N60258 / 001028 SWDIV SER 56LB.DR/0343 XMTL N68711-96-D-2029 00168	12-17-1998 08-01-1998 DO 015 10.2	CDM FEDERAL PROGRAMS CORP. L. DAVIDSON NAVFAC - SOUTHWEST DIVISION	DRAFT FINAL COMMUNITY RELATIONS PLAN (INCLUDES RESPONSE TO COMMENTS ON THE DRAFT COMMUNITY RELATIONS PLAN AND SWDIV TRANSMITTAL LETTER BY F. ALJABI)	ADMIN RECORD	COMMENTS CRP RESPONSE	006A 006B 007 008 009 010 011 012 013	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04032505 IMAGED LBSY_004
N60258 / 001021 NONE XMTL NONE 00003	12-17-1998 08-21-1998 NONE 01.6	NAVFAC - SOUTHWEST DIVISION A. LEE VARIOUS AGENCIES	TRANSMITTAL OF THE FINAL FEASIBILITY STUDY WORK PLAN FOR SITE 7, WITH REQUEST FOR WRITTEN ACCEPTANCE BY AUGUST 28, 1998 (W/O ENCLOSURE)	ADMIN RECORD	FS WORK PLAN	007	SOUTHWEST DIVISION - BLDG. 1 TO BE DELETED

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N60258 / 000103 NONE MM NONE 00012	12-11-2000 09-15-1998 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON SEPTEMBER 15, 1998	ADMIN RECORD INFO REPOSITORY	BCT BRAC EIR IR MTG MINS RAB ROD VOC	001 002 006A 007 009 012 013 014	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04012901 IMAGED LBSY_002
N60258 / 001032 SWDIV SER 05BL.DR/0396 PLAN N68711-96-D-2029 00139	12-17-1998 10-06-1998 DO 15 10.2	NAVFAC - SOUTHWEST DIVISION F. ALJABI NAVFAC - SOUTHWEST DIVISION	FINAL COMMUNITY RELATIONS PLAN - INCLUDES SWDIV TRANSMITTAL LETTER	ADMIN RECORD	CRP IR	006A 006B 007 008 009 010 011 012 013	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04022603 - PACKAGE IMAGED LBSY_004
N60258 / 000104 NONE MM NONE 00005	12-11-2000 11-17-1998 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON NOVEMBER 17, 1998	ADMIN RECORD INFO REPOSITORY	FS IR MTG MINS RAB ROD UST	001 002 003 004 005 006A 007 008 009 010 011 012 013 014	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04012901 IMAGED LBSY_002

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N60258 / 000107 NONE MM NONE 00011	12-11-2000 01-20-1999 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON JANUARY 20, 1999	ADMIN RECORD INFO REPOSITORY	AOC BCP BCT BRAC IR MTG MINS RAB	007	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04012901 IMAGED
N60258 / 000110 NONE MM NONE 00008	12-11-2000 03-17-1999 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON MARCH 17, 1999	ADMIN RECORD INFO REPOSITORY	AOEC FS IR MTG MINS RAB	007	LBSY_002 SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04012901 IMAGED LBSY_002
N60258 / 000113 NONE MM NONE 00008	12-11-2000 07-21-1999 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON JULY 21, 1999	ADMIN RECORD INFO REPOSITORY	BCT BRAC EIS IR MTG MINS RAB ROD	001 002 007 014	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04012901 IMAGED LBSY_002

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N60258 / 000114 NONE MM NONE 00007	12-11-2000 11-18-1999 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON 18 NOVEMBER 1999 (INCLUDES CANCELLATION NOTICE OF RESTORATION ADVISORY BOARD MEETING FOR 15 SEPTEMBER 1999)	ADMIN RECORD INFO REPOSITORY	BRAC FS IR MTG MINS RAB ROD	001 002 003 006A 007 008 009 010 011 012 013 014	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04012901 IMAGED LBSY_002
N60258 / 000116 NONE MM NONE 00007	12-20-2000 01-19-2000 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON JANUARY 19, 2000	ADMIN RECORD INFO REPOSITORY	ARAR BRAC EE/CA IR MTBE MTG MINS RAB RI SI	001 002 003 004 005 006 007 008 009 010 011 012 013 014	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04012902 IMAGED LBSY_002
N60258 / 000118 NONE MM NONE 00005	12-20-2000 03-29-2000 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON MARCH 29, 2000	ADMIN RECORD INFO REPOSITORY	AOC FFSRA MTG MINS PAH RAB RCRA ROD	001 002 007 009 012 013 014	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04012902 IMAGED LBSY 002

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N60258 / 000120 NONE MM NONE 00005	12-20-2000 08-30-2000 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES HELD ON AUGUST 30, 2000	ADMIN RECORD INFO REPOSITORY	AOC BRAC FFSRA MTBE MTG MINS RAB RCRA ROD	001 002 003 004 005 006A 007 008 009 010 011 012 013 014	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04012902 IMAGED LBSY_002
N60258 / 000131 NONE PLAN N68711-00-M-0109 00103	04-12-2001 03-30-2001 NONE	CDM FEDERAL PROGRAMS NAVFAC - SOUTHWEST DIVISION	DRAFT FINAL SITE MANAGEMENT PLAN FOR LONG BEACH NAVAL COMPLEX (INCLUDES DTSC COMMENTS ON DRAFT SITE MANAGEMENT PLAN)	ADMIN RECORD	AOC AOPC BCP EE/CA FFSRA FS GW MTBE NFA PA PCB REMEDIAL ACTIO RI ROD SI SMP SOIL TPH UST	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 BLDG. 816	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04011502 IMAGED LBSY_001

