



---

## Uploaded to VFC Website

▶▶▶ July 2013 ◀◀◀

---

This Document has been provided to you courtesy of Veterans-For-Change!

Feel free to pass to any veteran who might be able to use this information!

For thousands more files like this and hundreds of links to useful information, and hundreds of "Frequently Asked Questions, please go to:

[Veterans-For-Change](http://www.veteransforchange.org)

---

*Veterans-For-Change is a 501(c)(3) Non-Profit Corporation  
Tax ID #27-3820181*

***If Veteran's don't help Veteran's, who will?***

We appreciate all donations to continue to provide information and services to Veterans and their families.

[https://www.paypal.com/cgi-bin/webscr?cmd=\\_s-xclick&hosted\\_button\\_id=WGT2M5UTB9A78](https://www.paypal.com/cgi-bin/webscr?cmd=_s-xclick&hosted_button_id=WGT2M5UTB9A78)

---

**Note:**

VFC is not liable for source information in this document, it is merely provided as a courtesy to our members.



**EPA Superfund  
Record of Decision:**

**EL TORO MARINE CORPS AIR STATION  
EPA ID: CA6170023208  
OU 01,02  
EL TORO, CA  
06/27/2002**

**FINAL  
RECORD OF DECISION  
SITES 18 AND 24  
FORMER MARINE CORPS AIR STATION  
EL TORO, CALIFORNIA**

**FINAL RECORD OF DECISION  
OPERABLE UNIT 1  
SITE 18 – REGIONAL VOLATILE ORGANIC  
COMPOUND GROUNDWATER PLUME  
OPERABLE UNIT 2A  
SITE 24 – VOC SOURCE AREA  
FORMER MARINE CORPS AIR STATION  
EL TORO, CALIFORNIA**

**JUNE 2002**



**CLEAN II  
JUNE 2002**

**FINAL RECORD OF DECISION  
OPERABLE UNIT 1  
SITE 18 – REGIONAL VOLATILE ORGANIC  
COMPOUND GROUNDWATER PLUME  
OPERABLE UNIT 2A  
SITE 24 – VOC SOURCE AREA  
FORMER MARINE CORPS AIR STATION  
EL TORO, CALIFORNIA**

**JUNE 2002**

**POOR LEGIBILITY**

**ONE OR MORE PAGES IN THIS DOCUMENT ARE DIFFICULT TO READ  
DUE TO THE QUALITY OF THE ORIGINAL**

**RESPONSE TO COMMENTS  
DRAFT FINAL RECORD OF DECISION, OPERABLE UNIT- 1/2A  
GROUNDWATER AT SITES 18 AND 24  
MCAS EL TORO, CALIFORNIA**

June 2002

<p>Originator: Nicole Moutoux USEPA</p> <p>To: Dean Gould, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: 14 May 2002 (via e-mail)</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0164 File Code: 0232</p>
<p><b><u>GENERAL COMMENT</u></b></p> <p>I have reviewed the Response to Comments for the 18/24 ROD as well as the draft final ROD and have no further comments. All of my concerns have been addressed and incorporated. I will let you know about Thelma's review as soon as I get it.</p>	<p><b><u>RESPONSES TO GENERAL COMMENT</u></b></p> <p><b><u>RESPONSE 1:</u></b> The DON thanks U.S. EPA for their review of the draft final ROD. Comments from Thelma Estrada were of an explanatory nature and were resolved by teleconference with Navy Legal Counsel.</p>

**RESPONSE TO COMMENTS  
DRAFT FINAL RECORD OF DECISION, OPERABLE UNIT- 1/2A  
GROUNDWATER AT SITES 18 AND 24  
MCAS EL TORO, CALIFORNIA**

June 2002

<p>Originator: Triss M. Chesney, P.E., RPM DTSC</p> <p>To: Dean Gould, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: 7 June 2002</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0164 File Code: 0232</p>
<p><b><u>SPECIFIC COMMENTS</u></b></p> <p>1. The ROD should identify the restrictions necessary for the protection of human health and the environment. Additionally, the ROD should explain the means to implement the restrictions to ensure that they are effective.</p> <p>The draft final ROD describes the use of the Environmental Restriction Covenant and Agreement as well as the deed to ensure that the identified restrictions will be implemented upon transfer. Similarly, the ROD should state that the identified restrictions will be included in any Finding of Suitability to Lease (FOSL) and lease agreements for property associated with Site 24. Reference to inclusion of restrictions in lease agreements was included in the draft version of the ROD; however, these references were removed from the draft final version of the ROD.</p> <p>Further, California Health and Safety Code Section 25359(a) states, "Any owner of nonresidential real property who knows, or has reasonable cause to believe, that any release of hazardous substance has come to be located on or beneath that real property shall, prior to the sale, lease, or rental of real property by that owner, give written notice of that condition to the buyer, lessee, or renter of real property."</p> <p>Restrictions to be included in the FOSL and lease should be reflected in the Declaration (page 3), Section 8.2.2.2 - Institutional Controls (page 8-25), Section 8.2.2.3 - Implementation of Institutional Controls (page 8-29) and any other applicable sections.</p>	<p><b><u>RESPONSES TO SPECIFIC COMMENTS</u></b></p> <p><b>RESPONSE 1:</b> References to the FOSL and lease agreements have been added to the Declaration and to Sections 8.2.2.2, 8.2.2.3, and 10.8.2 as requested.</p> <p>In accordance with Section 120 (h)(3)(A) of CERCLA, the Department of the Navy (DON) provides a hazardous substances notification in deeds or leases for property where hazardous substances are known to have been stored for one year or more, known to have been released, or disposed of.</p>

**RESPONSE TO COMMENTS  
DRAFT FINAL RECORD OF DECISION, OPERABLE UNIT- 1/2A  
GROUNDWATER AT SITES 18 AND 24  
MCAS EL TORO, CALIFORNIA**

June 2002

<p>Originator: Triss M. Chesney, P.E., RPM DTSC</p> <p>To: Dean Gould, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: 7 June 2002</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0164 File Code: 0232</p>
<p>2. DTSC comment number 20 was included in a letter dated March 8, 2002 regarding the draft ROD. In response, the Department of the Navy (DON) proposed changes that included, " Current and future off-Station agricultural workers could be exposed to COCs [chemicals of concern] in groundwater through dermal adsorption and inhalation of VOCs." Following review of the response, DTSC requested that restrictions to prevent exposure of on and off-Station agricultural workers to VOCs in groundwater be included in the ROD. In turn, the DON stated that " Risks to the agricultural worker from groundwater in the principal aquifer have been evaluated and found to be acceptable." As a result, DTSC's comment has not been adequately addressed.</p> <p>The results of the risk assessment for Site 18 indicate that the excess lifetime cancer risk for the agricultural worker scenario is <math>3 \times 10^{-6}</math> in one existing well, 18_ET1, where the major chemical contributor is TCE. Please note that 18_ET1 is not located in an area where the maximum concentrations of TCE in the plume would be anticipated. As a result, references, to "prevent domestic use" of groundwater from Site 18 should be changed to " prevent use" to include current and future agricultural workers.</p> <p>This modification should be reflected in the Declaration (page 3), Section 8 - Description of Alternative (page 8-1), Section 8.1.2.3 - Institutional Controls, Section 10.8.1 - Off-Station Groundwater Plume (page 10-12), and other applicable sections.</p>	<p><b>RESPONSE 2:</b> The <math>3 \times 10^{-6}</math> risk that DTSC mentions in this comment is not the risk to the agricultural worker at well 18 ET1. It is the <u>residential risk</u> at 18 ET1. The risk to the agricultural worker from groundwater in the principal aquifer was not quantified in the OU-1 Interim Action RI/FS but was evaluated qualitatively in terms of the residential risk. This use of the residential risk is conservative because the agricultural worker would be exposed to contaminants for a much shorter exposure period (e.g., 8 hours a day, 250 days a year for 25 years as opposed to 24 hours a day, 350 days a year for 30 years) than the resident and would not be exposed to groundwater through the same pathways (e.g., there would be no ingestion).</p> <p>To understand the actual risk to the agricultural worker, the DON reviewed an agricultural risk assessment previously performed for Orange County Water District (OCWD) and performed a confirmatory risk assessment based on the more realistic agricultural scenario subsequent to receipt of this comment (both assessments were forwarded to the BCT for review on June 19, 2002 under separate cover). The OCWD risk assessment estimated the excess cancer risk to the agricultural worker from a well screened in the principal aquifer within the groundwater plume to be on the order of <math>6.37 \times 10^{-15}</math> to <math>3.185 \times 10^{-14}</math> based on a maximum concentration of TCE of <math>40 \mu\text{g/L}</math>. The non-cancer risk was on the order of <math>2.45 \times 10^{-10}</math> to <math>1.23 \times 10^{-9}</math>.</p> <p>The confirmatory assessment was intended to provide a conservative upper-bound on the risk and was based on the highest concentrations of VOCs in the off-Station portion of the shallow groundwater unit. Use of these concentrations is considered conservative because TCE concentrations in this portion of the shallow groundwater unit (<math>140 \mu\text{g/L}</math>) are over two times higher than the highest TCE concentrations (<math>61 \mu\text{g/L}</math>) reported anywhere in the principal aquifer plume. The agricultural worker was assumed to be exposed to groundwater 8 hours a day, 250 days a year for 25 years.</p>

**RESPONSE TO COMMENTS**  
**DRAFT FINAL RECORD OF DECISION, OPERABLE UNIT- 1/2A**  
**GROUNDWATER AT SITES 18 AND 24**  
**MCAS EL TORO, CALIFORNIA**

June 2002

<p>Originator: Triss M. Chesney, P.E., RPM DTSC</p> <p>To: Dean Gould, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: 7 June 2002</p>	<p style="text-align: right;">CLEAN II Program  Contract No. N68-711-92-D-4670  CTO-0164  File Code: 0232</p>
	<p>The results of the agricultural risk assessment are presented in the revised Section 7.1.5.3 and indicate that even under this conservative scenario the risks to the agricultural worker are acceptable (i.e., it is not necessary to restrict agricultural wells in the principal aquifer or off-Station portions of the shallow groundwater unit).</p> <p>Because both risk assessments (that performed by OCWD and by the DON) have demonstrated that it is not necessary to prevent agricultural use of off-Station groundwater, references to restrictions to protect agricultural workers from exposure to contaminated groundwater in the off-Station portion of the shallow groundwater unit have been removed from the Declaration, from Section 8.1.2.3, and from Section 10.8.1. The references to "preventing domestic use" of groundwater in the principal aquifer have been left unchanged.</p> <p>With regard to the on-Station property, deed restrictions will be used to prohibit installation of any on-Station wells within the plume area and its associated buffer zone.</p> <p>It should be noted that the DON has also had discussions with Orange County Health Care Agency (OCHCA) on this issue. The OCHCA is responsible for permitting all wells (e.g., domestic and agricultural) in the area of the groundwater plume. OCHCA indicated that they are aware of the plume location and would not permit any agricultural wells without requiring the permit applicant to coordinate with Regional Water Quality Control Board (to obtain a waste discharge permit) and/or South Coast Air Quality Management District (to obtain an air quality permit).</p>
<p>3. Section 5.3.3 - Phase I Remedial Investigation (RI): The first paragraph mentions several areas of groundwater contamination associated with other IRP sites and references Figure 5-5. Figure 5-5 does not include information regarding these other ERP sites. Please revise the text or figure accordingly.</p>	<p><b>RESPONSE 3:</b> The reference to Figure 5-5 has been deleted from this sentence and Figure 5-5 has been left as is.</p>
<p>4. Figure 5-10 - Total Dissolved Solids Concentrations in Principal Aquifer, 1992 to 1994: In the legend, please provide a reference and date for the isoconcentration contour based on "Combined MCAS El Toro RI and OCWD [Orange County Water District] Data."</p>	<p><b>RESPONSE 4:</b> Both isoconcentration contours shown in Figure 5-10 were taken from Figure 4-2b in the OU-1 RI Report Addendum. The source and date have been added to the legend as requested.</p>

**RESPONSE TO COMMENTS**  
**DRAFT FINAL RECORD OF DECISION, OPERABLE UNIT- 1/2A**  
**GROUNDWATER AT SITES 18 AND 24**  
**MCAS EL TORO, CALIFORNIA**

June 2002

<p>Originator: Triss M. Chesney, P.E., RPM DTSC</p> <p>To: Dean Gould, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: 7 June 2002</p>	<p style="text-align: right;">CLEAN II Program Contract No. N68-711-92-D-4670 CTO-0164 File Code: 0232</p>
<p>5. Section 7.1.1 - Chemicals of Potential Concern: The first sentence states, "Table 7-1 lists the chemicals of potential concern (COPCs) used in the Phase IHHRA [Human Health Risk Assessment] for Sites 18 and 24." Since this section is a summary for Site 18, please remove "and 24" from the end of the sentence.</p>	<p><b>RESPONSE 5:</b> The sentence has been revised to remove the words " and 24" as requested.</p>
<p>6. Section 7.1.5- Results: The first sentence in this section states, "The following paragraphs summarize future hypothetical risk from domestic use of untreated groundwater at Site 18." This introductory sentence should be revised to include all of the scenarios discussed, including current and future residential, agricultural and recreational, rather than just "future domestic use."</p>	<p><b>RESPONSE 6:</b> The first sentence in Section 7.1.5 has been revised to read as follows: "The following paragraphs summarize hypothetical risks from residential, agricultural, and recreational use of untreated groundwater at Site 18."</p>
<p>7. Section 8.1.2.3 - Institutional Controls (Site 18) and Section 8.2.2.3 - Institutional Controls (Site 24), Monitoring and Reporting: Please specify the time frame (for example, within 30 days) for submittal of permit applications and permits by the DON to the regulatory agencies.</p>	<p><b>RESPONSE 7:</b> Sections 8.1.2.3 and 8.2.2.3 have been revised to specify that copies of permits and permit applications will be provided to U.S. EPA, DTSC, and RWQCB within 60 days of receipt from OCHCA and IRWD.</p>
<p>8. Section 8.2.2.2 - Institutional Controls, Land-Use Restrictions on Property Overlying the Site 24 Shallow Groundwater Plume: Item number 1 should be revised to state, "No new wells of any type shall be installed within the Site 24 Shallow Groundwater Plume, without prior review and written approval from the DON, DTSC, and RWQCB [California Regional Water Quality Control Board]."</p>	<p><b>RESPONSE 8:</b> The first sentence of Item number 1 has been changed to read as follows: 1. No new wells of any type shall be installed within the Site 24 Shallow Groundwater Plume or buffer zone without prior review and written approval from the DON, DTSC, U.S. EPA, and RWQCB.</p>
<p>9. Section 8.2.2.2 - Institutional Controls, Land-Use Restrictions on Property Overlying the Site 24 Shallow Groundwater Plume: To include leases with the DON or future owners, the ROD should state that "transferees" include lessees.</p>	<p><b>RESPONSE 9:</b> Where appropriate, the word "transferee" has been changed to "transferee/lessee" throughout Section 8.2.2.2 to include leases with the DON or future owners.</p>
<p>10. Section 8.2.2.3 - Implementation of Institutional Controls (page 8-26): The ROD states that the covenant and quitclaim deed with be executed contemporaneously. Please note that the actual sequence must be that the covenant is executed and recorded before the deed.</p>	<p><b>RESPONSE 10:</b> Section 8.2.2.3 has been revised to indicate that the covenant will be executed and recorded immediately prior to the recordation of a quitclaim deed for conveyance of the property.</p>

**RESPONSE TO COMMENTS**  
**DRAFT FINAL RECORD OF DECISION, OPERABLE UNIT- 1/2A**  
**GROUNDWATER AT SITES 18 AND 24**  
**MCAS EL TORO, CALIFORNIA**

June 2002

<p>Originator: Triss M. Chesney, P.E., RPM DTSC</p> <p>To: Dean Gould, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: 7 June 2002</p>	<p style="text-align: right;">CLEAN II Program  Contract No. N68-711-92-D-4670  CTO-0164  File Code: 0232</p>
<p>11. Section 10.8.2 - On-Station Groundwater Plume: The first sentence of this section states, "Institutional controls for the on-Station portion of the groundwater plume are intended to protect residents from use of VOC-contaminated groundwater..." To be consistent with the changes made to the Declaration, this section should be revised to reflect that institutional controls are to prevent any use of the contaminated groundwater.</p>	<p><b>RESPONSE 11:</b> The first sentence of Section 10.8.2 has been revised to replace the words "protect residents from" with the word "prevent" and now reads as follows:  "Institutional controls for the on-Station portion of the groundwater plume are intended to prevent use of VOC-contaminated groundwater until cleanup goals are achieved in the shallow groundwater unit..."</p>
<p>12. Attachment A - Administrative Record for Site 18 and 24: The attachment states "An updated Administrative Record for Sites 18 and 24 will be submitted under separate cover." DTSC has not received a copy of the Administrative Record to be included in the ROD. Please ensure that this is provided in the final version of the ROD.</p>	<p><b>RESPONSE 12:</b> The site-specific Administrative Record Index for Sites 18 and 24 was transmitted to recipients of the Record of Decision on 14 June 2002. This index was intentionally not included in the transmittal of the Draft Final ROD to allow time for additional documents related to Sites 18 and 24 to be added to the Administrative Record and reflected in the index.</p>

**RESPONSE TO COMMENTS**  
**DRAFT FINAL RECORD OF DECISION, OPERABLE UNIT- 1/2A**  
**GROUNDWATER AT SITES 18 AND 24**  
**MCAS EL TORO, CALIFORNIA**

June 2002

<p>Originator: Patricia Hannon RWQCB</p> <p>To: Dean Gould, BRAC Environmental Coordinator MCAS El Toro</p> <p>Date: 6 June 2002</p>	<p style="text-align: right;">CLEAN II Program  Contract No. N68-711-92-D-4670  CTO-0164  File Code: 0232</p>
<p><b><u>SPECIFIC COMMENTS</u></b></p> <p>1. Page 5 Signature Page: Please add the middle initial J. to Mr. Gerard Thibeault's name in the signature block.</p>	<p><b><u>RESPONSES TO SPECIFIC COMMENTS</u></b></p> <p><b><u>RESPONSE 1:</u></b> Mr. Thibeault's initial has been added as requested.</p>
<p>2. Page 2-6 Table 2-1 Summary of Environmental Activities at Former MCAS El Toro: Please change the order number for the Cleanup and Abatement Order (CAO) to 87-97. CAO No. 87-97 was rescinded by Order No. 93-36 Rescission of Cleanup and Abatement Order No. 87-97.</p>	<p><b><u>RESPONSE 2:</u></b> The order number has been corrected as requested and the Summary of Finding text has been changed to read as follows: "CAO 87-07 was rescinded by Order No. 93-36, Rescission of Cleanup and Abatement Order No. 87-97, in April 1993."</p>
<p>3. Page 8-25 Land-Use Restrictions of Property Overlying the Site 24 Shallow Groundwater Plume, paragraph 3: Please add the RWQCB to the first sentence.</p>	<p><b><u>RESPONSE 3:</u></b> The RWOCB has been added to the first sentence of the third paragraph as requested.</p>
<p>4. Page 8-29 Environmental Restrictive Covenants in the Quitclaim Deed (California Civil Code Section 1471), 3rd paragraph: Please add RWQCB to the last sentence.</p>	<p><b><u>RESPONSE 4:</u></b> The RWOCB has been added to the last sentence in the third paragraph as requested.</p>

# **DECLARATION**

# **DECLARATION**

---

## **SITE NAME AND LOCATION**

Site 18, Regional Volatile Organic Compound (VOC) Groundwater Plume - Operable Unit 1 (OU-1)

Site 24, VOC Source Area - Operable Unit 2A (OU-2A)

Former Marine Corps Air Station (MCAS) El Toro Santa Ana, California 92709

National Superfund Database Identification Number: CA6170023208

## **STATEMENT OF BASIS AND PURPOSE**

This Record of Decision (ROD) presents the selected remedial action for groundwater at Sites 18 and 24 at Former MCAS El Toro, located in Orange County, California.

This document was developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), 42 *United States Code* Section 9602 et seq., and in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 *Code of Federal Regulations* Part 300, et seq. This decision is based on the administrative record files for these sites. A site-specific administrative record index is included as Attachment A.

The state of California (through the California Environmental Protection Agency [Cal/EPA] Department of Toxic Substances Control [DTSC] and the Regional Water Quality Control Board Santa Ana Region [RWQCB]) and the United States Environmental Protection Agency (U.S. EPA) concur on the selected remedy.

## **ASSESSMENT OF THE SITE**

Actual or threatened releases of hazardous substances from groundwater at Sites 18 and 24, if not addressed by implementing the remedial action selected in this ROD, may present a current or potential threat to public health and welfare or to the environment.

## **DESCRIPTION OF THE REMEDY**

Site 24, VOC Source Area, comprises two media: soil and groundwater. In the past, VOC contamination migrated from the soil at Site 24 to the shallow groundwater unit and from the shallow groundwater unit to the principal aquifer at Site 18. This ROD presents the final remedy for groundwater at Sites 18 and 24. Contaminated soil at Site 24 was addressed previously in an interim ROD that documented selection of soil vapor extraction as the remedy for removal of the VOC contamination. The Site 24 ROD was considered interim because it addressed soil but did not address contaminated groundwater at Site 24. The remedy for soil has been implemented, and a closure report has been submitted to the Base Realignment and Closure (BRAC) Cleanup Team (BCT). A separate ROD or ROD amendment addressing soil at Site 24 will be issued at a later date.

Site 18, Regional VOC Groundwater Plume, comprises only groundwater. The selected remedy for groundwater at Sites 18 and 24 is extraction and treatment and institutional controls. Groundwater will be extracted from wells installed in the areas of highest reported trichloroethene (TCE) concentrations at Site 24. At Site 18, groundwater will be extracted from areas of the groundwater plume where TCE concentrations are equal to or greater than 5 micrograms per liter. This extraction procedure will help prevent migration of VOCs from Site 24 to Site 18, contain VOC migration at Site 18, and reduce concentrations of VOCs in groundwater at both sites to federal or state drinking water standards.

Groundwater extracted at both sites will be treated at the Irvine Desalter Project (IDP) facility to remove VOCs using air stripping. VOC vapors will be treated with activated carbon filters before the air is discharged to the atmosphere. When the activated carbon filters become saturated with VOCs, the filters will be returned to the manufacturer where they will be regenerated and the VOCs destroyed.

The IDP is a proposed water supply development project initiated by the Orange County Water District and the Irvine Ranch Water District (OCWD/IRWD). The goal of this project is to develop a local water supply, drawing from the principal aquifer, by 1) intercepting, containing, and treating groundwater with high concentrations of total dissolved solids (TDS) and nitrates; and 2) accepting and treating for VOC removal the groundwater that the Marine Corps must remediate. The IDP as developed by OCWD/IRWD is composed of two separate components - a nonpotable system and a potable system - designed to treat groundwater from two areas in the principal aquifer and from the shallow groundwater unit at Site 24.

- Nonpotable System - groundwater from Site 24 and areas inside the principal aquifer VOC plume (which is contaminated above drinking water standards) would be extracted, treated, and conveyed for use as recycled water. Only the VOC-related portion of the IDP that treats water from Site 24 and other areas within the principal aquifer VOC plume would be considered part of the Department of the Navy's (DON's) CERCLA remedy.
- Potable System - VOCs have not been reported in the potable well locations. Groundwater from areas outside the principal aquifer VOC plume would be extracted and treated to remove TDS and nitrates. Treated water would then be supplied for domestic purposes. This is not part of the DON's CERCLA remedy.

The selected remedy for groundwater includes:

- construction, operation, and maintenance of a groundwater extraction system to remove VOCs from groundwater;
- performance monitoring throughout the remedial action;
- treatment of VOC-contaminated groundwater using air stripping and treatment of VOC vapors with activated carbon filters to meet air quality standards before discharge to the atmosphere;
- confirmatory groundwater sampling at the end of the remediation to confirm that VOC concentrations meet federal and state cleanup levels; and
- institutional controls to prevent use of contaminated groundwater, protect equipment, and allow access to the DON, OCWD/TRWD, and regulatory personnel.

Groundwater extraction addresses the risk posed by VOC contamination (which can be characterized as the primary threat at these sites) by removing and permanently destroying the contaminants, thereby significantly reducing the toxicity, mobility, and volume of hazardous substances in groundwater.

Institutional controls for the on-Station portion of the groundwater plume are necessary to protect the integrity of the groundwater extraction, injection, and monitoring wells and associated piping and equipment. Institutional controls are also necessary to prevent use of contaminated groundwater and to allow the DON, OCWD/TRWD, and regulatory personnel access to install, operate, and maintain equipment and to monitor the remedial action. For land containing the on-Station portion of the groundwater plume, institutional controls would be implemented through two separate legal instruments: 1) one or more Environmental Restriction Covenant and Agreements with DTSC addressing on-Station real property containing the Site 24 Shallow Groundwater Plume and associated buffer zone and 2) one or more quitclaim deeds/leases between transferee(s) /lessee(s) and the DON conveying/leasing on-Station real property containing the Site 24 Shallow Groundwater Plume and associated buffer zone. The Environmental Restriction Covenant and Agreement(s) will incorporate the land-use restrictions into restrictive covenants that run with the land and that are enforceable by DTSC against future transferees. The quitclaim deed(s) will include the identical land-use restrictions in environmental restrictive covenants that run with the land and that will be enforceable by the DON against future transferees. In essence, the DON and DTSC will each have the legal authority to enforce the land-use restrictions and will share responsibility for their enforcement.

Institutional controls for the off-Station portion of the groundwater plume are necessary to protect residents from using contaminated groundwater in the principal aquifer and shallow groundwater unit for domestic purposes until cleanup goals are reached. Off-Station institutional controls are administered by Orange County Health Care Agency (OCHCA) and IRWD through the well permitting process. The DON is continuing to work with OCHCA and IRWD to assure that any conditions that are necessary to assure adequate protection of public health (e.g., treatment to comply with federal and state drinking water standards) shall be included in any permits that they issue for construction of wells intended to be used for domestic drinking water supply. The DON will also assist OCHCA and IRWD in this process by providing them annually with updated copies of figures delineating the off-Station groundwater plume.

## **STATUTORY DETERMINATIONS**

The selected remedy is protective of human health and the environment, complies with federal and state requirements that are legally applicable or relevant and appropriate to the remedial action, and is cost-effective. The remedy uses permanent solutions and alternative treatment (or resource recovery) technologies to the maximum extent practicable and satisfies the statutory preference for remedies employing treatment that reduces toxicity, mobility, or volume as a principal element. The effectiveness of the remedial action selected in this ROD will be reviewed at a minimum at 5-year intervals to assure that the remedy continues to adequately protect human health and the environment and is achieving cleanup goals. Once cleanup goals have been achieved, the 5-year review will no longer apply to this action because hazardous substances will not remain above health-based levels.

## **ROD DATA CERTIFICATION CHECKLIST**

The following information is included in the Decision Summary:

- chemicals of concern and their respective concentrations (Section 5)

- baseline risk represented by the chemicals of concern (Section 7)
- cleanup levels established for chemicals of concern and the basis for these levels (Section 8)
- how source materials constituting principal threats are addressed (Section 8)
- current and reasonably anticipated future land-use assumptions and current and potential future beneficial uses of groundwater used in the baseline risk assessment and ROD (Sections 6 and 7)
- potential land and groundwater use that will be available at the sites as a result of the selected remedy (Section 10)
- estimated capital, annual operation and maintenance (O&M), and total present worth costs; discount rate; and the number of years over which the remedy cost estimates are projected (Section 10)
- key factors that led to selecting the remedy (Sections 8, 9, and 10)

Additional information can be found in the administrative record file for these sites.

# TABLE OF CONTENTS

---

Section	Page
DECLARATION	1
ACRONYMS/ABBREVIATIONS	vii
DECISION SUMMARY	
1 SITE NAME, LOCATION, AND DESCRIPTION	
1.1 Site Name	1-1
1.2 Site Location	1-1
1.3 Lead and Support Agencies	1-1
1.4 Site Description	1-4
2 SITE HISTORY AND ENFORCEMENT ACTIVITIES	
2.1 Initial Investigations	2-1
2.2 Phase I and II Remedial Investigations	2-2
2.3 Feasibility Studies	2-3
2.4 Pilot Testing	2-4
2.5 Recent Evaluations and Assessments	2-4
2.6 Groundwater Monitoring	2-5
3 HIGHLIGHTS OF COMMUNITY PARTICIPATION	
3.1 Restoration Advisory Board	3-1
3.2 Public Mailings	3-2
3.3 Community Participation for Sites 18 and 24	3-3
4 SCOPE AND ROLE OF OPERABLE UNIT	
5 SUMMARY OF SITE CHARACTERISTICS	
5.1 Regional Characteristics	5-1
5.1.1 Geology and Hydrogeology	5-1
5.1.2 Surface Hydrology	5-5
5.1.3 Rainfall and Prevailing Wind Conditions	5-5
5.2 Site Characteristics	5-5
5.2.1 Geology and Hydrogeology	5-6
5.2.2 Site History	5-14
5.3 Site Investigations	5-15
5.3.1 OCWD Groundwater Investigation	5-16
5.3.2 Perimeter Study Investigation	5-18
5.3.3 Phase I Investigation	5-18
5.3.4 Phase II Investigation	5-20
5.3.5 Potential for DNAPL	5-21
5.3.6 Vadose Zone Remediation	5-22
5.3.7 Preliminary Assessment of Building 307	5-27
5.3.8 Aquifer Testing and Air-Sparging Pilot Tests	5-27
5.3.9 Groundwater Remediation Pilot Testing	5-28
5.3.10 Perchlorate Monitoring	5-28

Section	Page	
5.3.11	Groundwater Monitoring	5-29
5.3.12	Radionuclide Evaluation	5-31
5.4	Routes of Exposure	5-31
5.5	Mass of TCE	5-32
<b>6</b>	<b>CURRENT AND POTENTIAL FUTURE LAND AND RESOURCE USES</b>	
6.1	Current Land Use	6-1
6.2	Future Land Use	6-2
6.3	Groundwater Uses	6-2
<b>7</b>	<b>SUMMARY OF BASELINE RISKS</b>	
7.1	Site 18 Risk Assessment	7-1
7.1.1	Chemicals of Potential Concern	7-1
7.1.2	Exposure Assessment	7-3
7.1.3	Toxicity Assessment	7-3
7.1.4	Risk Characterization	7-3
7.1.5	Results	7-5
	7.1.5.1 Noncarcinogenic Risks - Residential Exposure	7-5
	7.1.5.2 Carcinogenic Risks - Residential Exposure	7-5
	7.1.5.3 Agricultural Exposure Scenario	7-5
	7.1.5.4 Recreational Exposure Scenario	7-6
7.1.6	Summary of Site 18 Risks	7-7
7.2	Site 24 Risk Assessment	7-7
7.2.1	Chemicals of Potential Concern	7-7
7.2.2	Exposure Assessment	7-8
	7.2.2.1 Residential Scenario	7-9
	7.2.2.2 Industrial Scenario	7-9
	7.2.2.3 Recreational Scenario	7-9
	7.2.2.4 Excavation Worker Scenario	7-9
	7.2.2.5 Exposure Assumptions	7-9
	7.2.2.6 Calculation of Exposure-Point Concentration	7-9
7.2.3	Toxicity Assessment	7-10
7.2.4	Risk Characterization	7-10
7.2.5	Summary of Site Risks	7-10
<b>8</b>	<b>DESCRIPTION OF ALTERNATIVES</b>	
8.1	Site 18 Alternatives	8-3
8.1.1	Alternative 1: No Action	8-4
8.1.2	Alternative 2A: MCAS El Toro Project Without Well 18_ET1	8-4
	8.1.2.1 Shallow Groundwater Remediation	8-5
	8.1.2.2 Principal Aquifer Remediation	8-8
	8.1.2.3 Institutional Controls	8-8
	8.1.2.4 Groundwater Monitoring	8-9
8.1.3	Alternative 6A: MCAS El Toro Project and Partial IDP With Discharge to IDP Only	8-9
8.1.4	Alternative 7A: MCAS El Toro Shallow Groundwater Project	8-11

Section	Page	
8.1.4.1	Natural Attenuation	8-11
8.1.4.2	Monitoring	8-11
8.1.5	Alternative 7B: MCAS El Toro Project With Principal Aquifer Contingency Wells	8-12
8.1.6	Alternative 8: MCAS El Toro Shallow Groundwater Project and Modified Partial IDP With Discharge Only to IDP	8-12
8.1.7	Alternative 8A: MCAS El Toro Shallow Groundwater Project and CERCLA Principal Aquifer Wells with Treatment at IDP and Distribution for Nonpotable Use	8-13
8.1.7.1	Remediation of the Shallow Groundwater Unit	8-15
8.1.7.2	Remediation of the Principal Aquifer	8-15
8.1.7.3	Institutional Controls	8-15
8.1.7.4	Monitoring	8-15
8.1.7.5	Contingency Plan	8-15
8.2	Site 24 Alternatives	8-15
8.2.1	Alternative 1: No Action	8-17
8.2.2	Alternative 9: MCAS El Toro Project With SVE	8-17
8.2.2.1	Groundwater Remediation	8-18
8.2.2.2	Institutional Controls	8-18
8.2.2.3	Implementation of Institutional Controls	8-19
8.2.2.4	Monitoring	8-22
8.2.3	Alternative 10A: Irvine Desalter Project With SVE	8-22
8.2.4	Alternative 10B/10B: Modified Irvine Desalter Project With SVE	8-22
8.2.5	Alternative 11: Extraction/Treatment/Injection in the Shallow Groundwater Unit With SVE	8-24
8.3	Periodic Reviews	8-25
8.4	Operation and Maintenance Plan	8-25
9	SUMMARY OF THE COMPARATIVE ANALYSIS OF ALTERNATIVES	
9.1	Comparison of Site 18 Alternatives	9-2
9.1.1	Threshold Criteria	9-2
9.1.1.1	Overall Protection of Human Health and the Environment	9-2
9.1.1.2	Compliance With Applicable or Relevant and Appropriate Requirements	9-4
9.1.2	Primary Balancing Criteria	9-5
9.1.2.1	Long-Term Effectiveness and Permanence	9-5
9.1.2.2	Reduction of Toxicity, Mobility, or Volume	9-6
9.1.2.3	Short-Term Effectiveness	9-7
9.1.2.4	Implementability	9-7
9.1.2.5	Cost	9-8
9.1.3	Modifying Criteria	9-8
9.1.3.1	State Acceptance	9-8
9.1.3.2	Community Acceptance	9-8
9.2	Comparison of Site 24 Alternatives	9-9
9.2.1	Threshold Criteria	9-9
9.2.1.1	Overall Protection of Human Health and the Environment	9-9
9.2.1.2	Compliance With Applicable or Relevant and Appropriate Requirements	9-10

Section	Page
9.2.2 Primary Balancing Criteria	9-10
9.2.2.1 Long-Term Effectiveness and Permanence	9-10
9.2.2.2 Reduction of Toxicity, Mobility, or Volume	9-11
9.2.2.3 Short-Term Effectiveness	9-12
9.2.2.4 Implementability	9-12
9.2.2.5 Cost	9-12
9.2.3 Modifying Criteria	9-13
9.2.3.1 State Acceptance	9-13
9.2.3.2 Community Acceptance	9-13
<b>10 SELECTED REMEDY</b>	
10.1 Groundwater Remediation	10-1
10.2 CERCLA Components of the IDP	10-2
10.3 Non-CERCLA Components of the IDP	10-3
10.4 Settlement Agreement	10-7
10.5 Remedial Design of the Modified IDP	10-8
10.6 Contract for Shallow Groundwater Unit	10-9
10.7 Backup Remedy for Principal Aquifer	10-9
10.8 Institutional Controls	10-10
10.8.1 Off-Station Groundwater Plume	10-10
10.8.2 On-Station Groundwater Plume	10-10
10.9 Monitoring	10-11
10.10 Rationale for Remedy Selection	10-12
<b>11 STATUTORY DETERMINATIONS</b>	
11.1 Protection of Human Health and the Environment	11-1
11.2 Compliance with ARARs	11-1
11.2.1 Chemical-Specific ARARs	11-6
11.2.1.1 Water Quality Control Plan	11-13
11.2.1.2 Safe Drinking Water Act	11-13
11.2.1.3 RCRA Groundwater Protection Standards	11-13
11.2.1.4 Primary and Secondary MCLs	11-14
11.2.1.5 The DON'S Position Regarding SWRCB Resolutions 92-49 and 68-16	11-14
11.2.1.6 State of California's Position Regarding SWRCB Resolutions 68-16 and 92-49	11-14
11.2.1.7 Cleanup Levels	11-15
11.2.2 Location-Specific ARARs	11-15
11.2.3 Action-Specific ARARs	11-15
11.2.3.1 Federal	11-15
11.2.3.2 State	11-17
11.3 Cost-Effectiveness	11-18
11.4 Utilization of Permanent Solutions and Alternative Treatment Technologies (or Resource Recovery Technologies) to the Maximum Extent Practicable	11-19
11.5 Preference for Treatment as a Principal Element	11-19
<b>12 DOCUMENTATION OF SIGNIFICANT CHANGES</b>	

Section	Page
13 REFERENCES	

## RESPONSIVENESS SUMMARY

**ATTACHMENTS**

Attachment	
A ADMINISTRATIVE RECORD FOR SITES 18 AND 24	
B TRANSCRIPT FROM PUBLIC MEETING	
C WELL PERMITTING REGULATIONS, FORM, AND INFORMATION	
D MEMORANDUM OF AGREEMENT BETWEEN THE UNITED STATES DEPARTMENT OF THE NAVY AND THE CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL	
E COPY OF SETTLEMENT AGREEMENT AMONG THE SETTLING FEDERAL AGENCIES (SFA), ORANGE COUNTY WATER DISTRICT (OCWD), AND IRVINE RANCH WATER DISTRICT (IRWD) IN REGARD TO FORMER MARINE CORPS AIR STATION (MCAS) EL TORO GROUNDWATER REMEDIATION	

**FIGURES**

Figure	Page
1-1 Vicinity Map	1-2
1-2 IRP Sites 18 and 24	1-3
5-1 Groundwater Basin Boundaries	5-3
5-2 Groundwater Gradients in the Shallow Aquifer	5-7
5-3 Major Drainage and 100-Year Flood Plain	5-8
5-4 Aerial Photograph of Site 24 Physical Features (1980)	5-11
5-5 TCE Concentrations in the Shallow Groundwater Unit and Principal Aquifer Round 14, September 2001	5-9
5-6 TCE Concentrations in Groundwater Cross Section A-A"	5-13
5-7 Groundwater Gradient in the Principal Aquifer, September 2001	5-16
5-8 Former MCAS El Toro Conceptual Hydrogeologic Model	5-17
5-9 Total Dissolved Solids Concentrations in Shallow Groundwater Unit, 1992 to 1994	5-23
5-10 Total Dissolved Solids Concentrations in Principal Aquifer, 1992 to 1994	5-24
5-11 TCE Concentrations in the Shallow Groundwater Unit, September 2001	5-25
5-12 Potential Routes of Exposure-Sites 18 and 24	5-33
6-1 Active Irrigation Water Wells in the Vicinity of Former MCAS El Toro	6-3
8-1 Shallow Groundwater Unit Extraction/Injection Wells	8-6
8-2 Principal Aquifer Extraction/Injection Wells	8-7
8-3 Site 18 Groundwater Monitoring Network	8-10
8-4 Alternative 8A Principal Aquifer Well Configuration	8-16
8-5 Site 24 Area Requiring Institutional Controls	8-20

Figure		Page
8-6	Site 24 Conceptual Groundwater Monitoring Network	8-23
10-1	Alternative 8A Principal Aquifer Well Configuration	10-4
10-2	Alternative 10B' Shallow Groundwater Unit Well Configuration	10-5
10-3	Alternative 8A/10B' Conceptual Design	10-6
10-4	Area Requiring Institutional Controls	10-13
10-5	Groundwater Monitoring Frequency Decision Flowchart	10-14