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N60258 / 000144 NONE MISC NONE 00003	06-20-2001 04-12-2001 NONE	CDM FEDERAL PROGRAMS NAVFAC - SOUTHWEST DIVISION	RESPONSE TO AGENCY COMMENTS ON THE DRAFT FINAL SITE MANAGEMENT PLAN FOR LONG BEACH NAVAL COMPLEX	ADMIN RECORD INFO REPOSITORY	DRUMS00GW00MONITORING00REMEDIAL ACTIO00REMOVAL00ROD00SMP01SOIL01SVE010101	02 03 04 05 06A 07 08 09 10	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04012902 IMAGED LBSY_002
N60258 / 000156 SWDIV SER 06CM.JV/0706 XMTL NONE 00031	07-12-2001 07-09-2001 NONE	NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA REGULATORY AGENCIES VARIOUS REGULATORS	TRANSMITTAL OF REVISIONS TO THE FINAL SITE MANAGEMENT PLAN FOR THE NAVAL COMPLEX AND RESPONSE TO COMMENTS BY DTSC	ADMIN RECORD INFO REPOSITORY	GW00MONITORING00NFA00REMEDIAL ACTIO00RESPONSE00ROD00SMP00SVE0102030304040405040605070408040904010404040504050406040704080409040404050405040605070408040804090404040504050406040704080409040404050405040604070406040704080408040904040405040504060407040604 <td>02 03 04 05 06A 07 08 09 10</td> <td></td>	02 03 04 05 06A 07 08 09 10	

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N60258 / 000158 CTO-0177/0185	08-06-2001 07-25-2001	BECHTEL NATIONAL, INC.	RESTORATION ADVISORY BOARD MEETING AGENDA WITH DRAFT MINUTES FROM 23 MAY 2001 MEETING & FINAL MINUTES FROM	ADMIN RECORD CONFIDENTIAL	DISPOSAL DRUMS	001 002	SOUTHWEST DIVISION - BLDG. 12
MISC 00177 N68711-92-D-4670 NAVFAC - SOUTHWEST DIVISION		7 FEBRUARY 2001 MEETING (INCLUDES		FOST	003	12	
		MAILING LIST PARTS OF WHICH SHOULD		FS	004		
		DIVISION BE CONSIDERED CONFIDENTIAL)		GW	005	PALLET 14 -	
					MONITORING	006A	SW04021201
					MTG MINS	007	IMAGED
					MW	008	LBSY_002
					PIM	009	
					RAB	010	
					REMOVAL	011	
					ROD	012	
					SOIL	013	
				SOLVENTS	014		
					TECH MEMO	016	
					WORK PLAN	BLDG. 101	l
						BLDG. 210)

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N60258 / 000147 NONE PLAN N68711-00-M-0109 00150	06-20-2001 08-28-2001 NONE	CDM FEDERAL PROGRAMS NAVFAC - SOUTHWEST DIVISION	FINAL SITE MANAGEMENT PLAN FOR LONG BEACH NAVAL COMPLEX {INCLUDES REVISION PAGES DATED, 8/01 - REV. 2}	ADMIN RECORD INFO REPOSITORY	AIR AOC AOPC BCP BCT BRAC CYANIDE EE/CA FFSRA FS GW MONITORING MTBE MW NFA ORDNANCE PA PCB PESTICIDES REMEDIAL ACTIO RI ROD SI SMP SOIL SVOC TPH UST VOC WELLS	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 129 BLDG. 816	

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/Comments	Classification	Keywords	Sites	Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
N60258 / 000171 SWDIV SER 06CM.JV\1076 PLAN NONE 00037	10-31-2001 10-10-2001 NONE	NAVFAC - SOUTHWEST DIVISION DTSC - CYPRESS	SITE MANAGEMENT PLAN - QUARTERLY PROGRESS REPORT FOR JUNE 16, 2001 THROUGH SEPTEMBER 15, 2001 AT THE NAVAL COMPLEX (WITH NAVY TRANSMITTAL LETTER)	ADMIN RECORD INFO REPOSITORY	AOC BCT BRAC FFSRA GW MONITORING SMP SOIL SVE TPH WORK PLAN	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 129 BLDG. 314	SOUTHWEST DIVISION - BLDG. 1 POSSIBLE COMPLIANCE
N60258 / 000162 CTO-0177/0201 MM N68711-92-D-4670 00017	10-25-2001 10-24-2001 00177	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	NAVAL COMPLEX RESTORATION ADVISORY BOARD MEETING AGENDA MAILER WHICH INCLUDES DRAFT MINUTES FROM 7/25/01 MEETING AND FINAL MINUTES FROM 5/23/01 MEETING (ALSO CONTAINS MAILING LIST PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL)	CONFIDENTIAL	FOST FS GW MTG MINS MW ORDNANCE RAB ROD SMP SOIL SVE	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 210	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04021201 IMAGED LBSY_002

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N60258 / 000167 CTO-0177/0202 MM N68711-92-D-4670 00010	10-25-2001 10-25-2001 00177	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	BASE REALIGNMENT AND CLOSURE TEAM MEETING AGENDA WITH DRAFT MINUTES FROM 7/26/01 MEETING	ADMIN RECORD	BCT BRAC FOST FS GW MTBE MTG MINS MW REMEDIAL ACTIO SMP SOIL	001 002 003 004 005 006A 006B 007 008 009 010 011 012 013 014 BLDG. 101 BLDG. 101	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04021201 IMAGED LBSY_002
N60258 / 000180 CTO-0177/0207 MISC N68711-92-D-4670 00011	12-17-2001 11-20-2001 00177	BECHTEL NATIONAL, INC. C. RAYKOWSKI VARIOUS AGENCIES REGULATORS AND NAVY PERSONNEL	TRANSMITTAL OF THE AGENDA FOR THE NOVEMBER 28, 2001 RESTORATION ADVISORY BOARD MEETING AND DRAFT MINUTES FROM 25 OCTOBER 2001 FOR REVIEW AND APPROVAL	ADMIN RECORD INFO REPOSITORY	ARAR CEQA EBS FS MTBE MTG MINS ORDNANCE PIM PUBNOT RAB REMEDIAL ACTIO ROD SMP TCE TECH MEMO TSDF UXO	001 002 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 210 BLDG. 314	SOUTHWEST DIVISION - BLDG. 1 PROBLEM SHELVING