## TABLES

2-1	Summary of Environmental Activities at Former MCAS El Toro	2-6
3-1	Summary of Former MCAS El Toro Updates, Fact Sheets, and Proposed Plans	3-3
5-1	Potential Sources of VOC Contamination at Site 24	5-15
5-2	Groups of VOCs Reported in Groundwater at Sites 18 and 24	5-19
5-3	Vadose Zone Cleanup Goals	5-26
5-4	Mass of VOCs Removed During Vadose Zone Remediation at Site 24	5-26
5-5	Perchlorate Sampling Results for Wells at Sites 18 and 24	5-30
7-1	Chemicals of Potential Concern in Groundwater	7-2
7-2	Potential Exposure Routes and Pathways at Site 18	7-4
7-3	Chemicals of Potential Concern in Soil and Groundwater at Site 24	7-8
7-4	Summary of Risk Assessment Results at Site 24	7-11
8-1	Cleanup Standards for Chemicals of Concern in Groundwater	8-2
8-2	Background Irrigation Well Pumping	8-5
9-1	Comparative Analysis of Remedial Alternatives	9-3
9-2	Summary of Modeling Results for Site 18 Alternatives	9-4
9-3	Plume Area in Principal Aquifer After 20 Years	9-6
9-4	Summary of Modeling Results for Site 24 Alternatives	9-9
9-5	Length and Area of TCE Plume Exceeding MCL in Shallow Groundwater Unit	9-11
10-1	Estimated Costs for Remediation of Groundwater at Sites 18 and 24	10-15
11-1	Chemical-Specific ARARs for Selected Remedy	11-2
11-2	Location-Specific ARARs for Selected Remedy	11-7
11-3	Action-Specific ARARs for Selected Remedy	11-8

## ACRONYMS/ABBREVIATIONS

---

AFB	Air Force Base
AOC	area of concern
ARAR	applicable or relevant and appropriate requirement
BACT	best available control technology
BCT	BRAC Cleanup Team
bgs	below ground surface
BHC	benzene hexachloride
BNI	Bechtel National, Inc.
BRAC	Base Realignment and Closure
Cal. Civ. Code	California Civil Code
Cal. Code Regs.	California Code of Regulations
Cal/EPA Cal. Health & Safety Code	California Environmental Protection Agency California Health and Safety Code
Cal. Water Code	California Water Code
CAO	Cleanup and Abatement Order
CDM	CDM Federal Programs Corporation
CDMG	California Division of Mines and Geology
CDWR	California Department of Water Resources
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
C.F.R.	Code of Federal Regulations
COC	chemical of concern
COPC	chemical of potential concern
DCA	dichloroethane
DCE	dichloroethene
DDT	dichlorodiphenyltrichloroethane
DHS	Department of Health Services
DNAPL	dense nonaqueous-phase liquid
DoD	Department of Defense
DOJ	Department of Justice
DON	Department of the Navy
DOT	Department of Transportation
DQO	data quality objective
DTSC	(Cal/EPA) Department of Toxic Substances Control
Exec. Order No.	Executive Order Number
Fed. Reg.	Federal Regulation
FFA	Federal Facilities Agreement
FOSET	finding of suitability for early transfer
FOST	finding of suitability to transfer
Freon12	dichlorodifluoromethane
Freon 113	1,1,2-trichloro-1,2,2-trifluoroethane
FS	feasibility study
GAC	granular activated carbon
gpd	gallons per day
gpm	gallons per minute
HHRA	human-health risk assessment
HI	hazard index
HQ	hazard quotient

---

IAFS	interim-action feasibility study
IAS	initial assessment study
IDP	Irvine Desalter Project
IRP	Installation Restoration Program
IRWD	Irvine Ranch Water District
JEG	Jacobs Engineering Group Inc.
JMM	James M. Montgomery Engineers, Inc.
lb	pound
LLNL	Lawrence Livermore National Laboratory
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
MCAS	Marine Corps Air Station
MCL	maximum contaminant level
MCLG	maximum contaminant level goal
mg/L	milligrams per liter
MICR	maximum individual cancer risk
MPE	multiphase extraction
MSL	mean sea level
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
OCHCA	Orange County Health Care Agency
OCWD	Orange County Water District
OHM	OHM Remediation Services Corp.
O&M	operation and maintenance
OU	operable unit
PAL	(California) provisional action level
PCA	tetrachloroethane
PCB	polychlorinated biphenyl
PCE	tetrachloroethene (perchloroethene)
ppm	parts per million
PRG	preliminary remediation goal
PSI	perimeter study investigation
RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act
RFA	RCRA facility assessment
RI	remedial investigation
RME	reasonable maximum exposure
ROD	record of decision
RWQCB	(California) Regional Water Quality Control Board
§	section
SARA	Superfund Amendments and Reauthorization Act of 1986
SCAQMD	South Coast Air Quality Management District
SDWA	Safe Drinking Water Act
SGU	shallow groundwater unit
SIP	site inspection plan
SIPOA	site inspection plan of action
STLC	soluble threshold limit concentration

SVE	soil vapor extraction
SVOC	semivolatile organic compound
SWDIV	Southwest Division Naval Facilities Engineering Command
SWMU	solid waste management unit
SWRCB	(California) State Water Resources Control Board
T-BACT	best available control technology for toxics
TCA	trichloroethane
TCE	trichloroethene
TCLP	toxicity characteristic leaching procedure
TDS	total dissolved solids
tit.	title
TPH	total petroleum hydrocarbons
TSD	treatment, storage, and disposal
TTLC	total threshold limit concentration
UCL	upper confidence limit
U.S.C.	United States Code
U.S. EPA	United States Environmental Protection Agency
VGAC	vapor-phase granular activated carbon
VOA	volatile organic analysis
VOC	volatile organic compound
WQCP	water quality control plan
WQO	water quality objective

# **DECISION SUMMARY**

## Section 1

# **SITE NAME, LOCATION, AND DESCRIPTION**

---

This Record of Decision (ROD) presents the selected remedial action for groundwater at Installation Restoration Program (IRP) Sites 18 and 24 at Former Marine Corps Air Station (MCAS) El Toro in Orange County, California. The National Superfund Database Identification Number for this facility is CA6170023208.

The document was developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986 and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The decision for these sites is based on information contained in the administrative record. The site-specific administrative record index for Sites 18 and 24 is found in Attachment A.

## **1.1 SITE NAME**

This decision document addresses groundwater at two related sites at Former MCAS El Toro: Operable Unit (OU)-1, IRP Site 18, Regional Volatile Organic Compound (VOC) Groundwater Plume; and OU-2A, IRP Site 24, VOC Source Area. Groundwater is the only medium affected at Site 18. Contaminated soil at Site 24 was addressed previously in an interim ROD (SWDTV 1997a). The final remedy for soil at Site 24 will be addressed in a separate ROD or ROD amendment.

This ROD addresses groundwater at Sites 18 and 24 together because VOCs in the principal aquifer at Site 18 and in the shallow groundwater unit at Site 24 originated in the vadose zone at Site 24. Investigation results demonstrate that VOCs have migrated from their source at the Site 24 surface or subsurface to the shallow groundwater unit below. Downgradient of Site 24, the VOCs have migrated into the principal aquifer to form the regional groundwater plume of Site 18.

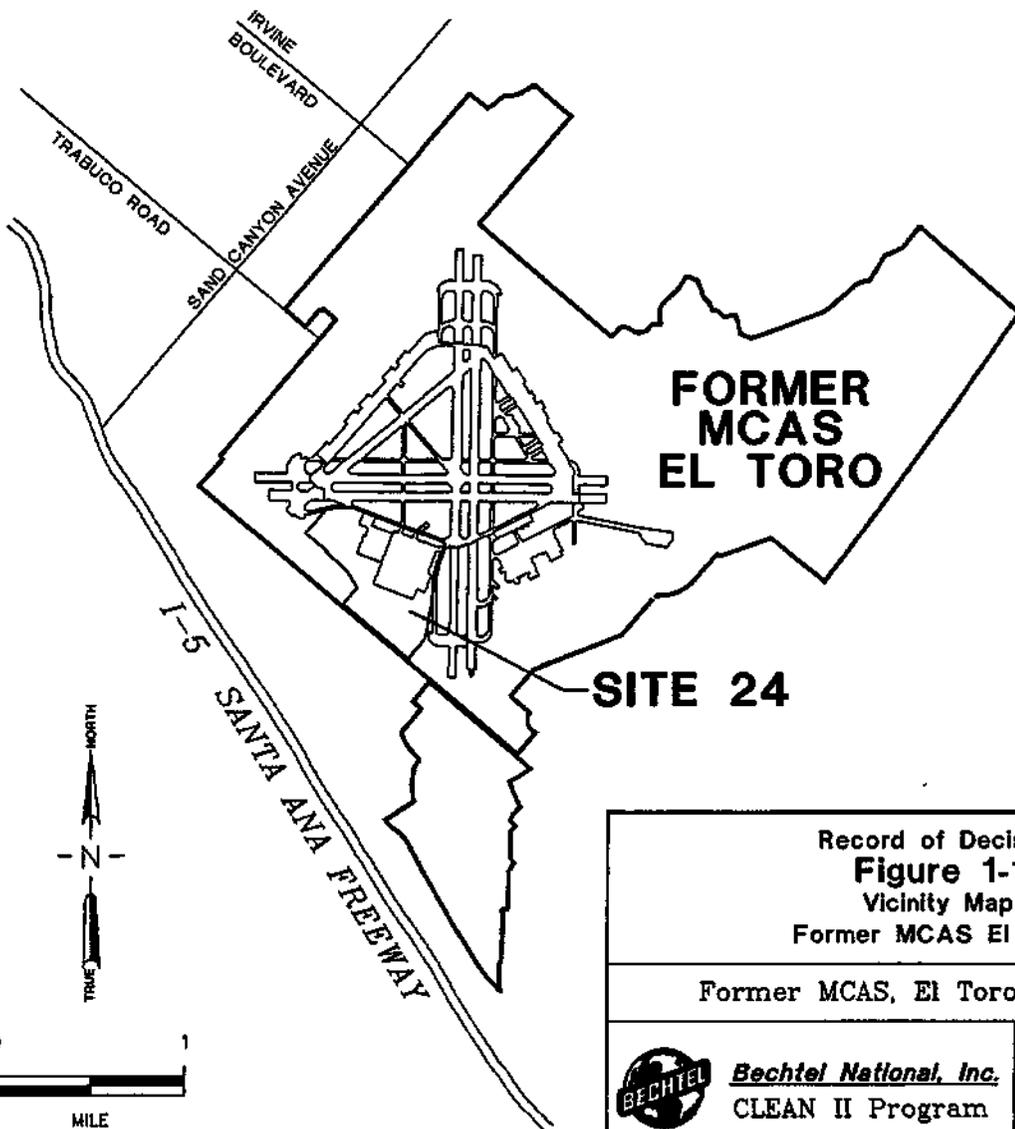
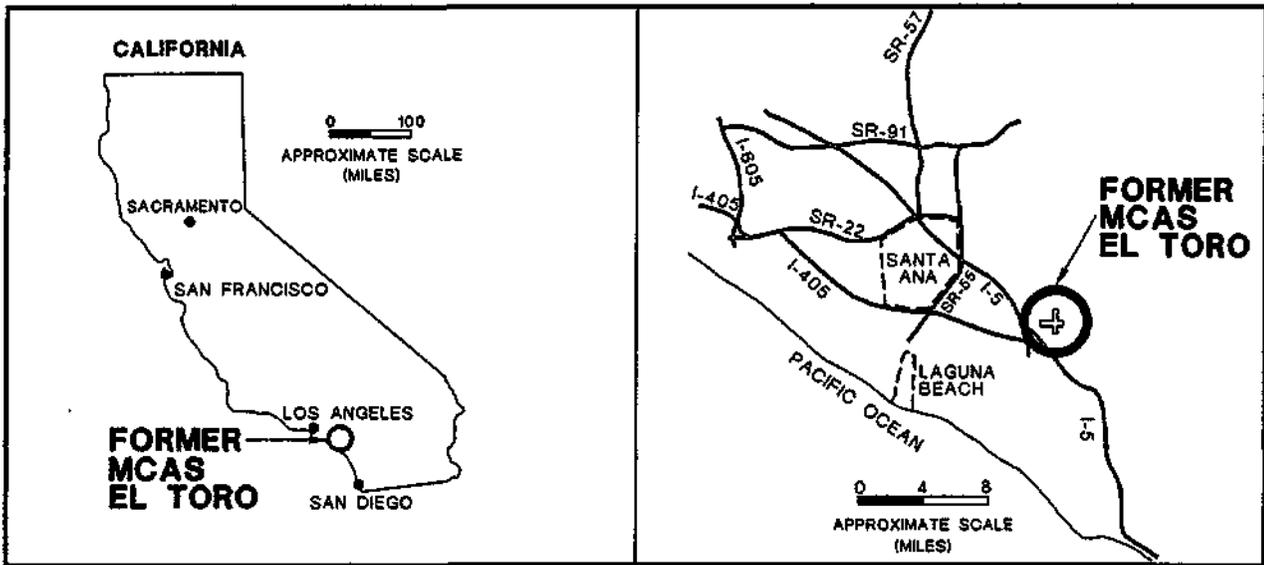
## **1.2 SITE LOCATION**

Former MCAS El Toro lies in a semiurban agricultural area of southern California, approximately 8 miles southeast of Santa Ana and 12 miles northeast of the city of Laguna Beach (Figure 1-1). Land northwest of the Station is used for agriculture, whereas the land to the south and northeast is used mainly for commercial, light industrial, and residential purposes. Residential areas in the vicinity of Former MCAS El Toro include the cities of Lake Forest, Irvine, and Laguna Hills.

Site 24 is in the southwest quadrant of the Station (Figure 1-2). The shallow groundwater plume associated with Site 24 originates at this site and extends off-Station approximately to Sand Canyon Avenue (Figure 1-2). Site 18, the regional VOC groundwater plume in the principal aquifer, is located off-Station and extends off-Station from the westernmost boundary of Former MCAS El Toro approximately 3 miles to the west beneath the city of Irvine (Figure 1-2).

## **1.3 LEAD AND SUPPORT AGENCIES**

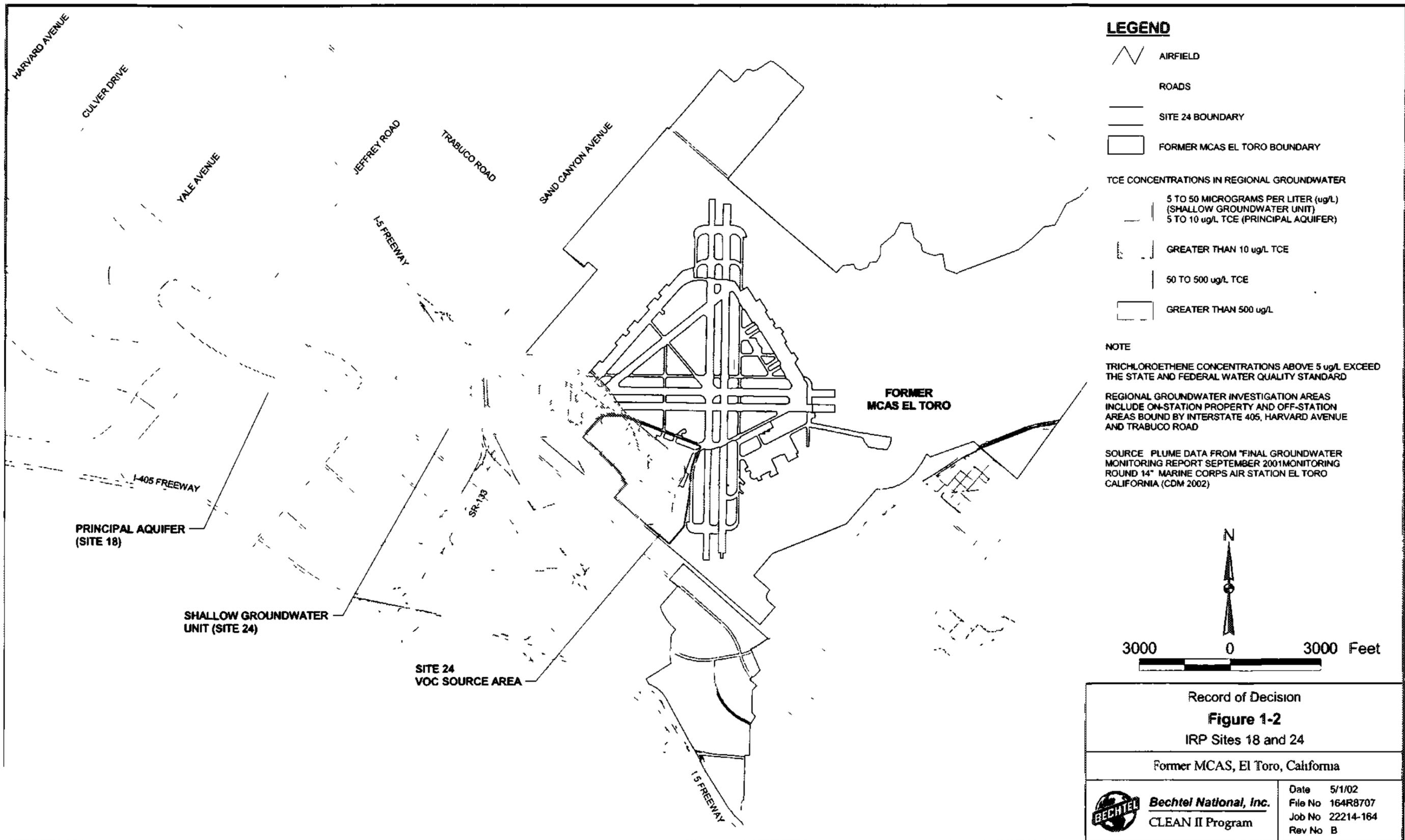
Former MCAS El Toro is a federal facility and is on the National Priorities List (NPL) of the Superfund Program. The lead agency for remedial investigation and remedial action at this facility is the Department of the Navy (DON). Regulatory agencies providing support and oversight include the United States Environmental Protection Agency (U.S. EPA), the California Environmental Protection Agency (Cal/EPA) Department of Toxic Substances Control (DTSC), and the Santa Ana Regional Water Quality Control Board (RWQCB). The DON, U.S. EPA, DTSC, and RWQCB entered into a federal facilities agreement (FFA) for Former MCAS El



Record of Decision  
**Figure 1-1**  
 Vicinity Map  
 Former MCAS El Toro

Former MCAS, El Toro, California

	<b>Bechtel National, Inc.</b> CLEAN II Program	Date: 4/17/02 File No: 164R7923 Job No: 22214-164 Rev No: B
---	---	--



Toro in 1990.

## **1.4 SITE DESCRIPTION**

Former MCAS El Toro was commissioned in 1943 as a Marine Corps pilot fleet operation training facility. In 1950, the Station was selected for development as a master jet station and permanent center for Marine Corps aviation on the west coast. The Station mission has involved the operation and maintenance of military aircraft and ground-support equipment. Historical activities on the Station included aircraft maintenance and repair. Much of the industrial activity supporting this mission took place in the southwest quadrant of the Station, where Site 24 is located.

To support the Station's mission, facility operations were expanded over the years to include runways, aircraft maintenance and training facilities, housing, shopping facilities, and other support facilities. Former MCAS El Toro occupies 4,738 acres of land, including 580 acres that are leased for commercial farming (DON 1999). The adjacent/surrounding land uses around Former MCAS El Toro include residential, commercial, industrial, and recreational.

Former MCAS El Toro ceased operations on 02 July 1999. The Marine Corps' mission at the Station was incorporated primarily into MCAS Miramar operations in San Diego, California.

## Section 2

# SITE HISTORY AND ENFORCEMENT ACTIVITIES

Past operations and practices at Former MCAS El Toro have contributed to soil and groundwater VOC contamination. Industrial activities at Site 24, such as dust suppression with waste liquids, paint stripping, degreasing, vehicle and aircraft washing, and waste disposal practices, involved the use of solvents containing VOCs such as trichloroethene (TCE) and tetrachloroethene (PCE). Waste solvents may have reached the surface or subsurface through leakage, runoff, storm drains, or direct application to the soil and are believed to be the source of VOCs in the regional groundwater. The precise origin, nature, and use of TCE released at the site and the circumstances and quantities of individual releases are not documented. TCE usage at Former MCAS El Toro is believed to have been discontinued in the mid-1970s.