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N60258 / 000176 CTO-0177/0208 MISC N68711-92-D-4670 00018	12-17-2001 11-28-2001 00177	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	RESTORATION ADVISORY BOARD DRAFT MEETING MINUTES FOR 24 OCTOBER 2001, AGENDA, MAILING LIST, AND 07/25/01 FINAL MEETING MINUTES - INCLUDES CONFIDENTIAL DISTRIBUTION LIST	ADMIN RECORD CONFIDENTIAL	ARAR ARSENIC COC GW METALS MTG MINS PIM PUBNOT RAB ROD SOIL TCE	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 129 BLDG. 210	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04012902 IMAGED LBSY_002
N60258 / 000183 CTO-0177/0214 XMTL N68711-92-D-4670 00015	01-17-2002 01-07-2002 00177	BECHTEL NATIONAL, INC. C. RAYKOWSKI NAVFAC - SOUTHWEST DIVISION	TRANSMITTAL OF AGENDA FOR RESTORATION ADVISORY BOARD MEETING OF 23 JANUARY, 2002 INCLUDING DRAFT MINUTES FROM 28 NOVEMBER 2001 AND FINAL MINUTES FROM 24 OCTOBER 2001	ADMIN RECORD INFO REPOSITORY	ARAR BCT BRAC EBS MTBE MTG MINS ORDNANCE RAB REMEDIAL ACTIO RI SMP TECH MEMO TSDF UXO	001 002 007 008 009 010 011 012 013 014 016 BLDG. 101	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04012902 IMAGED LBSY_002

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/Comments	Classification	Keywords	Sites	Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
N60258 / 000182 CTO-0177/0213 MISC N68711-92-D-4670 00022	01-15-2002 01-23-2002 00177	BECHTEL NATIONAL, INC. PUBLIC	RESTORATION ADVISORY BOARD MEETING NOTICE AND AGENDA - INCLUDES 11/28/01 DRAFT MEETING MINUTES AND 10/24/01 FINAL MEETING MINUTES (CONTAINS CONFIDENTIAL DISTRIBUTION LIST)	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	COC FS GW LUFT MTG MINS PIM PUBNOT RAB REMEDIAL ACTIO SARA SOIL TECH MEMO	003 004 006A 007 008 009 010 011 012 013 014 016	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04012902 IMAGED LBSY_002
N60258 / 000189 NONE PLAN NONE 00041	03-06-2002 01-30-2002 NONE	NAVFAC - SOUTHWEST DIVISION DTSC - CYPRESS	SITE MANAGEMENT PLAN - QUARTERLY PROGRESS REPORT FOR SEPTEMBER 16, 2001 THROUGH DECEMBER 15, 2001 AT THE NAVAL COMPLEX (WITH NAVY TRANSMITTAL LETTER AND REVISIONS). ***COMMENTS: THIS REPORT CONTAINS REVISION PAGES: FIGURE 3-1 (MASTER SCHEDULE) AND FIGURE 3-2 (DETAILED SCHEDULE); REPLACEMENT PAGES 3-3 THROUGH 3-22***	ADMIN RECORD	AOC BCT BRAC FFSRA FS GW HAZ WASTE IAS RCRA REMEDIAL ACTIO ROD SI SMP SOIL SVE WORK PLAN	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118 BLDG. 210 BLDG. 314	

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N60258 / 000192 CTO-0177/0225 MM N68711-92-D-4670 00015	04-04-2002 02-25-2002 00177	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	AGENDA FOR 28 FEBRUARY 2002 BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING WITH DRAFT MINUTES FROM 23 JANUARY 2002, AND FINAL MINUTES FROM 28 NOVEMBER 2001	ADMIN RECORD	ARAR ARSENIC BCT BRAC DISPOSAL FOSET FOST GW MTG MINS MW RAB ROD SI SMP SOIL TECH MEMO TSDF	001 002 006B 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118 BLDG. 210 BLDG. 314 OU 1	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04031101 IMAGED LBSY_003
N60258 / 000190 CTO-0177/0224 MM N68711-92-D-4670 00019	04-04-2002 03-25-2002 00177	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	AGENDA FOR 27 MARCH 2002 BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING WITH DRAFT MINUTES FROM 28 FEBRUARY 2002, FINAL MINUTES FROM 23 JANUARY 2002, AND REVISED FINAL MINUTES FROM 28 NOVEMBER 2001	ADMIN RECORD	BCT BRAC FOSET FOST GW MONITORING MTBE MTG MINS ROD SMP SOIL TSDF	001 002 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04031101 IMAGED LBSY_003

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/Comments	Classification	Keywords	Sites	Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
N60258 / 000193 NONE PLAN NONE 00040	04-19-2002 04-10-2002 NONE	NAVFAC - SOUTHWEST DIVISION DTSC - CYPRESS S. HAKIM	SITE MANAGEMENT PLAN - QUARTERLY PROGRESS REPORT FOR DECEMBER 16, 2001 THROUGH MARCH 15, 2002 AT THE NAVAL COMPLEX (WITH NAVY TRANSMITTAL LETTER)	ADMIN RECORD INFO REPOSITORY	AOC ARSENIC BCT BRAC FFSRA GW HAZ WASTE MONITORING MW RCRA ROD SI SMP SOIL WELLS WORK PLAN	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118 BLDG. 314 OU 1	
N60258 / 000196 CTO-0177/0229 MM N68711-92-D-4670 00018	04-24-2002 04-22-2002 00177	BECHTEL NATIONAL, INC. C. RAYKOWSKI NAVFAC - SOUTHWEST DIVISION	DRAFT BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MINUTES FROM 27 MARCH 2002 MEETING, AGENDA FOR 24 APRIL 2002 MEETING, AND FINAL MINUTES FROM 28 FEBRUARY 2002 MEETING; ALSO INCLUDES DOCUMENT REVIEW STATUS TABLE	INFO REPOSITORY	BCT BRAC FOSL FOST FS GW MTBE MTG MINS MW ROD SI SMP SOIL TSDF WELLS	001 002 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118 BLDG. 314	

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N60258 / 000194 CTO-0177/0226 MISC N68711-92-D-4670 00011	04-19-2002 04-24-2002 00177	BECHTEL NATIONAL, INC. T. HEIRONIMUS NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD MEETING NOTICE AND AGENDA - INCLUDES 01/23/02 DRAFT MEETING MINUTES (CONTAINS CONFIDENTIAL DISTRIBUTION LIST)	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	ARAR FS GW MONITORING PIM PUBNOT RAB SOIL SOLVENTS SVE TECH MEMO WELLS	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 118	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04012902 IMAGED LBSY_002
N60258 / 000198 CTO-0177/0231 MM N68711-92-D-4670 00018	05-23-2002 05-29-2002 00177	BECHTEL NATIONAL, INC. C. RAYKOWSKI NAVFAC - SOUTHWEST DIVISION	DRAFT BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MINUTES FROM 24 APRIL 2002 MEETING, AGENDA FOR 29 MAY 2002 MEETING, AND FINAL MINUTES FROM 27 MARCH 2002 MEETING; ALSO INCLUDES DOCUMENT REVIEW STATUS TABLE	ADMIN RECORD INFO REPOSITORY	BCT BRAC FFSRA FS GW MTBE MTG MINS PERMIT PROPOSED PLAN RAB RCRA REMEDIAL ACTIO ROD SI SMP SOIL TSDF WELLS	001 002 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118 BLDG. 314 OU 1	

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N60258 / 000200 SWDIV SER 06CM.JV/0618 PLAN N68711-00-D-0004 00104	08-13-2002 06-14-2002 DO 17	CDM FEDERAL PROGRAMS S. HAKIM NAVFAC - SOUTHWEST DIVISION	DRAFT SITE MANAGEMENT PLAN ANNUAL UPDATE FOR LONG BEACH NAVAL COMPLEX - INCLUDES SWDIV TRANSMITTAL LETTER FROM T. MACCHIARELLA	ADMIN RECORD INFO REPOSITORY	AOC AOPC ARAR AST BCP BCT BRAC CYANIDE EE/CA FFSRA FS GW HRA MW NEPA NPL PA PCB PROPOSED PLAN RCRA REMEDIAL ACTIO RI ROD SDWA SI SDWA SI SMP SOIL SVE SWMU TPH TSCA UST WELLS WORK PLAN	007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118 BLDG. 314	6

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/Comments	Classification	Keywords		Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
N60258 / 000203 CTO-0177/0236 MM N68711-92-D-4670 00016	08-13-2002 07-10-2002 00177	BECHTEL NATIONAL, INC. C. RAYKOWSKI NAVFAC - SOUTHWEST DIVISION	29 MAY 2002 DRAFT BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM MEETING MINUTES - INCLUDES 24 APRIL 2003 FINAL BRAC MEETING MINUTES AND 10 JULY 2002 AGENDA	ADMIN RECORD INFO REPOSITORY	ARAR BCT BRAC CLOSURE FOSET FOST FS GW MTBE MTG MINS PROPOSED PLAN ROD SI SMP TSDF WELLS	007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118 BLDG. 314	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04021201 IMAGED LBSY_002
N60258 / 000208 CTO-0177/0237 MM N68711-92-D-4670 00021	08-13-2002 07-24-2002 00177	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	DRAFT MINUTES FROM THE 24 APRIL 2002 RESTORATION ADVISORY BOARD MEETING, FINAL MINUTES FROM THE 23 JANUARY 2002 MEETING AND NOTIFICATION & AGENDA OF 24 JULY 2002 MEETING (INCLUDES CONFIDENTIAL MAILING LIST)	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	FS GW MTG MINS PIM PRG RAB RCRA ROD SOIL	007 008 009 010 011 012 013 014 016 BLDG. 118 BLDG. 210	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04021201 IMAGED LBSY_002

CDM 6046 09-16-2002 PROGRAMS UPDATE FOR LONG BEACH NAVAL PLAN INFO AOPC 000 DIVISION - E PLAN D0 17 NAVFAC - REVISION PAGES: TO THE DRAFT SMP AND REPOSITORY AST 009 12 NOBT1-00-0000 NAVFAC - REVISION PAGES: FIGURE 6-1 (MASTER REVISION PAGES: FIGURE 6-5 T0 6-8) AND FIGURE BCT 010 90105 00105 NAVFAC - REVISION PAGES: FIGURE 6-5 T0 6-9 AND FIGURE BCR 011 9000210 010 00105 FIGURE 6-5 TO 6-9 AND FIGURE BRAC 014 140.020 9000210 013 104.062D 00105 FIGURE 6-1 (MASTER REVISION PAGES: FIGURE 6-1 (MASTER REVISION PAGES ADMIN RECORD AO	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/Comments	Classification	Keywords		Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
NONE 10-10-2002 NONE SOUTHWEST DIVISION PROGRESS REPORT FOR JUNE 16 THROUGH SEPTEMBER 15, 2002 AT THE NAVAL COMPLEX INFO REPOSITORY ARSENIC 008 DIVISION - 12 00037 DTSC - CYPRESS DTSC - CYPRESS THOUGH SEPTEMBER 15, 2002 AT THE NAVAL COMPLEX INFO REPOSITORY ARSENIC 008 D1VISION - 12 00037 DTSC - CYPRESS DTSC - CYPRESS THOUGH SEPTEMBER 15, 2002 AT THE NAVAL COMPLEX INFO REPOSITORY ARSENIC 008 D1VISION - 12 00037 DTSC - CYPRESS DTSC - CYPRESS FISRA 010 PALLET 14 GW 016 IMAGED IMAGED IMAGED IMAGED IMAGED IMAGEN ARSY IMAGEN IMAGEN IMAGEN IMAGEN IMAGEN IMAGEN <	CDM 6046 PLAN N68711-00-D-0004	09-16-2002	PROGRAMS NAVFAC - SOUTHWEST	UPDATE FOR LONG BEACH NAVAL COMPLEX - INCLUDES (RESPONSE TO COMMENTS ON THE DRAFT SMP AND REVISION PAGES). ***COMMENTS: REVISION PAGES: FIGURE 6-1 (MASTER SCHEDULE PAGES 6-5 TO 6-8) AND FIGURE 6-2 (DETAILED SCHEDULE PAGES 6-11, 6-12,	INFO REPOSITORY	AOPC AST BCP BCT BRAC GW NFA NPL PCB PROPOSED PLAN RCRA REMEDIAL ACTIO RI ROD SI SMP SOIL SVE TPH UST	008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118 BLDG. 314	PALLET 14 - SW04021201 IMAGED
SOIL	NONE PLAN NONE	10-10-2002	SOUTHWEST DIVISION	PROGRESS REPORT FOR JUNE 16 THROUGH SEPTEMBER 15, 2002 AT THE	INFO	ARSENIC BCT BRAC CLOSURE FFSRA FS GW HAZ WASTE RCRA ROD SMP	008 009 010 011 012 013 016 BLDG. 101 BLDG. 118	PALLET 14 - SW04021201 IMAGED