Environmental remediation activities at Former MCAS El Toro are performed under the IRP. The IRP was developed in 1980 by the Department of Defense (DoD) to comply with federal guidelines to manage and control contamination from past hazardous waste disposal actions (DON 1997).

## 2.1 INITIAL INVESTIGATIONS

The first indication of contamination at the Station occurred during routine water quality monitoring in 1985, when the Orange County Water District (OCWD) discovered TCE in groundwater at an irrigation well approximately 3,000 feet downgradient of Former MCAS EL Toro. In 1985, the DON began to work on an initial assessment study (IAS) to locate potentially contaminated sites on the Station. This work was conducted for the Naval Facilities Engineering Command under the Navy Assessment and Control of Installation Pollutants Program, which was the DON version of the DoD IRP at that time. The IAS report identified 17 sites as potential sources of contamination (Brown and Caldwell 1986). The report also identified potentially contaminated sites based on the results of record searches and employee interviews and recommended sampling locations and analytical parameters to assess the suspected contamination.

In 1987, the Marine Corps contracted for a review of the IAS to produce a site inspection plan of action (SIPOA) (JMM 1988). The SIPOA, released in August 1988, recommended 19 sites for study and amended the site sampling plans proposed in the IAS report. This SIPOA report was the basis for a sampling and analysis plan for the remedial investigation (RI)/feasibility study (FS) sites.

In July 1987, while the SIPOA study was under way, RWQCB Santa Ana Region issued a Cleanup and Abatement Order (CAO) to the Marine Corps requiring the Station to initiate a perimeter groundwater VOC investigation and submit a draft report. Because the investigation revealed VOCs in the shallow groundwater unit near the Station boundary, an interim groundwater pump and treatment system was installed at this boundary. Between June 1989 and September 1993, the system pumped and treated groundwater from three extraction wells at approximately 30 gallons per minute (gpm). Over the life of the system, reported concentrations of TCE in the influent were about 10 to 160 micrograms per liter ( $\mu\text{g/L}$ ) and reported concentrations of PCE were 25 to 100  $\mu\text{g/L}$ . The extracted groundwater was treated with a granular activated carbon (GAC) treatment system and used to irrigate the Station golf course. On 13 April 1993, RWQCB rescinded the CAO, because the required actions were complete and because the DON had entered into an FFA to investigate and remediate environmental impacts associated with past and present activities at Former MCAS El Toro. In September 1993, the pump and treatment system was shut down (JEG 1996a).

## 2.2 PHASE I AND II REMEDIAL INVESTIGATIONS

In June 1988, U.S. EPA recommended adding Former MCAS El Toro to the NPL of the Superfund Program because of VOC contamination at the Station boundary and in the agricultural wells west of the Station. Former MCAS El Toro was added to the NPL on 15 February 1990. In October 1990, the Marine Corps/DON signed an FFA with U.S. EPA Region 9, California Department of Health Services (now referred to as the DTSC), and RWQCB Santa Ana Region (FFA 1990). The FFA is a cooperative agreement that:

- assures that environmental impacts are investigated and appropriate response actions are taken to protect human health and the environment;
- establishes a procedural framework and schedule for developing, implementing, and monitoring appropriate response actions;
- facilitates cooperation, exchange of information, and participation of the parties; and
- assures adequate assessment, prompt notification, and coordination between federal and state agencies.

The Base Realignment and Closure (BRAC) Cleanup Team (BCT) is responsible for implementing the FFA. The BCT consists of representatives from the DON Southwest Division Naval Facilities Engineering Command (SWDTV), U.S. EPA, DTSC, and RWQCB Santa Ana Region. The team was established to manage and coordinate environmental restoration and compliance programs related to the closure and disposal of Former MCAS El Toro by July 1999.

The vision of the BCT is "to expedite restoration and reuse of Former MCAS El Toro." The BCT's mission is "fast-track remediation of Former MCAS El Toro, to promote reuse and protect human health and the environment, by working cooperatively with the BCT, the community, and the stakeholders."

In December 1989, the DON began preparing a Phase I RI work plan and associated documents for Former MCAS El Toro. The DON reviewed the available reports and other documents pertinent to past disposal practices and concluded that 22 sites would be investigated (JEG 1993a). These sites were grouped into three OUs. OU-1 consisted of the regional VOC groundwater plume investigation and included groundwater at Site 18 and throughout MCAS El Toro, including the area later defined as Site 24. OU-2 originally included four landfill sites (Sites 2, 3, 5, and 17) (OU-2A Site 24 was added later) and Site 10, the petroleum disposal area (this site was later moved to OU-3). The remaining 16 sites, grouped together as OU-3, were potential sources for a variety of contaminants. The principal objectives of the Phase I RI were to evaluate the source(s) of contamination in regional groundwater west of the Station and to determine whether contamination existed and, if so, whether contamination was affecting the environment at sites in OU-2 and OU-3.

The results of the Phase I RI were documented in a draft Technical Memorandum issued in 1993 (JEG 1993a), a draft RI report for OU-1 issued in July 1994 (JEG 1994a), a final technical memorandum on soil gas issued in October 1994 (JEG 1994b), and a draft final RI/FS report for OU-1 issued in August 1996 (JEG 1996a-h). A variety of contaminants in the groundwater, soil, surface water, and sediment at Former MCAS El Toro were identified during the Phase I RI. Contaminants in the soil and sediment consisted primarily of low concentrations of semivolatile organic compounds (SVOCs), petroleum hydrocarbons, pesticides, herbicides, and polychlorinated biphenyls (PCBs) (JEG 1993 a). During the Phase I RI, the source of contamination for regional groundwater was found to be in the southwest quadrant of the Station, but no specific source was

identified. (It was later determined during the Phase II RI that Site 24 is the source of the regional groundwater contamination.) The sampling events yielded sufficient information to warrant a preliminary risk assessment of both groundwater and soil contamination. The OU-1 risk assessment showed that the risk drivers in groundwater at OU-1 were VOCs and metals. However, further evaluation showed that metals concentrations were consistent with background. The results of the Phase I RI provided the primary data for the Phase II RI/FS and allowed further investigations of the VOC plume and source area to focus on VOCs, which were demonstrated to be the chemicals of concern at these areas.

In March 1993, Former MCAS El Toro was placed on the BRAC HI list of military facilities considered for closure. Under the terms of the FFA, Station closure would not affect the DON's obligation to conduct the RI/FS and comply with other FFA requirements (FFA 1990, Section 37, Base Closure).

Concurrently with the Phase I RI, the DON conducted a Resource Conservation and Recovery Act (RCRA) facilities assessment (RFA) at Former MCAS El Toro to evaluate whether an additional 140 sites at the Station required further investigation under the Phase II RI/FS. The final RFA report was submitted in July 1993 (JEG 1993b). Based on analytical results, 25 solid waste management units/areas of concern (AOCs) were recommended for further action. Site 23 (Wastewater Treatment Plant Sewer Lines) was evaluated in the RFA and recommended for no further action.

Interviews with active and retired personnel from the Fuel Operations Division and Facility Management Department (later known as the Installations Department) were held in July 1994 at Former MCAS El Toro (JEG 1994c). The meeting was conducted to confirm and supplement information from past interviews and field investigations (to obtain a better understanding of current and historical operations at Former MCAS El Toro) and to identify additional areas of potential environmental concern. Those interviewed had knowledge of operations and procedures for storage and disposal of hazardous materials and waste. The interview panel consisted of regulatory agency personnel, DON and Former MCAS El Toro personnel, and contractor personnel.

Issued in July 1995, the final Work Plan for the Phase II RI/FS presented an approach to conduct the Phase II RI at 24 sites, including the newly identified Site 24 (VOC Source Area) and Site 25 (Major Drainages) (BNI 1995). For Site 24, the Phase II Work Plan objectives were to determine whether VOC-contaminated soil at Site 24 was an active source of the regional VOC groundwater plume, assess potential risks to human health and the environment, and characterize the site to evaluate response actions. The Phase II RI, conducted in 1995 and 1996, demonstrated that soil at Site 24 was the source of the regional VOC contamination and that human-health risk from exposure to the groundwater exceeded U.S. EPA guidelines (BNI 1997a).

During this period, the DON evaluated background concentrations of metals in soils and reference levels for pesticides and herbicides in soils (BNI 1996a). This enabled site-specific analytical results of soil sampling to be compared with background and reference levels during the RI to identify potential releases.

## **2.3 FEASIBILITY STUDIES**

Remedial action objectives for Sites 18 and 24 were developed during the RI. The FS for Site 18 (JEG 1996b) and FSs for soil and groundwater at Site 24 (BNI 1997b, c) identified and screened numerous technologies to develop remedial alternatives capable of achieving the remedial action objectives. Groundwater extraction and treatment was the technology selected for both sites to permanently remove VOCs from the aquifer. The groundwater alternatives differed in the well locations based on the treatment and discharge options. The Site 24 FS for soil presented soil vapor extraction (SVE) as an effective technology to remove VOCs from the soil,

thus minimizing further groundwater contamination.

## **2.4 PILOT TESTING**

Pilot-test data from small-scale groundwater extraction (BNI 1997b) and SVE tests (BNI 1997d) were used to support the FS evaluations. The pilot tests collected site-specific information to assess the effectiveness of the most promising remediation technologies. Data from the SVE pilot testing were subsequently used to support the SVE engineering design (BNI 1998a). Investigations performed during groundwater pilot testing helped demonstrate the migration pathway of VOCs from the shallow groundwater unit to the principal aquifer. The pilot-test data will also help support remedial design activities.

## **2.5 RECENT EVALUATIONS AND ASSESSMENTS**

Subsequent to the Phase IE RI, three groundwater evaluations were performed: an evaluation of metals (BNI 1999a), an evaluation of perchlorate (BNI 1999b, Earth Tech 2001a), and an evaluation of radionuclides (Earth Tech 2000b). The purpose of these evaluations was to determine whether the reported concentrations of metals, perchlorate, and radionuclides in groundwater at Former MCAS El Toro reflect ambient conditions or are the result of historical Station activities.

The evaluation of metals showed that, even though the reported concentrations of some metals at various sites at Former MCAS El Toro exceed maximum contaminant levels (MCLs), such conditions reflect ambient basewide groundwater quality conditions and are not the result of site-related contamination (BNI 1999b). The evaluation of perchlorate showed that the reported concentrations of perchlorate exceeded the California provisional action level (PAL) of 18 µg/L at Sites 1, 18, and 19 and the federal PAL of 32 µg/L at Site 1. (The California PAL of 18 µg/L was established in 1997. As of January 2002, the California PAL for perchlorate is 4 µg/L.) Site 1 is a former explosive ordnance disposal range. A site-specific perchlorate investigation at this site showed that perchlorate was present above state and federal PALs at only one well, located in approximately the center of the site. Perchlorate was also present in 4 of 42 soil samples. However, none of the reported concentrations exceeded residential or industrial preliminary remediation goals (Earth Tech 2001a). The evaluation of radionuclides confirmed that the radionuclides in groundwater at Former MCAS El Toro are naturally occurring and are not due to historical activities conducted at the Station (Earth Tech 2001b).

From 1998 through 1999, the DON conducted a historical radiological assessment of Former MCAS El Toro as part of the base closure process (Roy F. Weston 2000). A historical radiological assessment report summarizing the results of the assessment was issued in May 2000. The report recommended that a radiological survey be conducted at selected sites and buildings at Former MCAS EL Toro. The survey was completed in November 2001. Results were summarized in a draft Radiological Release Report (Roy F. Weston 2002) that is expected to be released in spring 2002 and finalized in fall 2002.

In September 2001, the DON conducted additional sampling for VOCs at Building 307, a former dry cleaning facility in the southwest portion of Site 24. Results of the sampling did not identify a significant release at this location (Earth Tech 2001c).

Table 2-1 summarizes the enforcement activities and environmental investigations at Former MCAS El Toro.

## 2.6 GROUNDWATER MONITORING

Delineation of the nature and extent of groundwater contamination at Former MCAS El Toro was originally based on two rounds (Round 1 and 2) of groundwater data collected as part of the Phase I RI (September 1992 to February 1993 and June 1993 to December 1993, respectively), as well as off-Station data collected by OCWD. These early groundwater samples were analyzed for a large list of analytes, including VOCs, SVOCs, pesticides/PCBs, herbicides, total fuel hydrocarbons, total recoverable petroleum hydrocarbons, metals, cyanide, general chemistry parameters, gross alpha/gross beta, and dioxins/furans (JEG 1995).

**Table 2-1**  
**Summary of Environmental Activities at Former MCAS El Toro**

<b>Date</b>	<b>Investigation/Activity</b>	<b>Objective</b>	<b>Summary of Findings</b>
1985	IAS	Locate potentially contaminated sites at Former MCAS El Toro using record searches and employee interviews.	Identified 17 sites as potential sources of contamination. Recommended sampling locations and sample analytical parameters to confirm the suspected contamination at the 17 sites.
1986	OCWD groundwater investigation	Investigate source of TCE found in agricultural well west of Former MCAS El Toro.	After installing a series of monitoring wells and soil vapor probes and reviewing independent investigations, OCWD concluded that Former MCAS El Toro was the source of TCE contamination in groundwater downgradient of the Station.
1987	RWQCB issues CAO 87-97	Required Former MCAS El Toro to perform the following actions: submit a plan of action, submit progress reports, submit an interim report containing findings of field investigations, and submit a supplementary report on an off-site groundwater investigation.	In response to the CAO, Former MCAS El Toro performed the actions specified in the order. As a result of the investigations, on 16 February 1990 the U.S. EPA listed Former MCAS El Toro on the NPL. In October 1990, the DON signed an FFA committing to investigate and remediate environmental impacts associated with past and present activities. CAO 87-97 was rescinded by Order No. 93-36, Rescission of Cleanup and Abatement Order No. 87-97, in April 1993.
1988	Site inspection plan of action	Review IAS findings.	Recommended 19 sites for investigation and amended the site sampling plans proposed in the IAS report. This included one site (Site 18) intended to address the off-Station contaminant plume of VOCs.

(table continues)

Table 2-1 (continued)

Date	Investigation/Activity	Objective	Summary of Findings
1988	Perimeter study investigation	Address the RWQCB Santa Ana Region cleanup and abatement order requiring investigation of the source of regional VOC groundwater contamination.	Reported VOCs in shallow groundwater near the southwestern boundary of the Station.
1989-1993	Interim pump-and-treat system	Pump and treat VOC-contaminated groundwater from three extraction wells near the Station boundary.	Groundwater was extracted at a combined rate of 30 gpm from three wells and treated with granular activated carbon. Extracted groundwater had reported concentrations of TCE and PCE from 10 to 160 and 25 to 100 µg/L, respectively.
1989	Phase I RI planning	Formulate Work Plan, Field Sampling Plan, and associated documents to direct the Phase I fieldwork.	The DON concluded that 22 sites would be investigated and grouped into three OUs.
1990	Superfund NPL	Identify sites with imminent risks to the public.	Former MCAS El Toro was added to the NPL for the Superfund Program due to VOC contamination at the Station boundary and in agricultural wells to the west.
1993	Base Closure and Realignment Act	Identify sites for closure.	Former MCAS El Toro was placed on the BRAC III list. Under the terms of the FFA, Station closure would not affect the DON's obligation to conduct the RI/FS and comply with the other FFA requirements.
1993	Phase I RI	Make an initial determination of the existence and risks of contamination at sites in OU-1, OU-2, and OU-3.	The draft Technical Memorandum and draft OU-1 RI Reports document the results of the Phase I RI. Various contaminants in the groundwater, soil, surface water, and sediment were reported at Former MCAS El Toro. Soil and sediment contaminants were primarily SVOCs, petroleum hydrocarbons, pesticides, herbicides, and PCBs. The Phase I RI concluded that the source of regional groundwater contamination was the southwest quadrant of the Station, but it did not indicate specific sources. A preliminary risk assessment was conducted for contaminants in both groundwater and soil at the sites. Sites 24 and 25 were added during the Phase I RI.

(table continues)

Table 2-1 (continued)

Date	Investigation/Activity	Objective	Summary of Findings
1993	RCRA facility assessment	Evaluate whether an additional 140 sites at Former MCAS El Toro would require further investigation under the Phase II RI/FS program.	Based on the RCRA facility assessment results, 25 SWMUs/AOCs were recommended for further action. This action included additional subsurface investigation and other activities such as inspection of underground storage tanks, repair of cracks in concrete-paved areas, and excavation of contaminated soil. Two SWMUs/AOCs were recommended for further action under the Phase II RI/FS program. Site 23 was investigated and recommended for no further action.
1994	Phase I soil gas survey for Sites 24 and 25	Identify potential VOC sources at Sites 24 and 25.	The soil gas survey investigated soil conditions (generally 12 to 20 feet below ground surface). Elevated concentrations of VOCs were reported beneath the aircraft maintenance hangars (Buildings 296 and 297). TCE was the compound most frequently reported; others included PCE, 1,1-dichloroethene, Freon 113, carbon tetrachloride, and chloroform.
1994	Interviews with active and retired personnel	Supplement and confirm information from past investigations and interviews, better understand current and past operations, and identify further areas of potential environmental concern.	The interview panel provided information about types of operations that occurred on-Station and types of chemicals used in these operations.
1995	Development of final Work Plan for Phase II RI/FS and associated documents	Present an approach to conduct the Phase II RI at 24 sites at Former MCAS El Toro using the U.S. EPA DQO process. Identify background concentrations of metals in soils and establish a process to collect sufficient information to support risk management decisions.	Established DQO process for conducting RI/FS. Sites 24 and 25 were established for investigation in Phase II.
1996	Evaluation of background concentrations and reference levels in soil	Calculate background concentrations of metals in soil and reference levels of herbicides and pesticides in soil at Former MCAS El Toro.	Background concentrations of metals and reference levels of herbicides were developed for comparison with site-specific analytical results in the RI to identify potential releases.

(table continues)

Table 2-1 (continued)

Date	Investigation/Activity	Objective	Summary of Findings
1996	Interim-action RI/FS for groundwater contamination designated as OU-1	Document results of Phase I RI at OU-1 and evaluate potential actions to reduce the impact of the VOC-contaminated groundwater.	A range of alternatives for groundwater remediation was prepared and evaluated. The least costly alternatives used the IDP to treat extracted groundwater. These alternatives also removed the largest mass of TCE from groundwater. The preferred alternative is presented in this ROD.
1997	RI for Site 24 VOC contamination	Determine the nature and extent of contamination at Site 24 and evaluate the human-health risk from this contamination.	Soil and groundwater were investigated. The RI linked the groundwater hot spot identified during the Phase II RI with high concentrations of TCE in the vadose zone beneath Buildings 296 and 297.
1997	FS for vadose zone contamination at Site 24	Evaluate potential actions to remediate the VOC-contaminated soils at Site 24.	SVE is presented as the presumptive remedy most appropriate for remediation of contaminated soils.
1997	Interim ROD for vadose zone contamination at Site 24	Select interim remedial action for Site 24 vadose zone.	SVE was selected for remediation of contaminated soil at Site 24.
1997	FS for groundwater contamination at Site 24	Evaluate potential actions to remediate VOC-contaminated groundwater at Site 24.	Five alternatives for remediation of shallow groundwater at Site 24 were evaluated. The most effective alternatives used pump and treat from the groundwater hot spot and extraction and discharge to the IDP. Groundwater modeling included OU-1 and confirmed the effectiveness of natural attenuation in the principal aquifer.
1996-1998	SVE pilot testing	Evaluate effectiveness of SVE at Site 24.	SVE was shown to be effective at Site 24. Air flow rates were highly variable because of site stratigraphy. Over 800 pounds of TCE was removed.

(table continues)

Table 2-1 (continued)

Date	Investigation/Activity	Objective	Summary of Findings
1998	Groundwater remediation pilot test at Site 24	Collect additional data to assist in the design of a remedial alternative capable of minimizing VOC migration within the shallow groundwater unit and from the shallow groundwater unit to the principal aquifer.	The pilot test confirmed that the vertical interval of TCE-contaminated groundwater is limited to the top 50 to 60 feet of the shallow groundwater unit within the pilot test area. New data showed that the TCE hot spot (TCE concentrations greater than 500 µg/L) extends approximately 1,300 feet farther downgradient than was previously known and delineated the migration pathway from the shallow groundwater unit to the principal aquifer. Pilot test data also showed that vacuum-enhanced groundwater extraction increased the well yield, extraction well capture zone, and VOC mass removal in most wells.
1998	Evaluation of metals in groundwater at Former MCAS El Toro	Evaluate whether the reported concentrations of metals in groundwater at Former MCAS El Toro reflect ambient conditions or are the result of past Station operations	Although the concentrations of some metals at various sites at Former MCAS El Toro exceed MCLs, such conditions are characteristic of basewide groundwater quality. Conditions are not indicative of site-related contamination.
1998-1999	Evaluation of perchlorate in groundwater	Evaluate whether the reported concentrations of perchlorate in groundwater at Former MCAS El Toro reflect ambient conditions or are the result of past station operations.	Concentrations of perchlorate exceeded both state or federal action levels at only one site, Site 1. Soil and groundwater at Site 1 were evaluated further. Perchlorate in groundwater exceeded federal action levels at one well located in the center of one site. Perchlorate in soil does not exceed residential or industrial PRGs.
1999	Evaluate effectiveness of final alternative for Site 18	Optimize conceptual design of Site 18 alternative.	IRWD held focus group meetings to evaluate public acceptance of treated groundwater. This led to development of Alternative 8 A that uses separate treatment systems for groundwater extracted from areas inside and outside the TCE plume in the principal aquifer. Modeling showed that this alternative is effective in containing plume movement and permanently reducing VOCs.

(table continues)

Table 2-1 (continued)

Date	Investigation/Activity	Objective	Summary of Findings
1998-2000	Remediation of vadose zone contamination at Site 24	Operate SVE at Site 24 and monitor effectiveness.	Vapor concentrations in all SVE wells were below soil gas cleanup goals by the end of 1999. Rebound testing performed in September 2000 confirmed that soil gas cleanup goals have been achieved throughout the soil gas plume. A closure report documenting that soil gas cleanup goals have been attained was submitted to the BCT in June 2001. This report is expected to be finalized in spring 2002.
2000	Historical radiological assessment of Former MCAS El Toro	Evaluate historical use, storage, and disposal of radiological materials at Former MCAS El Toro and recommend follow-on investigations of potentially impacted areas.	The final Historical Radiological Assessment Report, dated May 2000, identified candidate sites for radiological surveys on the basis of historical information. Sites 18 and 24 do not require further radiological investigation.
2001	Radiological survey	Evaluate selected sites and buildings for radiological materials or contamination.	The radiological survey was conducted from June through November 2001. The final Radiological Release Report is scheduled to be issued in fall 2002.
2000-2001	Radionuclide investigation of groundwater	Evaluate whether reported levels of radioactivity in groundwater at Former MCAS El Toro reflect ambient conditions or are the result of past Station operations.	Precise laboratory analysis of radionuclide concentrations has shown that the reported levels of radionuclides present at Former MCAS El Toro are consistent with background. Therefore, radionuclides are not chemicals of concern in groundwater at Former MCAS El Toro.
2001	Preliminary assessment of VOCs at Building 307	Identify and characterize the possible presence of VOCs in soil gas, soil, and groundwater as a result of laundry and dry cleaning operations at Building 307.	The preliminary assessment confirmed that there has not been a significant release to either the environment at Building 307 or along the sewer line segment from Building 307 to the former sewage disposal plant due to past dry cleaning operations. These results did not change previous conclusions regarding VOC contamination at Site 24 nor change the remedy already in place at the site.

## Acronyms/Abbreviations:

AOC - area of concern

BCT - BRAC Closure Team

BRAC - Base Realignment and Closure

CAO - Cleanup and Abatement Order

DON - Department of the Navy

DQO - data quality objective

FFA - Federal Facilities Agreement

Freon 113- 1,1,2-trichloro-1,2,2-trifluoroethane

FS- feasibility study

gpm - gallons per minute

IAS - initial assessment study

IDP- Irvine Desalter Project

IRWD - Irvine Ranch Water District

µg/L - micrograms per liter

MCAS - Marine Corps Air Station

MCL - maximum contaminant level

NPL- National Priorities List

OCWD - Orange County Water District

OU - operable unit

PCB - polychlorinated biphenyl

PCE - tetrachloroethene

PRG - preliminary remediation goal

RCRA- Resource Conservation and Recovery Act

RI - remedial investigation

ROD - record of decision

RWQCB - (California) Regional Water Quality Control Board  
SVE - soil vapor extraction  
SVOC - semivolatile organic compound  
SWMU - solid waste management unit  
TCE - trichloroethene  
U.S. EPA - United States Environmental Protection Agency  
VOC - volatile organic compound

---

Routine on-Station groundwater monitoring was suspended during the Phase II RI and continued in 1996 and 1997 (Rounds 3 through 7) using an initial RI/FS Groundwater Monitoring Plan that was developed in 1995 (JEG 1995). The plan was modified as required to reflect additions of new wells, deletions of wells where contaminants had not been reported, and evaluation of the information gathered.

In 1999, after a total of seven rounds of groundwater monitoring had been conducted, the DON prepared a comprehensive CERCLA Groundwater Monitoring Plan (BNI 1999). This plan summarized the results of sampling to date; analyzed the frequency of detection and distribution of VOCs, SVOCs, pesticides/PCBs, herbicides, radionuclides, and metals in groundwater; and made recommendations for which analytes and wells should be monitored in the future.

The evaluation summarized in the CERCLA Groundwater Monitoring Plan concluded that the only chemical category confirmed to have impacted groundwater at Sites 18 and 24 was VOCs. SVOCs, pesticides/PCBs, and herbicides were eliminated as chemicals of concern for the following reasons.

- SVOCs were not consistently reported for every sampling event for any single well. For this reason, the reported SVOC concentrations were interpreted to be isolated occurrences, most likely attributable to sampling and analysis errors.
- PCBs were never reported in any groundwater samples.
- All of the pesticides and herbicides were interpreted to be isolated occurrences because none of these compounds were consistently reported in every sampling event from a given well.

Radionuclides were recommended for further evaluation. The results of the evaluation of radionuclides and of metals are summarized in Section 2.5.

Since the CERCLA Groundwater Monitoring Plan was issued, seven additional groundwater monitoring rounds (Rounds 8 through 14) have been conducted at Former MCAS El Toro.

### Section 3

## HIGHLIGHTS OF COMMUNITY PARTICIPATION

A community relations plan (BNI 1996b) was developed to document concerns identified during community interviews and to provide a detailed description of community relations activities planned in response to information received from the community. Initially prepared in 1991, the plan was revised in 1993 and again in 1996 and will be updated in 2002 to incorporate the most recent assessment of community issues, concerns, and informational needs about the ongoing environmental investigation and remediation program at Former MCAS El Toro.

The community relations program includes specific activities for obtaining community input and keeping the community informed. These activities include conducting interviews, holding public meetings, issuing fact sheets to provide updates on remediation activities, maintaining an information repository where the public can access technical documents and program information, disseminating information to the local and regional media, and making presentations to local groups.

Community members and local government agencies have also participated in planning for the reuse of Former MCAS El Toro through development of the Community Reuse Plan.

### 3.1 RESTORATION ADVISORY BOARD

In 1994, establishment of the Restoration Advisory Board (RAB) gave individuals from local communities a channel for increasingly significant participation in the environmental restoration process. Original membership on the board, which was solicited by the Marine Corps and the DON through paid newspaper notices, exceeded 50 business and homeowners' representatives, locally elected officials and local regulatory agencies, and interested residents.

Currently, the RAB is composed of 28 registered members: 12 community members or private citizens and 16 representatives from various government agencies. RAB meetings are held every 2 months and are scheduled in the evenings after normal working hours (6:30 to 9:00 p. m.) at the city of Irvine City Hall, Conference and Training Center. The meetings are open to the public and include representatives from the Marine Corps and the DON, city and county offices, and regulatory agencies. By sharing information from the regular meetings with the groups they represent, RAB members help increase awareness of the IRP process; in addition, members of the public can contact RAB members to obtain information or express concerns to be discussed at subsequent meetings.

Copies of the RAB meeting minutes are available at the Former MCAS El Toro Information Repository, located at the Heritage Park Regional Library in Irvine, California. RAB meeting minutes are also located on the DON's SWDIV environmental web site: <http://www.efds.w.navfac.navv.mil/environmental/envhome.htm>.

VOC-contaminated groundwater at Sites 18 and 24 and soil at Site 24 have been key topics for presentations and discussions at over 30 RAB meetings. Early presentations focused on the remedial investigation and provided background and educational information to RAB members on the extent of groundwater contamination both off-Station and on-Station. The OU-1 interim action remedial investigation/feasibility study was often the focus of the technical presentations, which also provided information on alternatives that would be implemented by the DON alone or as a joint project with local water districts (OCWD/Irvine Ranch Water District [ IRWD]). Presentation handouts were provided to RAB members at all meetings.

Later meetings concentrated on the remedial investigation of on-Station soil and groundwater contamination. Draft final Feasibility Study Reports for OU-2A were prepared separately for soil and groundwater at Site 24. For soil, the focal point was on U.S. EPA's presumptive remedy, SVE. The draft final Feasibility Study Reports

for both OU-1 and OU-2A presented information on the development of remedial alternatives and cost comparisons for groundwater remediation. Regulatory agency representatives discussed technical issues and commented on reports and other documents pertaining to VOC-contaminated soil and groundwater, groundwater monitoring, FFA schedules, and related issues. RAB subcommittee meetings focused on the specific aspects of the FS reports. Updates on the negotiations between the DON and the OCWD/IRWD regarding a joint project to remediate contaminated groundwater were also presented to the RAB. A public briefing at the January 1999 RAB meeting announced the Marine Corps' intention to proceed with SVE at the VOC Source Area, Site 24.

The most recent RAB meetings have focused on progress of and changes to the OCWD/IRWD joint project, especially the change to a dual-purpose project. Originally, all treated groundwater was to be used for drinking water purposes. OCWD/IRWD changed this conceptual design based on public response. In the new design, water from areas inside the VOC plume will be treated (CERCLA action) and used for reclaimed water purposes, such as landscape irrigation. Water from areas outside the plume, which currently meets drinking water standards except with regard to total dissolved solids (TDS) and nitrates, will be treated to remove TDS and nitrates and used for drinking purposes (non-CERCLA action).

### **3.2 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 first information update announcing the IRP process at Former MCAS El Toro was delivered in November 1991 to area residents and mailed to city, state, and federal officials; agencies; local groups; and individuals identified in the Community Relations Plan. Subsequent fact sheets were mailed to the community as significant remediation milestones were reached (Table 3-1). These publications included information concerning the status of site investigations, the upcoming remedy selection process, the means of public participation in the investigation and remediation of Former MCAS El Toro, and the availability of the administrative record.

Proposed plans are summaries of remedial alternatives proposed for a site or group of sites. The plan describes each of the alternatives, evaluates each alternative against nine criteria, and identifies the preferred alternative. This document is issued to the public prior to the beginning of a public comment period to provide information and solicit public input on the potential remedial options that underwent detailed evaluation. Once the public comment period closes, the comments are compiled, reviewed by the BCT, and used to refine the remedial action. The final decision and response to comments (known as a "Responsiveness Summary") are presented in this ROD.

To reach as many community members as possible, the updates, fact sheets, and proposed plans are mailed to approximately 600 households, businesses, public officials, and agencies. Copies are also made available at the information repository at Heritage Park Library and in the administrative record file at Former MCAS El Toro.

**Table 3-1**  
**Summary of Former MCAS El Toro Updates, Fact Sheets, and Proposed Plans**

<b>Fact Sheet Number</b>	<b>Date</b>	<b>Summary of Contents</b>
-*	11/91	Information Update/TRP Process
-	12/92	Information Update
1	12/93	Phase II RI Results
2	12/93	RAB Formation
3	07/95	Information Update/Tank 398
4	10/95	Information Update, Engineering Evaluation/Cost Analysis
5	11/95	Former MCAS El Toro Building 673-T3 Certification for Closure
6	04/96	Looking Back-Moving Forward Update on IRP Progress
7	12/96	Groundwater Remediation OU-1 and OU-2A
-	04/97	Proposed Plan for Site 24 Vadose Zone
-	06/97	Proposed Plan for No Action Sites
-	05/98	Proposed Plan for Sites 2, 3, 5, and 17
8	02/99	SVE Design Completed, Proceed with Interim Action for Site 24 Vadose Zone
-	05/99	Proposed Plan for OU-3 Sites 8,11, and 12
-	09/00	Proposed Plan for Sites 7 and 14
-	11/01	Proposed Plan for Groundwater at Sites 18 and 24

Note:

\* dash indicates updates or proposed plans, which are not given fact sheet numbers

Acronyms/Abbreviations:

IRP- Installation Restoration Program

MCAS - Marine Corps Air Station

OU - operable unit

RAB - Restoration Advisory Board

RI - remedial investigation

SVE - soil vapor extraction

### **3.3 COMMUNITY PARTICIPATION FOR SITES 18 AND 24**

The Interim-Action RI/FS Report for Site 18 was released to the public in August 1996. The RI Report for Site 24 was issued in March 1997. The FS reports for Site 24 vadose zone and groundwater were issued in March and December 1997, respectively. The Proposed Plan for the vadose zone at Site 24 was issued in April 1997 and the interim ROD for the Site 24 vadose zone was finalized in September 1997. This schedule enabled the remedial design and remedial actions for the vadose zone to be implemented before the remedial action for

groundwater was finalized. In conjunction with the 27 January 1999 RAB meeting, a public briefing formally announced the Marine Corps' intent to proceed with the Interim Remedial Action for soil at Site 24 by the end of March 1999. A fact sheet was distributed to those in attendance at the briefing and mailed to those on the Former MCAS El Toro project mailing list. The SVE system that was used at Norton Air Force Base (AFB) was brought to Former MCAS El Toro to be used to remediate VOC-contaminated soil at Site 24. A tour of the SVE system at Site 24 was conducted for RAB members and other interested community members on 27 February 1999.

The Proposed Plan for groundwater at Sites 18 and Site 24 was mailed in November 2001 to recipients on the Former MCAS El Toro project mailing list. This plan described the DON's preferred alternative for groundwater remediation and documented the progress of soil remediation.

The Interim-Action RI/FS Report for Site 18, RI Report for Site 24, FS Reports for Site 24 vadose zone and groundwater, Proposed Plan for the Site 24 vadose zone, Interim ROD for the Site 24 vadose zone, and other key documents related to Sites 18 and 24 were made available to the public at the information repository at the Heritage Park Regional Library. The notices of availability of these documents were published in the *Orange County Register* and the *Los Angeles Times (Orange County Edition)* approximately 1 week before the start of the public comment period on the Proposed Plan. The notices also announced the availability of the complete administrative record file at the SWDIV BRAC office in San Diego and at Former MCAS El Toro. Because of space limitations at the library, only a partial administrative record file is available for review at the information repository, but the information repository contains a complete index of the administrative record file along with information on how to access the complete file at Former MCAS El Toro.

A public comment period for the Proposed Plan for Sites 18 and 24 groundwater was held from 07 November to 07 December 2001, and a public meeting was held on 13 November 2001. The public meeting was announced in the *Orange County Register* and the *Los Angeles Times (Orange County Edition)* on 06 November 2001 and in the Proposed Plan. At the public meeting, representatives from the DON, Former MCAS El Toro, and environmental regulatory agencies answered questions about site conditions and the remedial alternatives under consideration, and a court reporter recorded public comments. A transcript of the meeting is included as Attachment B. Comment forms were provided to encourage submittal of written comments during or after the meeting, and responses to the comments received during this period are included in the Responsiveness Summary, which is part of this ROD.

## Section 4

# SCOPE AND ROLE OF OPERABLE UNIT

Twenty-five IRP sites have been investigated at Former MCAS El Toro. Twenty-four of these sites are grouped into three OUs. Site 23 was evaluated in an RFA under the FFA and, as a result, was eliminated as an environmental concern. OU-1 encompasses Site 18 (Regional VOC Groundwater Plume). OU-2 is subdivided into OU-2A, OU-2B, and OU-2C. OU-3 is subdivided into OU-3A and OU-3B.

OU-1 Site 18 is included in this ROD.

OU-2A, which includes Site 24 (VOC Source Area) and Site 25 (Major Drainages), was defined to address the potential sources of regional groundwater contamination. Site 25 was included in OU-2A because it was not known whether the major drainages at Former MCAS El Toro were a source of the regional VOC groundwater contamination. After the Phase II RI showed that Site 25 was not a source of regional groundwater contamination, the site was recommended for no action and included with several OU-3 sites in a no action ROD that was signed in September 1997 (SWDIV 1997b).

As this OU-1/OU-2A ROD demonstrates, groundwater is a contaminated medium shared by Sites 18 and 24. Prior to remediation, Site 24 also included contaminated soil, which was the source of the regional groundwater contamination. Remediation of soil at Site 24 was addressed in an interim ROD that was signed in September 1997 (SWDIV 1997a). The interim ROD selected SVE as the remedy for removing the VOC-contaminated soil. The Site 24 ROD was interim because it did not address groundwater at Site 24 and because the DON agreed to reevaluate cleanup levels for soil in the final ROD, which will be issued later. This ROD documents the selected remedy for groundwater at Sites 18 and 24.

OU-2B encompasses Sites 2 and 17, and OU-2C encompasses Sites 3 and 5. Sites 2, 3, 5, and 17 are generally referred to as the landfill sites. Sites 2 and 17 were addressed in an interim ROD that was issued to the public in April 2000 and signed in July 2000 (SWDIV 2000). The ROD was interim because it presented the selected remedial action for only vadose zone soil at Site 2 and for vadose zone soil and groundwater at Site 17. Remediation of groundwater at Site 2 will be addressed in the final ROD. A radiological survey was conducted at Sites 2 and 17 in August through October 2001. The final ROD will also summarize the results of the survey and address radiological contamination, if any, at both Sites 2 and 17. Sites 3 and 5 will be addressed in an OU-2C ROD that is expected to be issued to the public in 2002.

OU-3 was defined to address the remaining IRP sites at Former MCAS El Toro. Of the 13 sites in OU-3A, Sites 4, 6, 9, 10, 13, 15, 19, 20, 21, and 22 were investigated, found to contain no unacceptable risks to human health or the environment, and recommended for no action. These sites were addressed along with Site 25 in the signed no action ROD (SWDIV 1997b). OU-3A Site 11 was addressed in an action ROD that was signed in September 1999 (SWDIV 1999). OU-3B Sites 7 and 14 were addressed in a no action ROD that was signed in June 2001 (SWDIV 2001). The remaining OU-3A sites (Sites 8 and 12) and OU-3B sites (Sites 1 and 16) are currently being evaluated.

## Section 5

# SUMMARY OF SITE CHARACTERISTICS

This section describes the regional characteristics of Former MCAS El Toro, provides a brief history of the source of contamination at Sites 18 and 24, summarizes the sampling performed at these sites, and presents figures illustrating site-specific sampling results. This section also discusses current and potential future migration of chemicals of potential concern at the sites and concludes with an estimate of the mass of TCE present in groundwater. A complete discussion of sampling locations and methodologies, compounds reported at each site, and the nature and extent of contamination appears in the Phase I RI Technical Memorandum, Draft Final Operable Unit 1 Interim Action Remedial Investigation/Feasibility Study Report (JEG 1996a, c, d), and the Phase II RI Report for Site 24 (BNI 1997a).

The nature and extent of contamination at Sites 18 and 24 is based on the Phase I and II RI data presented in the above-referenced reports and on pilot tests, rebound tests, and routine groundwater monitoring performed subsequent to the RIs. The Phase I RI was conducted during 1992 and 1993 and included groundwater at sites throughout Former MCAS El Toro. The Phase II RI was conducted in 1996 and included Site 24. Data collected during the Site 24 RI include the results of shallow and deeper subsurface soils investigations, groundwater investigations, aerial photograph reviews, and interviews with Former MCAS El Toro personnel. An extensive soil gas survey was also conducted at Site 24. Data collected during the Site 18 RI include only results of groundwater investigations because contamination at this site is limited, by definition, to groundwater.