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N60258 / 001089 SWDIV SER 06CM.TM/0336 PLAN NONE 00020	04-02-2003 01-13-2003 NONE	NAVFAC - SOUTHWEST DIVISION DTSC - CYPRESS	SITE MANAGEMENT PLAN, QUARTERLY PROGRESS REPORT FOR SEPTEMBER 16 THROUGH DECEMBER 15, 2002 AT THE NAVAL COMPLEX [INCLUDES SWDIV TRANSMITTAL LETTER BY T. MACHIARELLA]	ADMIN RECORD INFO REPOSITORY	SMP	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118 BLDG. 314	SOUTHWEST DIVISION - BLDG. 1 POSSIBLE COMPLIANCE
N60258 / 000262 SWDIV SER 06CM.JV/0657 RPT NONE 00032	05-05-2003 04-10-2003 NONE	NAVFAC - SOUTHWEST DIVISION DTSC - CYPRESS	SITE MANAGEMENT PLAN, QUARTERLY PROGRESS REPORT FOR 16 DECEMBER 2002 THROUGH 15 MARCH 2003 - INCLUDES (SWDIV TRANSMITTAL LETTER BY T. MACHIARELLA)	ADMIN RECORD INFO REPOSITORY		001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118	SOUTHWEST DIVISION - BLDG. 12 PALLET 14 - SW04012902 IMAGED LBSY_002
Tuesday, Septembe	r 26, 2006	This Adminis bibliographic	strative Record (AR) Index includes references to d citations are considered to be part of this AR but n	ocuments which cite biblio	ography sources. These ly in the index.		ge 35 of 38

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N60258 / 000295 NONE PLAN NONE 00010	04-06-2004 01-09-2004 NONE	NAVFAC - SOUTHWEST DIVISION DTSC - CYPRESS	SITE MANAGEMENT PLAN, QUARTERLY PROGRESS REPORT FOR 16 SEPTEMBER 2003 THROUGH 15 DECEMBER 2003	ADMIN RECORD INFO REPOSITORY		001 002 003 004 005 006A 007 008 009 010 011 012 014 016 BLDG. 101 BLDG. 118 OU 1	SOUTHWEST DIVISION - BLDG. 1
N60258 / 000293 CTO-0044/0029 & SWDIV SER 06CM.AD/0323 PLAN N68711-95-D-7526 00040	04-06-2004 03-01-2004 00044	BECHTEL ENVIRONMENTAL, INC. NAVFAC - SOUTHWEST DIVISION	DRAFT FINAL PROPOSED PLAN/DRAFT REMEDIAL ACTION PLAN (RAP) [INLCUDES RESPONSE TO COMMENTS ON THE DRAFT PP/RAP AND SWDIV TRANSMITTAL LETTER BY J. VALENZIA]	ADMIN RECORD INFO REPOSITORY	COMMENTS	007	SOUTHWEST DIVISION - BLDG. 1
N60258 / 001094 SWDIV SER. 06CA.AD/0456 LTR NONE 00002	05-18-2004 04-22-2004 NONE	NAVFAC - SOUTHWEST DIVISION J. VALENZIA DTSC - CYPRESS S. HAKIM	DEPARTMENT OF TOXIC SUBSTANCES CONTROL (DTSC) SCHEDULE EXTENSION REQUEST LETTER OF 16 APRIL 2004 (SEE AR # 293)	ADMIN RECORD INFO REPOSITORY		007	SOUTHWEST DIVISION - BLDG. 1

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N60258 / 001116 NONE RPT NONE 00020	01-12-2005 01-10-2005 NONE	CDM FEDERAL PROGRAMS CORP. NAVFAC - SOUTHWEST DIVISION	SITE MANAGEMENT PLAN, QUARTERLY PROGRESS REPORT FOR 16 SEPTEMBER 2004 THROUGH 15 DECEMBER 2004 AT FORMER LONG BEACH NAVAL COMPLEX	ADMIN RECORD INFO REPOSITORY	OU SVE VOC	001 002 003 004 005 006A 007 008 009 010 011 012 013 014 016 BLDG. 101 BLDG. 118 OU1	SOUTHWEST DIVISION - BLDG. 1
N60258 / 000337 BRAC SER BPMOW.SO/0315 CORRESP NONE 00004	06-21-2006 01-18-2005 NONE	BRAC PMO WEST J. VALENZIA DTSC - CYPRESS S. HAKIM	NAVY SCHEDULE EXTENSION REQUEST FOR SITE 7 DOCUMENTS IN ACCORDANCE WITH THE FEDERAL FACILITIES SITE REMEDIATION AGREEMENT (FFSRA) (W/ ENCLOSURE - DETAILED SCHEDULE)	ADMIN RECORD INFO REPOSITORY	ARAR FFSRA	007	SOUTHWEST DIVISION - BLDG. 1
N60258 / 001133 SWDIVSER BPMOW.JV/1023 LTR NONE 00003	08-19-2005 08-02-2005 NONE	NAVFAC - SOUTHWEST DIVISION J. VALENZIA DTSC - CYPRESS S. HAKIM	ANNOUNCEMENT OF NEW BASE REALIGNMENT AND CLOSURE (BRAC) ENVIRONMENTAL COORDINATOR ANDREA ESPINOZA SERVING AS THE FEDERAL FACILITIES SITE REMEDIATION AGREEMENT (FFSRA) PROJECT MANAGER (INCLUDES DELIVERABLE EXTENTION REQUEST FOR VARIOUS IR SITES)	ADMIN RECORD INFO REPOSITORY	BRAC FFSRA IR	007 008 010 012 013 016	SOUTHWEST DIVISION - BLDG. 1

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Total Estimated Record Page Count:		6,521					
Total - Administrative Records:			89				
[UIC NUMBER]='N No Keywords Sites=007;007A;00							

No Classification

ATTACHMENT B

TRANSCRIPT FROM THE PUBLIC MEETING

LONG BEACH NAVAL COMPLEX PUBLIC MEETING TRANSCRIPT OF PROCEEDINGS, at Airflite, 3250 Airflite Way, Long Beach, California 90807, commencing at 6:04 p.m., Wednesday, October 25th, 2006, before VIENNA NGUYEN, CSR No. 13137, pursuant to Notice.