## 5.1 REGIONAL CHARACTERISTICS

Former MCAS El Toro is situated on the southeastern edge of the Tustin Plain, a gently sloping surface of alluvial fan deposits derived mainly from the Santa Ana Mountains. The Tustin Plain, bounded on the north and east by the Santa Ana Mountains and on the south by the San Joaquin Hills, is at the southeastern end of the Los Angeles Basin, a large sedimentary basin in the Peninsular Ranges Geologic Province. The elevation at Former MCAS El Toro ranges from 215 feet above mean sea level (MSL) in the western portion to approximately 800 feet above MSL in the eastern portion.

### 5.1.1 Geology and Hydrogeology

The Tustin Plain is a broad basin composed of Quaternary marine and alluvial sediments deposited on Tertiary marine sedimentary bedrock (Fife 1974). The Quaternary deposits are generally less consolidated and more permeable than the bedrock. The Tustin Plain is bounded by bedrock, exposed in the Santa Ana Mountains to the north and east and in the San Joaquin Hills to the south.

The Tertiary bedrock consists of semiconsolidated marine sandstones, siltstones, and conglomerates of the Sespe, Vaqueros, Topanga, Capistrano, Niguel, and Fernando Formations (CDMG 1981). The lower-Pliocene Fernando Formation forms the base of the water-bearing units at Former MCAS El Toro (Herndon and Reilly 1989). The Fernando Formation is interbedded with marine clayey and sandy siltstones of the Capistrano and Niguel Formations west of Former MCAS El Toro (JMM 1988).

Pleistocene sediments predominantly composed of interlayered fine-grained lagoonal and nearshore marine deposits unconformably overlie the Tertiary sedimentary bedrock (Singer 1973). These deeper Quaternary sediments may be equivalent to the lower Pleistocene San Pedro Formation, which consists of semiconsolidated silts, clays, and sands with interbedded limestone.

Conformably overlying the Pleistocene sediments are Holocene materials consisting of isolated coarse-grained stream channel deposits within fine-grained overbank deposits. These Holocene sediments were deposited as alluvium and range in thickness up to 300 feet (Herndon and Reilly 1989).

Former MCAS El Toro lies within the Irvine Forebay I Groundwater Subbasin, which is southeast of and adjacent to the main Orange County Groundwater Basin (Figure 5-1). The Irvine Subbasin has been designated by RWQCB Santa Ana Region as a public water supply source (RWQCB 1995). Regional aquifer systems in the Irvine Subbasin have been described as a series of discontinuous lenses of clayey sands and gravels contained within an assemblage of sandy clay and silt. These aquifer systems are within the less consolidated and more permeable Quaternary sedimentary deposits.

Four hydrostratigraphic units were defined at the Station from existing literature and from information gathered during the Phase I RI (JEG 1996b). From shallowest to deepest, these units are:

- Shallow Groundwater Unit (water-bearing),
- Intermediate Horizon (confining),
- Principal Aquifer (water-bearing), and
- Semiconsolidated Materials (sparsely water-bearing).

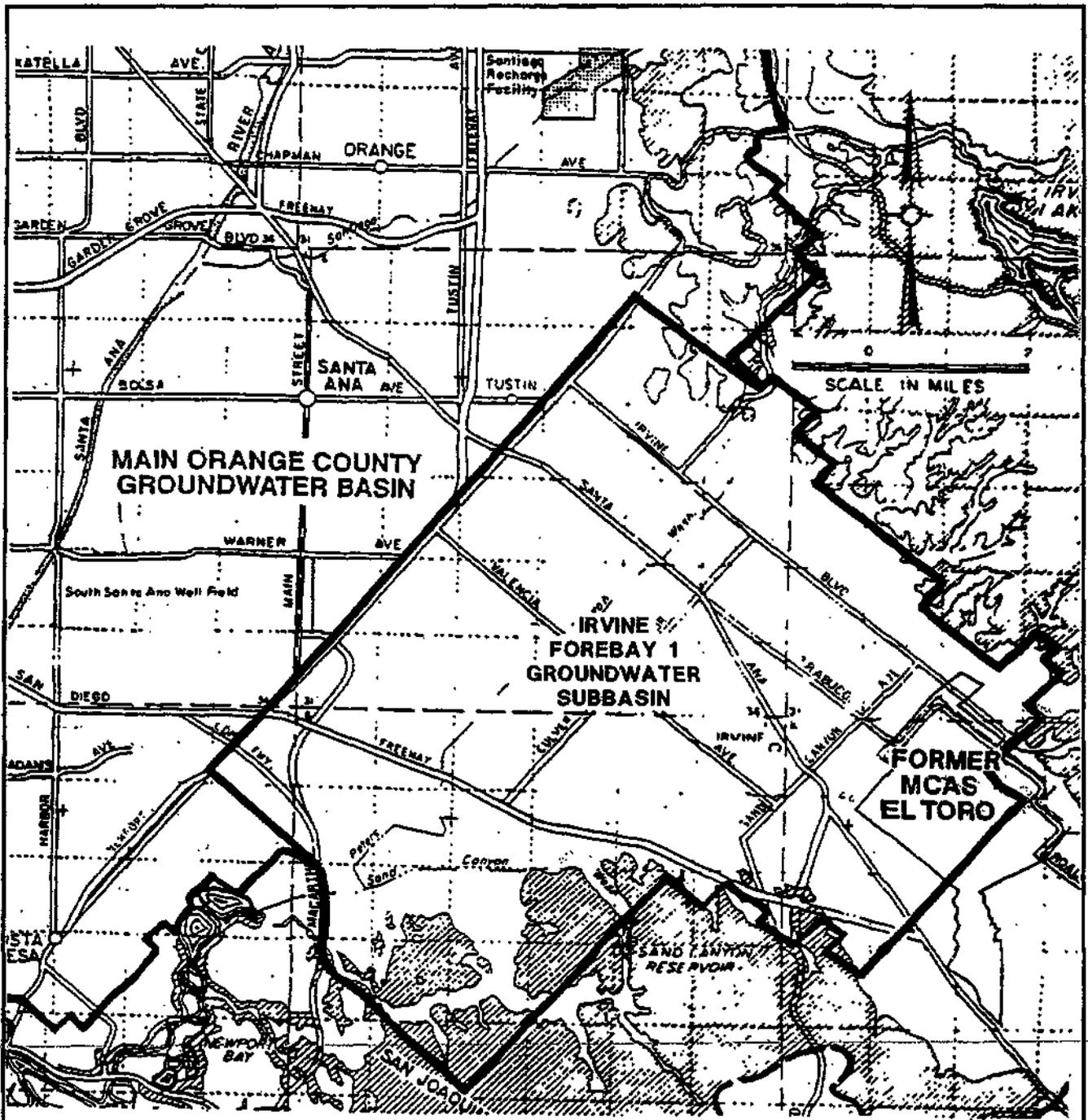
The water-bearing properties of these hydrostratigraphic units depend on the physical characteristics of their constituent geologic materials. The sediments encountered during drilling for the Phase I RI essentially consisted of unconsolidated clays and silts variously interbedded with sands and gravels. The variable, unconsolidated sediments are typical of alluvial, floodplain, and shallow marine deposits formed from the sedimentary formations that comprise the surrounding foothills. Silts and clays predominate in the central and northwestern portions of the Station whereas sands are more common near the foothills. Sands are predominantly well graded (poorly sorted), ranging from coarse- to fine-grained, and commonly contain clay streaks. Clays exhibit medium plasticity and contain sand.

**Shallow Groundwater Unit.** This is the uppermost unconsolidated sediment sequence beneath the Station and consists mostly of sands with interbedded fine-grained silts and clays. The water table occurs in the shallow groundwater unit. Typical of alluvial fan deposits, the water-bearing characteristics within this unit are highly variable. In general, this unit can yield moderate quantities of water while localized areas will yield lesser amounts of water. The thickness of this unit generally ranges from 100 feet to 150 feet. Near the foothills, the thickness is about 40 feet.

The shallow groundwater unit overlies the relatively fine-grained intermediate horizon over most areas in and around the Station. However, the intermediate horizon pinches out toward the northeast area of the Station near the foothills and the coarse-grained materials of the shallow groundwater unit merge with the coarse-grained materials of the principal aquifer.

**Intermediate Horizon.** This unit hydraulically restricts groundwater flow between the overlying shallow groundwater unit and the underlying principal aquifer over most of the areas in and around the Station. This unit consists mostly of fine-grained silts and clays with interbedded sands and gravels. Typical of alluvial fan deposits, the water-bearing characteristics within this unit are highly variable. Because of this variable nature, in some locations the intermediate horizon is not identifiable from inspection of drill cuttings alone and may resemble both the shallow groundwater unit and the principal aquifer. The intermediate horizon is, however, interpreted to be present where finer-grained materials are not observed in drill cuttings because of the unique potentiometric groundwater elevations in the shallow groundwater unit and principal aquifer.

The estimated thickness of the intermediate horizon ranges from approximately 70 to 140 feet. As the horizon pinches out toward the northeast foothills, the coarse-grained materials become more abundant and fine-grained materials become less abundant. In addition, the potentiometric elevations in the shallow groundwater unit become indistinguishable from those of the principal aquifer in this area.



**LEGEND**  
 BEDROCK

Record of Decision <b>Figure 5-1</b> Groundwater Basin Boundaries	
Former MCAS, El Toro, California	
	Date: 1/3/02 File No: - Job No: 22214-164 Rev No: B
Bechtel National, Inc. CLEAN II Program	

Source: OCWD/Bonke, 1984, and California DWR, 1967

Although restricted, groundwater flow between the shallow groundwater unit and principal aquifer does occur. This is evidenced by the occurrence of chlorinated VOCs in the principal aquifer downgradient of the Station.

**Principal Aquifer.** This is the lowest unconsolidated sediment sequence at the Station and consists primarily of sands and gravels with interbedded fine-grained silts and clays. This is the main aquifer for irrigation groundwater supply to IRWD and the Irvine Company northwest of the Station. Although the water-bearing characteristics within this unit are highly variable, this unit can yield moderate to large quantities of water. The thickness of this unit ranges from less than 50 feet in the eastern portion of the Irvine Subbasin to about 1,200 feet in the western portion.

**Semiconsolidated Materials.** The deepest materials encountered during the Phase I RI consisted of the semiconsolidated materials underlying the unconsolidated materials of the principal aquifer. These materials consist of sandstones, siltstones, and conglomerates of late Miocene to late Pliocene age, and are considered to be the top of the bedrock in the Former MCAS El Toro area. Although they may yield some quantities of groundwater, these materials are not considered to be appreciably water bearing. The semiconsolidated materials effectively bound the bottom of the groundwater flow system of the Irvine Subbasin.

The depth to shallow groundwater beneath Former MCAS El Toro ranges from approximately 45 to 60 feet below ground surface (bgs) in the foothills to approximately 85 feet bgs along the southwestern boundary to greater than 240 feet bgs along Irvine Boulevard (JEG 1993a). Depth to the principal aquifer ranges from less than 200 feet bgs on-Station to 300 to 375 feet bgs at Site 18.

Groundwater in the shallow aquifer flows northwest at gradients ranging from 0.005 to 0.025 foot/foot (Figure 5-2). The hydraulic gradient has been influenced strongly by the pumping of irrigation wells west of Former MCAS El Toro. Average linear groundwater flow velocities are reported to range from 0.02 foot to 1.9 feet per day (JMM 1990).

Groundwater in the vicinity of Former MCAS El Toro contains elevated concentrations of inorganic compounds, including TDS, sulfate, nitrate, and chloride. These inorganic parameters exist in groundwater at concentrations that exceed drinking water standards and the applicable water quality objectives specified in the Water Quality Control Plan for the Santa Ana Basin (RWQCB 1995). The observed concentrations of inorganic parameters in groundwater, particularly TDS and nitrate, were evaluated in the OU-1 RI/FS and were determined to be the result of naturally occurring subsurface conditions and past and current land uses, in particular past agricultural practices (JEG 1996h).

Former MCAS El Toro occupies an area in which the historically predominant land uses have been agriculture and grazing. The widespread occurrence of elevated TDS concentrations in the vicinity of Former MCAS El Toro has been documented for more than 100 years. Elevated concentrations of nitrate have been documented for the past 25 years.

Former MCAS El Toro is not the source of the elevated TDS and nitrate concentrations. The principal sources of TDS appear to be marine sediments; fine-grained materials, specifically clays, in the sediments of the Irvine Subbasin; subsurface inflow of groundwater through marine sedimentary rocks of the Santa Ana Mountains and San Joaquin Hills; and accumulated salts in irrigation return flow. Nitrate contamination is attributed to historical agricultural use, farm animal waste, landscaping, domestic septic tank wastewater disposal, and industrial operation discharges (JEG 1996h).

### 5.1.2 Surface Hydrology

Surface drainage near Former MCAS El Toro generally flows southwest, following the slope of the land perpendicular to the trend of the Santa Ana Mountains. Several washes originate in the hills northeast of Former MCAS El Toro and flow through or adjacent to the Station en route to San Diego Creek. Off-Station drainage from the hills and upgradient irrigated farmland combines with Station runoff at Former MCAS El Toro (generated from the extensive paved surfaces) and flows into four main drainage channels. Three of these drainage channels (Borrego Canyon, Agua Chinon, and Bee Canyon) are contiguous with natural washes that originate in the Santa Ana Mountains. The fourth drainage is Marshburn Channel (Figure 5-3).

Borrego Canyon Wash flows along the southeastern boundary of Former MCAS El Toro. The wash is unlined in the Santa Ana Mountains and unlined downstream of Irvine Boulevard. Borrego Canyon Wash crosses the southern corner of the Station and joins Agua Chinon Wash about 1/4 mile downstream of the Station boundary.

Both Agua Chinon and the Bee Canyon Washes cross the central portion of Former MCAS El Toro and receive on-Station runoff mainly through storm sewers. These washes are contained in culverts through most of their pathways across the Station. Both washes are unlined along several hundred feet at the southwestern edge of the Station and are lined again in a culvert beneath the Irvine Spectrum development adjacent to the southwestern boundary of the Station. Marshburn Channel is a lined drainage channel that runs along the northwestern boundary of Former MCAS El Toro. The channel receives runoff from the western part of the Station. All of the drainages ultimately discharge into San Diego Creek.

The MCAS El Toro Master Plan indicates that much of the Station lies within the 100-year floodplain. Existing drainage systems were developed for agricultural use, not for the increased flows generated by the urban development now surrounding the base. Approximately 15 acres of an agricultural lease was flooded and crops were destroyed during a storm on 29 November 1997. Figure 5-3 shows the area included in the 100-year floodplain.

### 5.1.3 Rainfall and Prevailing Wind Conditions

The mean, average rainfall at Former MCAS El Toro is approximately 12.2 inches, most of which occurs from November through April (JEG 1993a). Because of the low average annual rainfall and high evapotranspiration rates, net infiltration from precipitation is low.

From March through October, the prevailing wind is from the west, averaging 6 knots. From November through February, the prevailing wind is from the east, averaging 4 knots. Dry, gusty, offshore winds (locally known as "Santa Ana winds") are common during late fall and winter. The typically dry conditions and persistent winds may result in light to moderate wind erosion.

## 5.2 SITE CHARACTERISTICS

This section discusses characteristics of Sites 18 and 24. The sites are addressed together because Site 24 has been identified as the source of VOCs in the shallow groundwater unit beneath Site 24 and downgradient of Site 24, where VOCs have migrated into the principal aquifer to form the regional groundwater plume of Site 18.

Site 18, Regional VOC Groundwater Plume, is defined as the area where TCE concentrations are greater than 5 µg/L in the principal aquifer. Site 18 is downgradient of Site 24 and is located entirely off-Station. The contaminated groundwater of Site 18 originates in the shallow aquifer at Site 24, migrates into the principal

aquifer near the southwestern Station boundary, and extends into the principal aquifer off-Station approximately 3 miles to the west beneath the city of Irvine. The average width of the off-Station VOC plume is approximately ½ mile. VOC contamination reaches depths of 450 feet bgs in some areas.

Site 24, VOC source area, encompasses approximately 200 acres. The site slopes toward the west from about 320 feet above MSL at the intersection of the east-west and north-south runways to approximately 240 feet above MSL near the end of the east-west runway. The site is largely industrialized and contains two large aircraft hangars (Buildings 296 and 297) and several smaller buildings that were used for aircraft and vehicle maintenance and repair (Figure 5-4). Maintenance activities (e.g., aircraft washing, degreasing) conducted adjacent to and within these buildings are believed to be the source of the VOC contamination in site soil and groundwater.

The Site 24 surface cover consists of unpaved open ground, asphalt, and concrete. Most of the site (170 acres) is paved. Asphalt-covered areas were used primarily for access roads and parking lots for military and personal vehicles. Concrete covers the areas where most of the industrial activities at Site 24 have been conducted, including slabs for Buildings 296 and 297 (the two aircraft hangars), Building 295 (the helicopter hangar), and Building 324 (the former engine test facility).

A network of storm drains collects rainwater from the paved surfaces of Site 24. When industrial activities were conducted at Site 24, wastewater generated from the concrete-paved areas would also have been transported via this network. The network discharges to Agua Chinon Wash on the eastern portion of the site and Bee Canyon Wash on the western portion, near the Station boundaries in these locations.

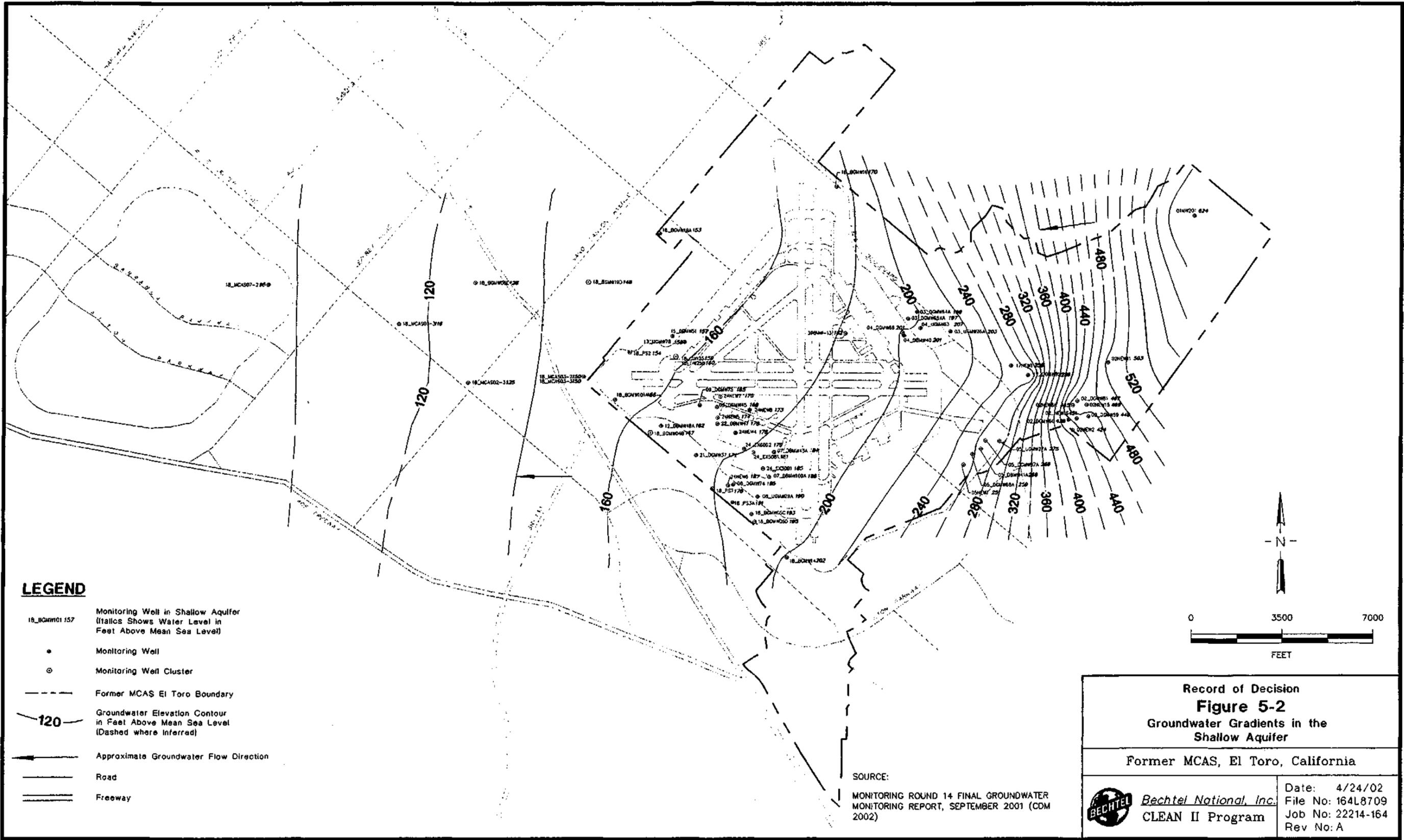
Because Site 24 includes most of the southwest quadrant on the Station, it encompasses IRP Sites 7, 8, 9, 10, 11, 12, 22, and a portion of Site 25. These are soil sites and contamination present at the sites does not extend to groundwater.