* * *

1 2	APPEARANCES:	1		LONG BEACH, CALIFORNIA, WEDNESDAY, OCTOBER 25, 2006	
23	MR. JOHN HILL	2		6:04 p.m.	
	BRAC Environmental Coordinator BRAC PMO West	3			
4	1455 Frazee Road, Suite 900	4		JOHN HILL: So I welcome everybody here tonight.	
5	San Diego, California 92108 (619) 532-0985	5		This is the Navy's opportunity to present the proposed	
6	BROWN AND CALDWELL	6		plan for the harbor sediments at the former Long Beach	
7	BY: MS. BETTY SCHMUCKER	7		Naval Complex. The proposed plan presents our preferred	7
8	Principal Scientist 9665 Chesapeake Drive	8	7	remedies for the drastic contamination in the harbor	
_	Suite 201 San Diego, California 92123	9		sediments. And we're accepting written comments on our	
9	(858) 514-8822	10		proposed plan from October 16th, last week, all the way	
10 11	bschmucker@brwncald.com TIM CHAUVEL	111		through November 16.	
	Public Participation Specialist Department of Toxic Substances Control	12		we also offer this opportunity for you tonight	
12	5706 Corporate Avenue	13		to verbally issue your comment on the proposed plans.	
13	Cypress, California 90630 (714) 484-5487	14		They will be recorded, and there will be an	
14	• •	15		opportunity that will give an opportunity for the	
15	Water Resource Control Engineer	16		Navy to formally respond to those comments prior to	
16	CA Regional water Quality Control Board Los Angeles Region	17		issuing our decision documents document, which will	
	370 west 4th street. Suite 200			actually issue the remedy selection.	
17	Los Angeles, California 90013 (213) 576-6740	18			
18	MARTIN HAUSLADEN	19		So with that, we'll allow Betty Schmucker to	
19	somedial Project Manager	20		present the proposed plan to you. Feel free to, at the	
20	Hazardous Waste Management Division (H-9-2) U.S. Environmental Protection Agency, Region IX	21		end of her presentation, ask questions if you need	
	75 Hawthorne Street San Francisco, California 94105	22		clarification on the presentation.	
21	(415) 972-3007	23		However, if you do want to issue a verbal	-
22	DENNIS PARKER	24		comment on the proposed plans, please state so. Please	
23	Remedial Project Manager BRAC PMO West	25		identify yourself, tell the reporter that this is a	
24	1455 Frazee Road, Suite 900				
25	San Diego, California 92108 (619) 532-0954				
	2				4
				comment on the proposed plan so it can be recorded.	
1	JENNIFER RICH	1			
2	Remedial Project Manager Department of Toxic Substances Control	2		We also have on the back sheet for you an	
2	5796 Corporate Avenue	3		opportunity to provide your written comment. And you	
3	Cypress, California 90630	4		can turn those in tonight or mail those in prior to	
4	JOSH BURNAM	5		November 16.	
-	Anchor Environmental	6		So with that, I'll let Betty begin with her	
5	CHRISTINE HOUSTON	7		presentation.	
6	Port of Long Beach	8		BETTY SCHMUCKER: Thank you, John. Did everybody	
7	ALAN HSU	9		get a copy of the handout over here? And I also have	
	Department of Toxic Substance Control	10		copies of the proposed plan if you didn't get one.	
8	VOMER KADASTER	11		All right, then. This worked earlier. Bear	
9	Brown & Caldwell	12		with us a moment. Okay.	
10	Dave Lange	13		Thank you for coming tonight. The purpose of	
	CDM Federal	14		our meeting is to discuss the proposed plan for IR	
11					
12	TIM MCDONNELL Brown & Caldwell	15		Site 7 at Long Beach Naval Complex.	
13	biomi di caranteri	16		Tonight, we're going to present the preferred	
	V SARAH ANN MOORE	17		remedies for sediments at IR Site 7, and we're going to	
14	Navy BRAC	18		offer the public an opportunity to learn more and	
15		19		provide comments on the Navy's proposed plan.	
16 17	Alpha Hsu	20		Installation Restoration, or IR Program, that	
18	Annual - Towir Substance	21		the Navy follows is follow CERCLA or the "Superfund"	
19	Upportment & IUXIC "	22		process, the Comprehensive Environmental Response,	
20	(intel 1	23		Compensation, and Liability Act. The goal of the IR	
21	and Commate treated	24		program is to protect human health in the environment.	
22 23	5+96 Lor 400,20	47 75		The IR program studies, identifies, and	
23 24	Depastment ED TOXIC Substances Control 5796 Corporate treame Ceppress, EA 9063D	25		וויפ אר דיסטו שו שנטטופש, וטפונווופש, מוט	
25					5
	3				ر