Site 7 and Sites 9, 10, 22, and 25 were investigated, found to require no action, and addressed in no action RODs that were finalized in June 2001 and September 1997, respectively. Sites 8, 11, and 12 contain low levels of soil contamination. Site 11 was addressed in a ROD that was finalized in September 1999. The ROD for Sites 8 and 12 is expected to be finalized in 2002.

Groundwater contamination, where present beneath Sites 7, 8, 9, 10, 11, 12, 22, and 25, has its origin at Site 24 and is addressed in this ROD. Figures 5-5 and 5-6 illustrate the relationship between Site 24 groundwater and Site 18 and the extent of the plume at Site 18.

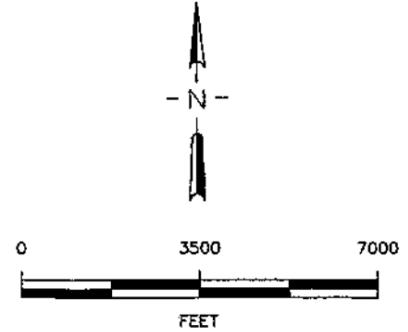
### **5.2.1 Geology and Hydrogeology**

The geology beneath Site 24 consists of sediments deposited in a basin as an alluvial fan. Lithologic data collected from Site 24 during the RI/FS were represented by two units of coarse-grained stream channel deposits (sands and gravels) interbedded with fine-grained overbank deposits (silts and clays). These sediments were investigated to approximately 260 feet bgs. Beneath the main industrial areas of Site 24, Buildings 296 and 297, the coarse-grained and fine-grained units display a lenticular stratigraphy. Lenses of both units are laterally extensive on a large scale and show a high degree of heterogeneity on a small scale. Small-scale heterogeneities likely prevented low-permeability units from completely stopping vertical fluid migration through the vadose zone. Under these conditions, fluid migration was primarily vertical through the vadose zone beneath Buildings 296 and 297 where solvents were used at Site 24 (BNI 1997a).



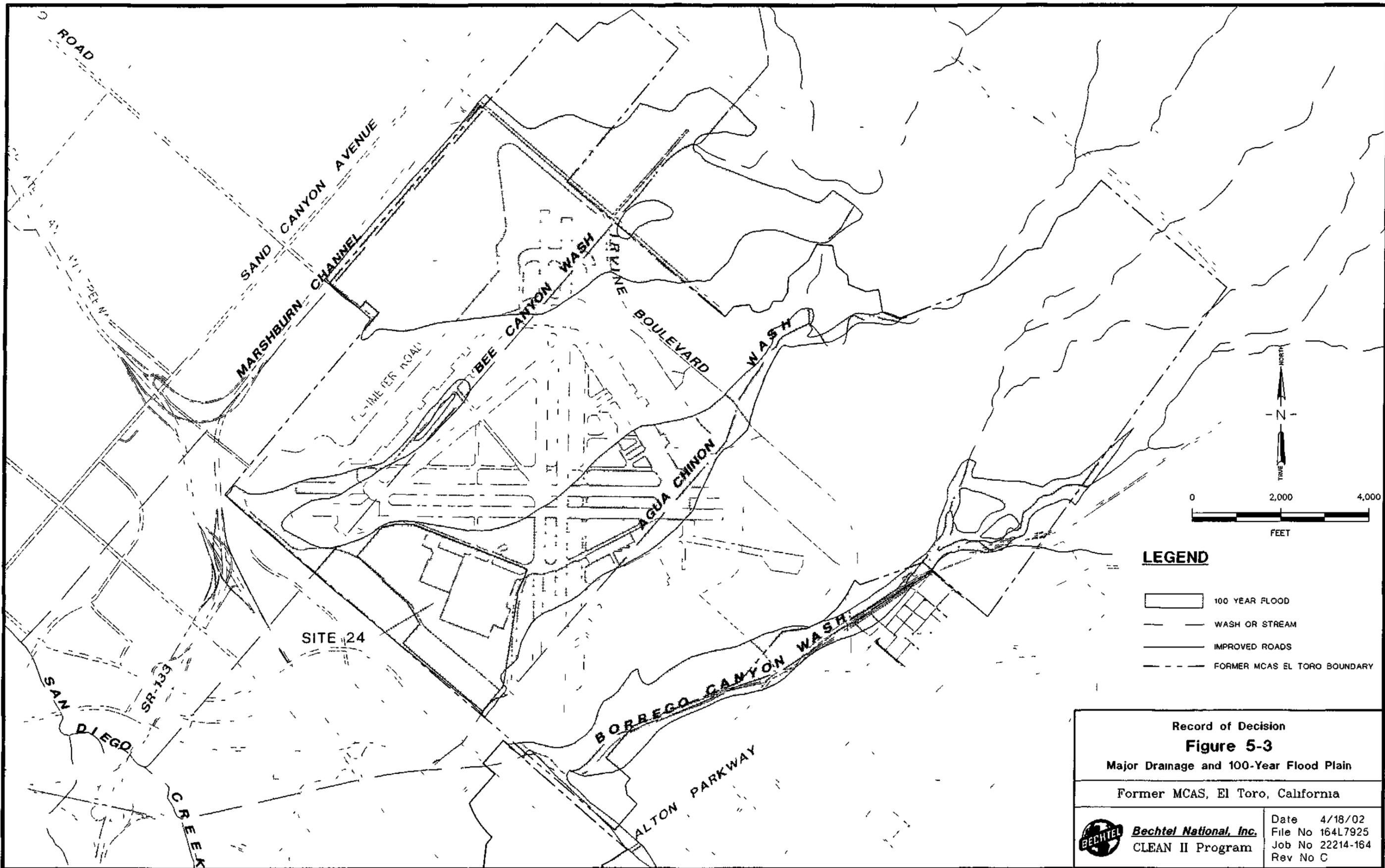
**LEGEND**

- 18\_BOWM01 157 Monitoring Well in Shallow Aquifer  
(Italics Shows Water Level in Feet Above Mean Sea Level)
- Monitoring Well
- ⊙ Monitoring Well Cluster
- Former MCAS El Toro Boundary
- 120 Groundwater Elevation Contour  
in Feet Above Mean Sea Level  
(Dashed where Inferred)
- Approximate Groundwater Flow Direction
- Road
- == Freeway

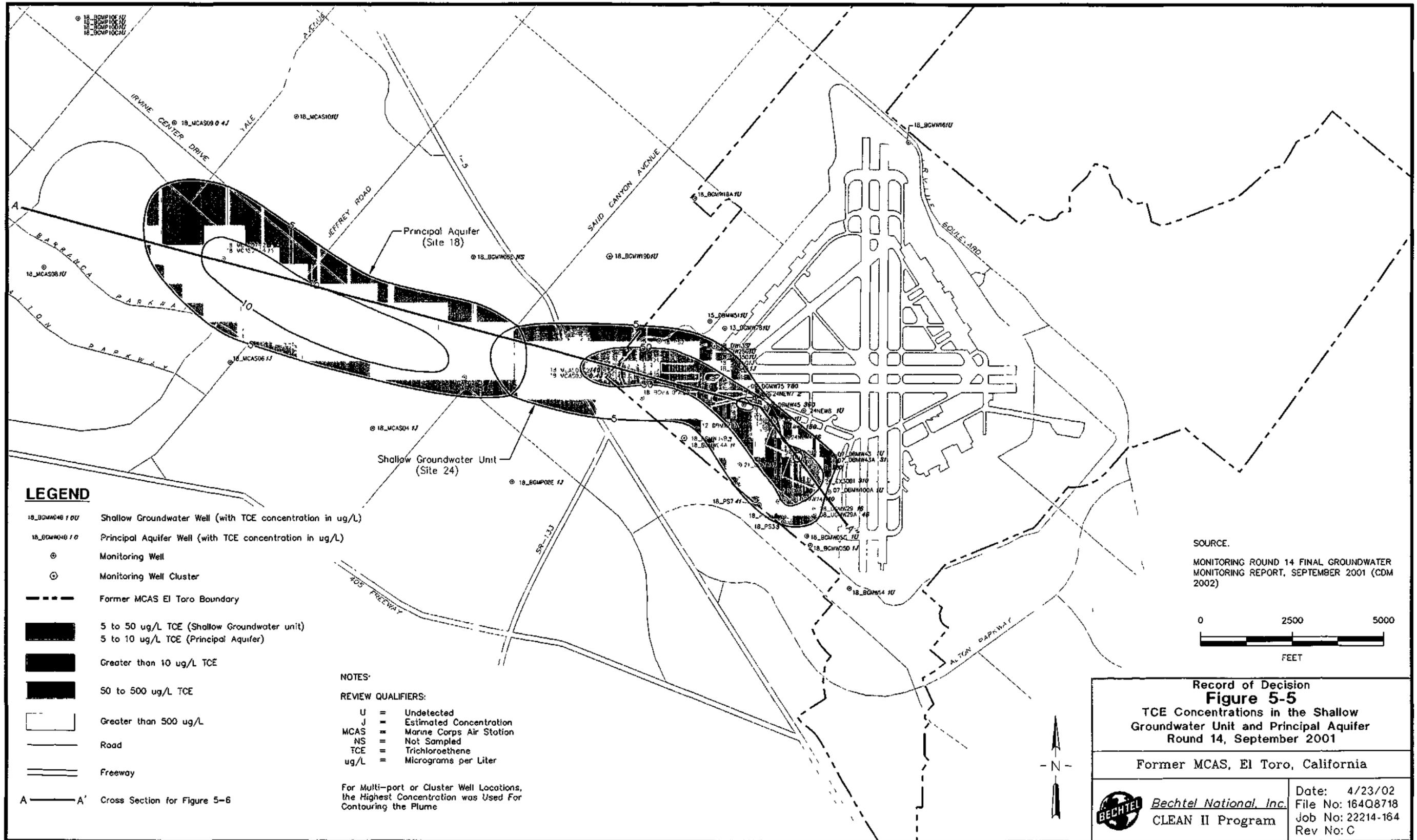


SOURCE:  
MONITORING ROUND 14 FINAL GROUNDWATER  
MONITORING REPORT, SEPTEMBER 2001 (CDM  
2002)

<p>Record of Decision <b>Figure 5-2</b> Groundwater Gradients in the Shallow Aquifer</p>	
<p>Former MCAS, El Toro, California</p>	
<p><i>Bechtel National, Inc.</i> CLEAN II Program</p>	<p>Date: 4/24/02 File No: 164L8709 Job No: 22214-164 Rev No: A</p>



<b>Record of Decision</b> <b>Figure 5-3</b> <b>Major Drainage and 100-Year Flood Plain</b>	
Former MCAS, El Toro, California	
 <b>Bechtel National, Inc.</b> CLEAN II Program	Date 4/18/02 File No 164L7925 Job No 22214-164 Rev No C



PARTIALLY SCANNED  
OVERSIZE ITEM (S)

See Document # 121730  
for partially scanned image(s).

For complete version of oversize document(s),  
see paper copy.

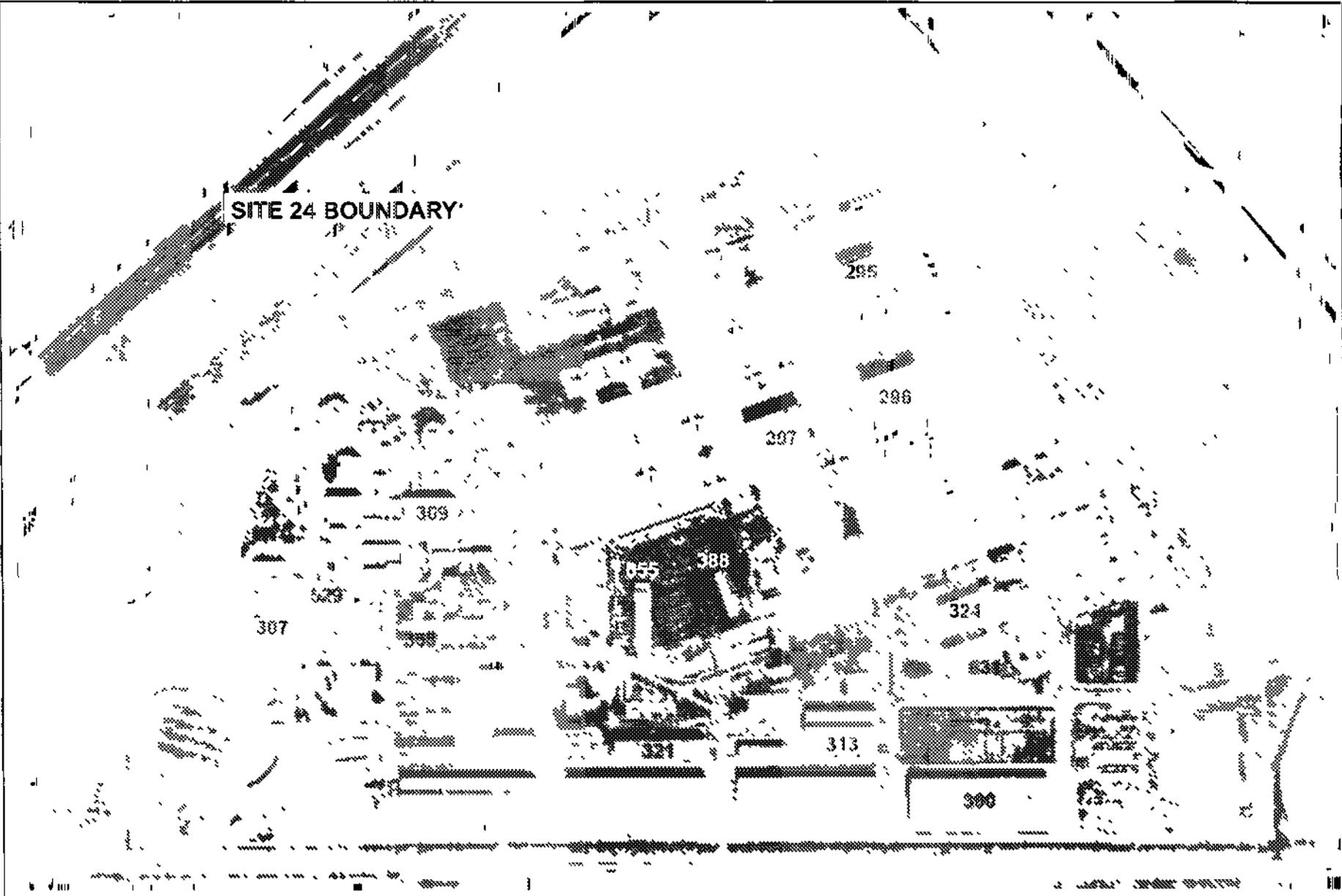


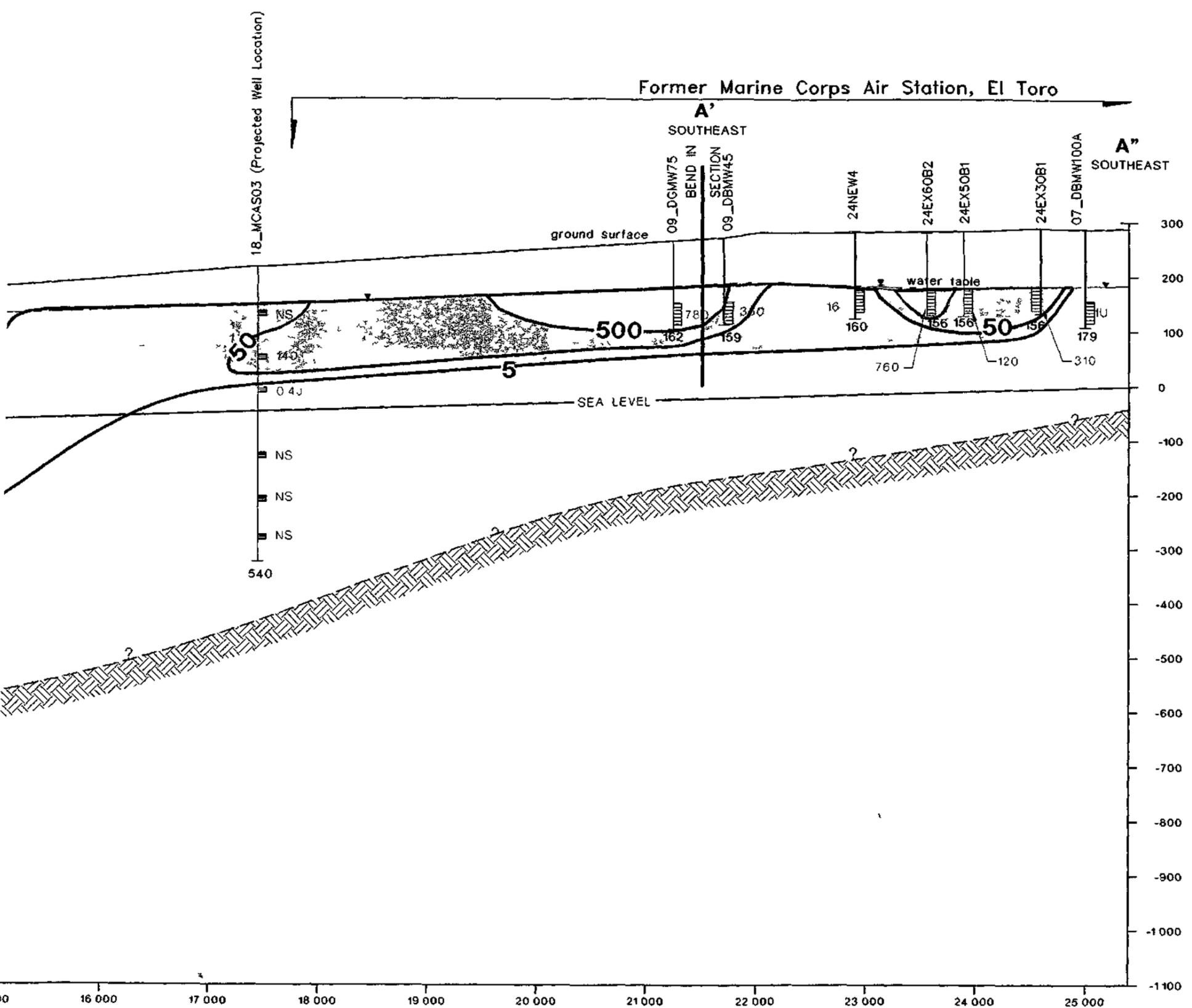
Figure 5-4  
Aerial Photograph of Site 24 Physical Features (1980)



SDMS Doc ID 121730

**PARTIALLY SCANNED  
OVERSIZE ITEM(S)**

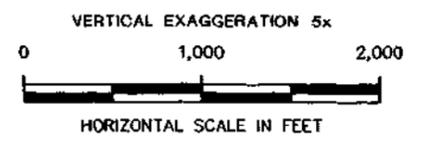
See paper copy for complete version  
of oversize document(s)



**LEGEND:**

- Location of A-A shown on Figure 5-5
  - 24NEW4 Well Identification
  - Potentiometric surface
  - Upper saturated zone (water table)
  - TCE concentration ug/L
  - NS = not sampled
  - u = undetected above ug/L
  - Screen interval of monitoring well/monitoring port
  - Total depth of monitoring well, feet below ground surface
- TCE CONCENTRATIONS IN GROUNDWATER**
- 50 TO 500 ug/L TCE
  - 500 TO 5000 ug/L TCE
  - GREATER THAN 5000 ug/L TCE
  - ILLUSTRATED TCE PLUME BELOW THE SHALLOW GROUNDWATER UNIT WAS TAKEN FROM September 2001 data
  - 5 INFERRED TCE ISOCONCENTRATION CONTOUR (ug/L)
  - Semiconsolidated low-permeability sediments
  - (P) Production well
  - TCE = Trichloroethene
  - ug/L = Micrograms per liter
  - J = Estimated concentration

SOURCE  
MONITORING ROUND 14 FINAL GROUNDWATER  
MONITORING REPORT SEPTEMBER 2001 (CDM 2002)



**Record of Decision**  
**Figure 5-6**  
**TCE Concentrations in Groundwater**  
**Cross Section A-A"**

Former MCAS, El Toro, California

	<b>Bechtel National, Inc.</b>	Date 4/23/02
	CLEAN II Program	File No 164X8711
		Job No 22214-164
		Rev No C

Groundwater is first encountered approximately 85 to 120 feet beneath Site 24 in the shallow groundwater unit. This unit consists of sands and minor gravel interbedded with silts and clays, and is laterally continuous across the site. The thickness of the shallow groundwater unit ranges from 100 to 150 feet based on boring logs from Site 24. The upper 40 to 50 feet is relatively sandy with some fine-grained interbeds. The lower portion (the bottom 50 to 120 feet) of the unit, while still containing massive sandy units, becomes increasingly interbedded with finer-grained sediments.