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		1	sediments. The harbor area itself is about 700 acres in
1	remediates contaminated sites at Navy and Marine Corps	2	size. About 90 percent of IR Site 7 is owned by the
2	facilities. And it is performed in partnership with	3	Port of Long Beach. The remaining 10 percent belongs to
3	regulatory agencies.	4	the United States, and it's under the custody of the
4	The steps in the Installation Restoration	5	U.S. NAVY.
5	Program include the following: First of all, there's a		Now, there is one part of it called Pier 12,
6	prelimary assessment and site inspection phase. At this	6	which is this little thing right here, which sticks out.
7	point. the area's history is reviewed. Sampling is	7	That is part of an active naval installation and it's
8	performed to determine potential contaminants at the	8	
9	sîte.	9	still in operation.
	The next phase is remedial investigation and	10	There were a series of reports and studies
10	feasibility study. The purpose of this is to evaluate	11	generated for the sediments in IR Site 7. And the Navy
11	additional data in order to conduct risk assessment and	12	did work, and continues to work, with agencies and V
12	then evaluate possible clean-up remedies.	13	trustees in conducting studies, preparing reports, and
13	The next phase, and it's the phase which we are	• 14	also in preparing this proposed plan.
14	in right now, is the proposed plan. This proposes a	15	Okay. A closer picture of IR Site 7 with the
15	in right now, is the proposed plant. This projects a site clean-up remedy and provides a 30-day public	16	picture right here. This is the shipyard portion and
16		17	this was the Naval Station portion. And these piers
17	comment period.	18	that are in hatching right here no longer exist. They
18	And then as John mentioned a while ago, the	19	were present at one time but have since been demolished.
19	record of decision, which is a document that selects and	20	Okay. Let's take a look at some of the
20	formally records the clean-up remedy. And at this	20	investigations that were done for IR Site 7. In 1997, a
21	point, this is the end of the Navy's action.		remedial investigation was completed. For that study,
22	The next steps in the IR program will be	22	sediment sampling was conducted, a human-health risk
23	implemented at IR Site 7 by the Port of Long Beach. And	23	assessment was conducted, and an ecological risk
24	those include Remedial Action, which is design and	24	
25	implementation of the clean-up remedy.	25	assessment was conducted.
25			
		_	8
		6	
	Response Action Complete, at which point the	1	And in 1998 to 2003, when the report came out,
1	Response Action Complete, at mitch pende	. 2	a feasibility study was conducted. And a few months ago
2	agency documents concurrence on close-out of the site,	3	earlier this year, we had an FS Addendum that was
3	and the remediation is considered complete.	4	prepared as well. For the feasibility study, there was
4	And then the last phase is Long-term Operation	5	additional sediment sampling conducted. A remedial
5	and Monitoring, which effectively monitors the clean-up	6	action objective for IR Site 7 was developed as part of
6	remedy over a period of time. Okay.	7	the feasibility study or FS; and remedial alternatives
7	Our site is this area right here. Long Beach		developed.
8	Harbor, West Basin all comprise IR Site 7. A little	8	
9	the second based ways Complex. It	1 -	okay. Let's on back to the remedial
	background on the former Long Beach Naval Complex. It	9	Okay. Let's go back to the remedial
	actually includes two former Navy facilities: Naval	10	investigation for a moment. The objective of that study
10	actually includes two former Navy facilities: Naval	10 11	investigation for a moment. The objective of that study was to determine whether organisms living in surface
10 11	actually includes two former Navy facilities: Naval Station Long Beach and the former Long Beach Naval	10	investigation for a moment. The objective of that study was to determine whether organisms living in surface harbor-bottom sediments were affected by chemicals
10 11 12	actually includes two former Navy facilities: Naval Station Long Beach and the former Long Beach Naval Shipyard.	10 11	investigation for a moment. The objective of that study was to determine whether organisms living in surface harbor-bottom sediments were affected by chemicals reported in the sediment.
10 11 12 13	actually includes two former Navy facilities: Naval Station Long Beach and the former Long Beach Naval Shipyard. The facilities were developed in the late	10 11 12	investigation for a moment. The objective of that study was to determine whether organisms living in surface harbor-bottom sediments were affected by chemicals reported in the sediment. For human health risk, the RI investigation
10 11 12 13 14	actually includes two former Navy facilities: Naval Station Long Beach and the former Long Beach Naval Shipyard. The facilities were developed in the late 1930's and early 1940's. The facility operated as a	10 11 12 13	investigation for a moment. The objective of that study was to determine whether organisms living in surface harbor-bottom sediments were affected by chemicals reported in the sediment. For human health risk, the RI investigation concluded there is no appreciable difference between
10 11 12 13 14 15	actually includes two former Navy facilities: Naval Station Long Beach and the former Long Beach Naval Shipyard. The facilities were developed in the late 1930's and early 1940's. The facility operated as a naval shipyard and performed ship maintenance and	10 11 12 13 14	investigation for a moment. The objective of that study was to determine whether organisms living in surface harbor-bottom sediments were affected by chemicals reported in the sediment. For human health risk, the RI investigation concluded there is no appreciable difference between eating fish caught in the waters of IR Site 7 and eating
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1	remedial investigation had the objective of evaluating	1	Removal and on-site containment of AOEC
2	remedial alternatives for reducing adverse effects on	2	sediments, which would be inside the IR Site 7 area.
3	the benthic organisms in the sediment. Based on the	3	The sediments would be removed and contained in here
4	sampling results, the boundaries and the depths of the	4	somewhere. The next alternative was removal and
5	AOEC's were futher refined.	5	off-site containment of AOEC sediments.
6	There are 7 of them, A through G. Yeah.	6	Again, all AOEC's were evaluated. That means
7	Portions of IR Site 7 were considered "no action." And	7	any sediment taken here would be taken outside IR Site 7
8	this was accepted by the agencies. And the reason is	8	to an appropriate location. Okay. I jumped ahead.
9	because the analyses show little ecological risk in	- 9	Removal and discharge. This is the removal and
10	these particular sediment areas. And, therefore, those	10	discharge process where sediments are discharged.
11	"no action" areas are not addressed in the proposed	11	So those were the alternatives that were
12	plan.	12	evaluated. Okay. There are nine federal evaluation
13	I'll show you where they are right here. This	13	criteria against which the alternatives must be compared
14	is the light blue area right here. This is a "no	14	or evaluated. And they include the following: Two
15	action" area and AOEC D, which is on this slide. So we	15	threshold criteria. First of all, overall protection of
16	have ADEC A, B, C, and ADEC D over here. This is a "no	16	human health and the environment. The second one is
17	action" area. E, which is Pier 12. Another part of C	17	compliance with federal and state applicable or relevant 0 A
18	here. F and G and these are all the pier areas. And IR	18	and appropriate requirements, or ARAR? since we love AFT
19	Site 7 in the middle. This is not an action area.	19	acronyms.
20	okay. when conducting a feasibility study,	20	And there are five primary balancing criteria.
21	remedial alternatives are developed and evaluated. They	21	This includes long-term effectiveness and permanence of
22	may include such things as engineering controls, which	22	the remedy. Reduction of toxicity, mobility, or volume.
23	seek to reduce contaminant, toxicity, movement, or	23	Short-term effectiveness, the ability to be implemented,
24	volume. And examples of engineering controls include	24	and cost, of course. Finally, the last two criteria
25	capping or covering sediments or dredging and removing	25	called modifying criteria are state acceptance of the
	10)	12
-	off-site for disposal. Those are engineering actions.	1	remedy and community acceptance. So what we're doing
1 2	Institutional controls are another kind of	2	tonight is part of this one right here.
2 3	alternative which can restrict access to or disturbance	3	Okay. The preferred alternatives that went
4	of contaminant-containing sediments. An example of an	4	through the screening and evaluation by the nine
5	institutional control would be something like a deed	5	criteria came out as follows: For AOEC A and AOEC C,
6	restriction that limits your activities. It says you	6	which are right here and right here, the remedy that is
7	cannot disturb the sediments. You cannot dredge or	7	proposed is removal and discharge of sediments at
8	build.	8	off-site projects. The benefit of this remedy is that
9	Okay. The remedial alternatives that were	9	it separates the benthic community from the chemicals of
10	evaluated in the FS for IR Site 7 include all the ones	10	ecological concern by removing the sediments and
11	you see up there. According to the NCP which is defined \checkmark	11	discharging them at off-site locations.
12	in the proposed plan, no action is required as a	12	It provides the most protection to the benthic
13	baseline evaluation for all alternatives.	13	communities at IR Site 7. It does achieve the remedial
14	So every alternative get looked at from the no	14	action objective which we discussed earlier. It does
15	action perspective. What happens if nothing is done?	15	provide the greatest level of long-term effectiveness
16	The other alternative is evaluated where limited action,	16	and permanence; and it's easily implementable through
17	which would include institutional control and that	17	dredging.
18	was an alternative that was evaluated for all of the	18	For AOEC B, the decision was no action, because
19	AGEC'S.	19	the chemical concentrations have not resulted in
20	Limited actions, periodic sediment quality	20	sediment toxicity or have not produced not shown to
21	monitoring again, all the AOEC's were evaluated for	21	produce adverse effects on the benthic community. AOEC
22	that particular alternative. In situ or in-place	22	B is here.
23	capping with clean, imported sediments. And for this	23	For AOEC E, F, and G, the proposed remedy is
24	particular alternative, only AOEC B and C were evaluated	24	limited action and the implementation of institutional
25	because it was appropriate for those two AOEC's.	25	controls. The purpose of this remedy is to prevent
	. 11		13

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*				
1	unauthorized or uncontrolled disturbance and/or exposure	1	officially close this public meeting.	
2	of sediments beneath the pier. AOECS E, F, and G are	z	And I thank everyone for your attention. Thank	
- 3	pier AOECs. The chemicals in the sediments underneath	3	you.	
4	the pier would present a potential risk if they are	4	(At 6:24 p.m., the deposition was concluded.)	
5	disturbed and the benthic communities that live in the	5	-000-	
6	sediments are exposed to the chemicals.	6		
7	Locations of the piers and access requirements	7		
8	seem to be reasonable because they make institutional	8		
° 9	controls practical. They are not easy to get to. And	9		
9 10	the remedy that is proposed here would be applied to the	10		
10	areal extent of those AOECS.	111		
12	Okay. The next steps. well, we have public	12		
	comment starting on the 16th of October extending	13		
13	through the 23rd of November. It's longer than 30 days.	14		
14 15	It's about five weeks. During this period, the public	15		
	may comment on the proposed plan itself or other	16		
16 17	site-related documents.	17		1
17	The record of decision which follows the	18		
18	proposed plan then will finalize the preferred remedial	19		
19	alternatives. It will include all responses to public	20		
20	comments received, and it will serve as the final Navy	21		
21 22	document for IR Site 7.	22		
22	And then the remedial action will be	23		
23 24	implemented. The Port of Long Beach will take the lead	24		
25	on performing the remedy. And the action will be	25		
25				
		.4		16
1	subject to CEQA, California Environmental Quality Act,	1	STATE OF CALIFORNIA)	
2	review.	2) SS.	
3	Okay. There's a couple of ways to provide	3	COUNTY OF LOS ANGELES)	
4	public comments. One is to our court reporter here	4	I, VIENNA NGUYEN, CSR NO. 13137, do hereby	
5	tonight. Or comments may be submitted by mail or by fax	5	certify:	
6	to John Hill. You have his address and phone number		That the foregoing TRANSCRIPT OF PROCEEDINGS was	
7	there. Address and fax number, actually.	7	taken before me at the time and place therein set forth	
8	And for more information on the proposed plan	0	and was taken down by me in shorthand and transcribed	
9	or anything else about IR Site 7 we have a list of	9 10	into computer-generated text under my direction and	
10	people here: Dennis Parker, John Hill, Jennifer Rich,	10	supervision; and I hereby certify the foregoing	
11	Tim Chauvel, Robert Ehe. Oh, good. Hi. And Martin	11	transcript of my shorthand notes so taken.	
12	Hausladen, all of whom are here tonight.	13	I further certify that I am neither counsel for	
13	Now, we do have an information repository for	14	nor related to any party to said action nor in any way	
14	Long Beach Naval Complex. It's been established for a	15	interested in the outcome thereof.	
15	number years in the Government Publications section of	16	IN WITNESS WHEREOF, I have hereunto subscribed my	
16	the Long Beach Public Library. And the proposed plan	10	name this 25th day of October, 2006.	
17	and the supporting documents are available there. And I	18		
18	thank you for your attention. Any questions?	19		
19	JOHN HILL: Okay. Thank you, Betsy. As Betsy	20		
20	UNIDENTIFIED SPEAKER: Betty.	20	VIENNA NGUYEN	
21	JOHN HILL: pointed out, the public period it	21		
22	actually goes through November 23rd, not the 16th as I	23		
23	mentioned in the introductions. So with that, if	23		
24	there's no members of the public that would like to	25		
25	issue a verbal comment on the proposed plan, we'll	2.5		
		1		
	1	.5		17