Located approximately 100 feet below the first water encountered at Site 24 is an intermediate zone that also consists of interbedded sands, silts, and clays, but with a higher percentage of finer-grained sediments than the shallow groundwater unit. This intermediate zone, approximately 90 feet thick, appears to act as an aquitard in the area of Site 24 by restricting groundwater flow between the overlying shallow groundwater unit and the underlying principal aquifer (JEG 1996a).

The principal aquifer is encountered immediately below the intermediate zone approximately 290 feet bgs. The saturated thickness of the principal aquifer in the area is estimated to be over 200 feet.. The deepest drilling during the RIs encountered the semiconsolidated, low-permeability sediments that underlie the principal aquifer and generally bound the bottom of the groundwater flow system of the Irvine Subbasin. This unit is not considered to be appreciably water bearing (BNI 1997a).

At Site 24, separation of the shallow groundwater unit from the principal aquifer is supported by lithologic, geochemical, and cone penetrometer test data. Geotechnical analytical results from the shallow groundwater unit, intermediate zone, and principal water-bearing zone indicate vertical hydraulic conductivities for the intermediate zone that are several orders of magnitude lower than the two water-bearing zones (BNI 1997a). Although small vertical gradients exist between shallow and deeper water-bearing intervals at Site 24, groundwater analytical data suggest that downward migration of VOCs from the shallow groundwater unit to the principal aquifer is minimal.

The potentiometric elevation data suggest that vertical groundwater flow throughout the basin occurs due to a slight downward gradient that becomes more pronounced when the principal aquifer agricultural wells are in operation (BNI 1999a). The off-Station TCE contamination in the principal aquifer is verification that some downward vertical migration has occurred. A groundwater pilot test performed in 1998, subsequent to completion of the RI, showed that vertical migration of VOCs from the shallow groundwater unit occurs downgradient of Site 24 (BNI 1998b).

The groundwater plume at Site 18 is limited to the principal aquifer which is first present approximately 300 to 375 bgs in this area. The saturated thickness of the aquifer ranges from less than 100 feet in the eastern portion of the site to about 700 feet in the western portion (Figure 5-6). During the RI, wells screened in the principal aquifer exhibited transmissivity values ranging from 0.28 square foot per day to 5,680 square feet per day, hydraulic conductivity values of 0.01 foot per day to 56.8 feet per day, and storage coefficients of approximately  $10^{-4}$  (JEG 1996e). Figure 5-7 illustrates the direction of groundwater flow.

Figure 5-8 presents a conceptual hydrogeologic model for Sites 18 and 24.

### 5.2.2 Site History

The Former MCAS El Toro mission has historically involved the operation and maintenance of military aircraft and ground-support equipment. The southwestern quadrant, which includes Site 24, was the center of industrial activity at the Station. Historical activities at Site 24 supporting the Station mission included aircraft maintenance and repair. These activities generated waste solvents that are believed to be the source of the VOC contamination at the site.

Active sources no longer exist at Site 24. Prior to Station closure, most of the potential sources, such as degreaser pits and solvent tanks, were either abandoned in place or completely removed, and former disposal practices, such as dust suppression with waste liquids, that may have led to the contamination were discontinued. Table 5-1 summarizes potential VOC sources at Site 24.

Land above the Site 18 groundwater plume has historically been used for agricultural activities. However, recently the land use has changed to mixed use with agricultural, commercial, and residential areas. The agricultural land use has likely contributed to the reportedly elevated concentrations of TDS and nitrate that are found throughout the basin, but it is not responsible for the extensive VOC contamination that originated at Site 24.

## 5.3 SITE INVESTIGATIONS

Investigations at Site 18 have consisted of a OCWD groundwater investigation (1985), a perimeter study investigation (1988), a Phase I RI (1991 through 1993), a perchlorate evaluation (1998 through 1999), and a radionuclide evaluation (2001). Because of the depth of the principal aquifer, HydroPunch sampling at Site 18 is not possible; all sampling results come from monitoring or agricultural wells.

Investigations conducted at Site 24 include a Phase I groundwater characterization and soil gas survey, a Phase II RI, perchlorate and radionuclide evaluations, and a preliminary assessment of Building 307, the location of a former dry cleaning facility, and the sewer line segment from Building 307 to the former industrial wastewater treatment plant. In addition, routine groundwater monitoring has taken place at Sites 18 and 24 since 1992.

### 5.3.1 OCWD Groundwater Investigation

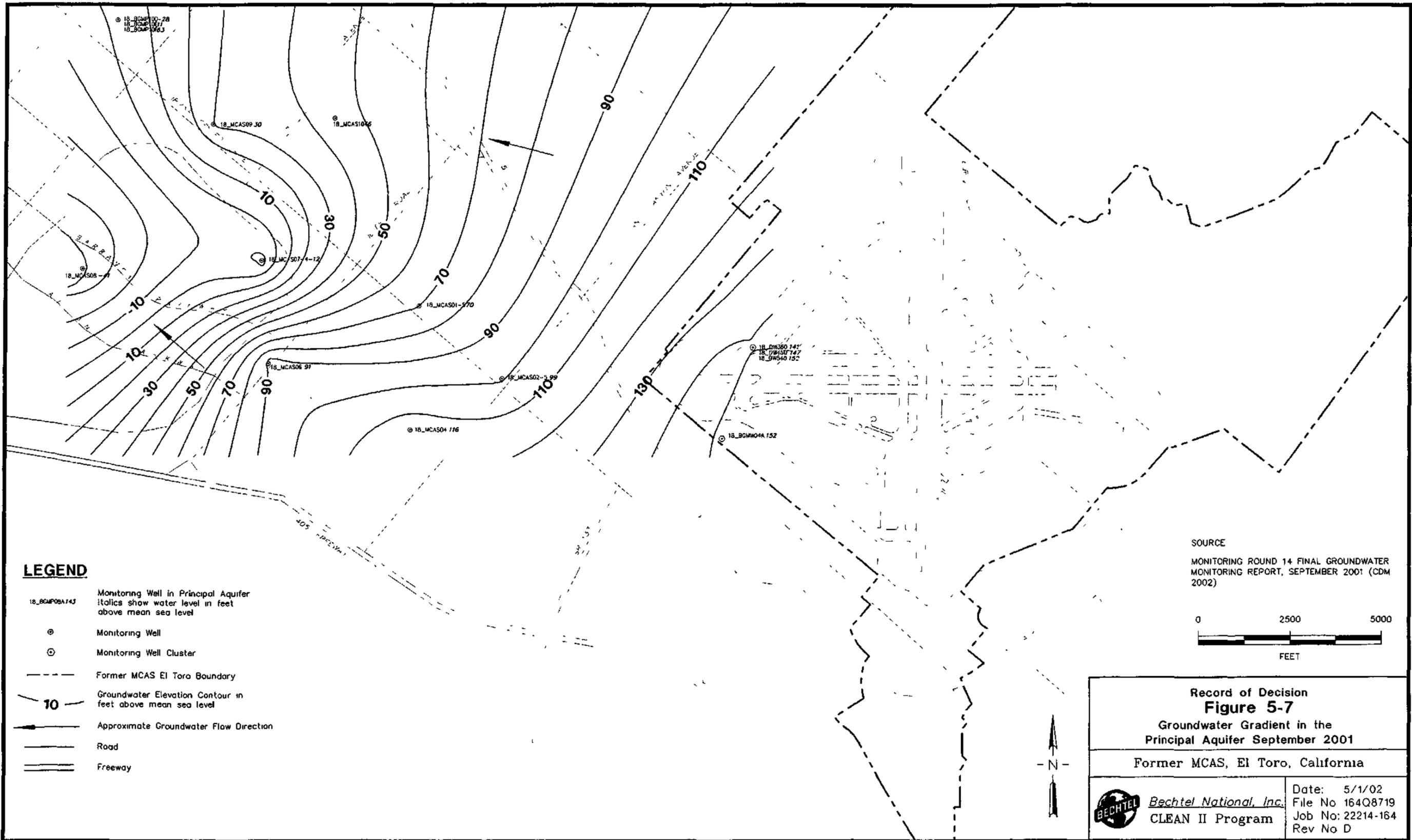
In June 1985, OCWD discovered TCE in an agricultural well (TIC 47) approximately 3,000 feet west of the Station. OCWD subsequently launched its own off-Station investigation to determine the source and extent of the TCE contamination. After installing a network of monitoring wells and soil vapor probes and reviewing the results of independent investigations by Cannon, Inc., and Wilma Pacific, Inc. (JEG 1993b), OCWD concluded that the Station was the source of the TCE contamination.

**Table 5-1**  
**Potential Sources of VOC Contamination at Site 24**

<b>Location</b>	<b>Description</b>
Subsurface	Former degreaser pits and solvent tanks Storm drains and industrial wastewater lines Vehicle wash racks with associated drains and sumps Underground storage tanks
Surface	Aircraft washing Waste-handling practices Hazardous waste storage areas Tarmac runoff

Acronym/Abbreviation:

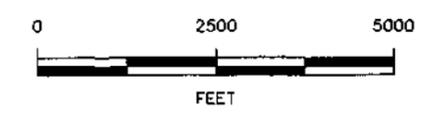
VOC - volatile organic compound



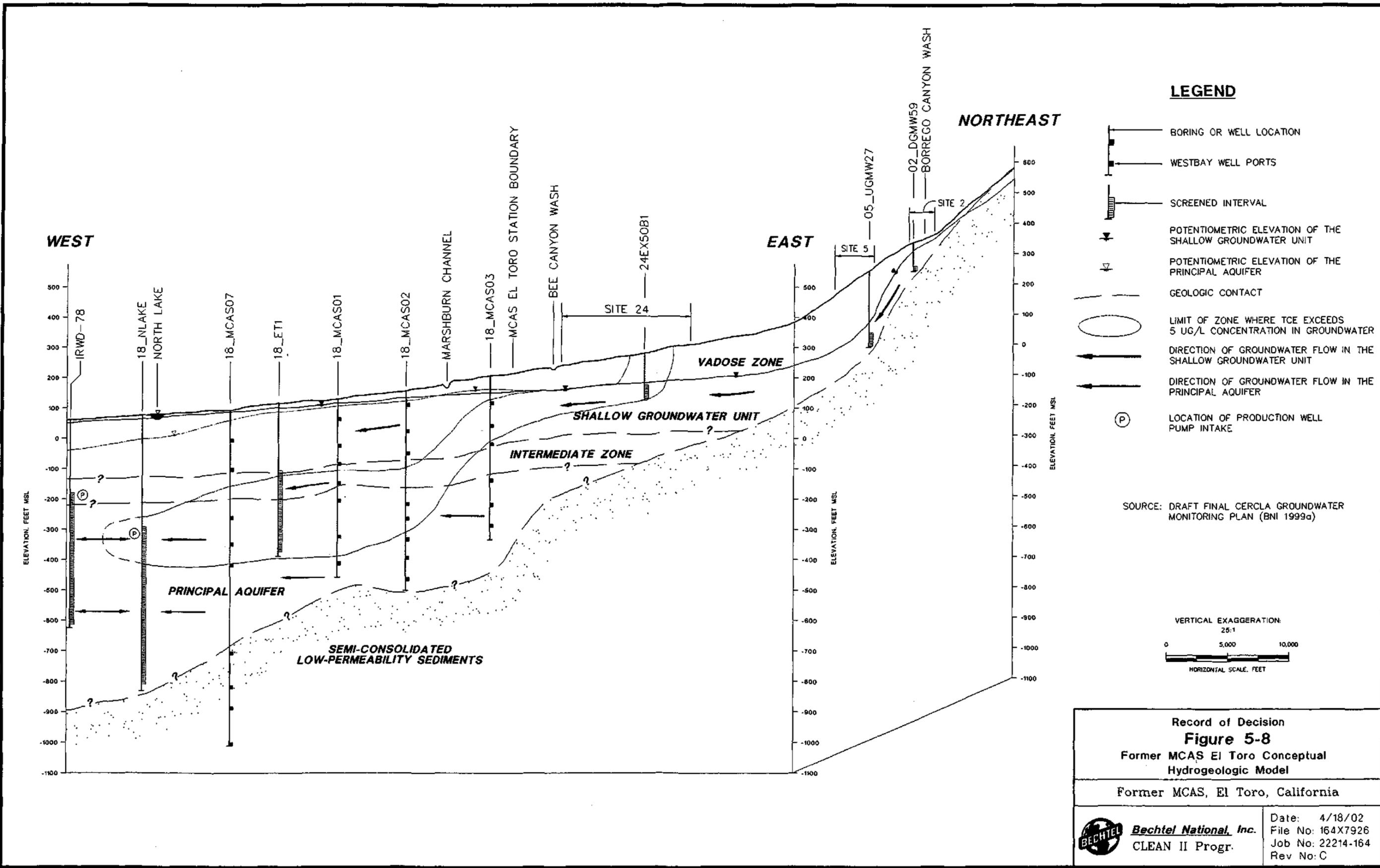
**LEGEND**

- 18\_BGNW04-152 Monitoring Well in Principal Aquifer  
*Italics show water level in feet above mean sea level*
- ⊙ Monitoring Well
- ⊙ Monitoring Well Cluster
- Former MCAS El Toro Boundary
- 10 Groundwater Elevation Contour in feet above mean sea level
- Approximate Groundwater Flow Direction
- Road
- == Freeway

SOURCE  
MONITORING ROUND 14 FINAL GROUNDWATER MONITORING REPORT, SEPTEMBER 2001 (CDM 2002)



<b>Record of Decision</b> <b>Figure 5-7</b> Groundwater Gradient in the Principal Aquifer September 2001 Former MCAS, El Toro, California	
 Bechtel National, Inc. CLEAN II Program	Date: 5/1/02 File No 164Q8719 Job No: 22214-164 Rev No D



### 5.3.2 Perimeter Study Investigation

In 1988, James M. Montgomery Engineers, Inc., was contracted by the Marine Corps to conduct a perimeter study investigation (PSI) to study VOC contamination along the southwestern boundary of the Station. The PSI results indicated that VOCs are present in the shallow groundwater near the Station boundary.

### 5.3.3 Phase I Remedial Investigation

From 1992 through 1993, the DON conducted a Phase I RI for the regional groundwater contamination area designated as OU-1. The OU-1 study area included groundwater beneath the entire Station as well as the regional groundwater plume and groundwater beneath all areas at Former MCAS El Toro was known as Site 18 (Site 24 had not been designated yet). The RI identified groundwater contamination at several areas throughout Former MCAS El Toro, including Magazine Road Landfill, Site 2, and Crash Crew Pit, Site 16. Contaminated groundwater at Sites 2 and 16 is being addressed in conjunction with soil contamination at these sites in separate RODs. OU-1 is now considered to include only Site 18. The Phase I RI groundwater characterization identified a plume of TCE in groundwater originating beneath the area now designated as Site 24. The plume extended approximately 3 miles off-site and downgradient of Former MCAS El Toro. The Phase I soil gas survey identified potential VOC sources by collecting soil gas samples from the upper 30 feet of soil at Site 24. TCE in soil gas was reported throughout a large area beneath Buildings 296 and 297, but the area of highest TCE concentrations in groundwater was separated from this apparent vadose zone source by approximately 1,500 feet (JEG 1994b). The area of highest reported TCE concentrations in groundwater was approximately 1,500 feet northwest of Building 297 at Site 24. The highest concentration of TCE reported in groundwater during the Phase I RI was 2,000 µg/L (JEG 1993a).

Chemicals reported in groundwater during the Phase I RI included VOCs, SVOCs, pesticides, herbicides, and metals. The primary contaminants found in groundwater at Sites 18 and 24 were VOCs (Table 5-2), especially TCE. TCE has been reported beyond the Station as far west as Culver Drive in Irvine. TCE was also the compound reported most often and at the highest concentrations in groundwater at Sites 18 and 24, followed by PCE and carbon tetrachloride.

An evaluation of metals in groundwater was performed during the Phase I RI and subsequent to the Phase II RI (JEG 1996a, BNI 1999a). These evaluations supported the conclusion that elevated concentrations of metals in groundwater at Former MCAS El Toro are the result of ambient conditions and are not the result of activities that took place at the Station. For this reason, metals are not included as chemicals of concern (COCs) at Sites 18 or 24.

SVOCs were reported during the OU-1 RI. With few exceptions, the only SVOCs observed in groundwater were phthalates. Phthalates are man-made compounds typically associated with plastics manufacturing and are commonly found in the environment at low concentrations; they are also common laboratory contaminants. The available groundwater data do not suggest the presence of a distinct source of SVOC contamination and, therefore, SVOCs were not included as COCs at Site 18 and 24.

Seven pesticides and nine herbicides were also reported in groundwater at OU-1. All but one of the pesticides and one of the herbicides were reported in the first of two rounds of sampling. The OU-1 RI concluded that the presence of these organic compounds may be due to past and current agricultural activities. The RI also noted that the presence of these organic compounds may be due to the potable water drawn from fire hydrants used as source water for drilling since low levels of pesticides were reported in the hydrants' water. Based on the OU-1 evaluation, pesticides and herbicides were not considered COCs at Sites 18 and 24.

TDS and nitrate concentrations were also evaluated during the Phase I RI. Both parameters were reported at elevated concentrations throughout the shallow groundwater unit and principal aquifer (Figures 5-9 and 5-10). The concentrations varied with depth.

The highest TDS concentrations were in the shallowest (surface to 200 feet bgs: mean of 1,326 milligrams per liter [mg/L]) and deepest (greater than 650 feet: mean of 1,273 mg/L) portions of the aquifer system. The middle two depth intervals (200 to 650 feet bgs) had lower average TDS concentrations (853 to 932 mg/L).

Nitrate concentrations decreased with sampling depth. Nitrate concentrations above an upper screen depth of about 200 feet were about twice concentrations at the 200- to 400-foot depth interval (mean concentrations of 18.9 mg/L versus 8.21 mg/L). Nitrate concentrations below 650 feet were below the detection limit.

**Table 5-2**  
**Groups of VOCs Reported in Groundwater at Sites 18 and 24**

<b>Chemical Group</b>	<b>Site 18</b>	<b>Site 24</b>
<b>PCE/TCE</b>		
1,1-DCA	X	
1,2-DCA	X	X
1,1-DCE	X	X
1,2-DCE	X	X
1,1,2,2-PCA	X	
PCE	X	X
1,1,1-TCA	X	X
1,1,2-TCA	X	X
1,2-TCA	X	
TCE	X	X
Vinyl chloride	X	
<b>Carbon Tetrachloride</b>		
Carbon tetrachloride	X	X
Chloroform	X	X
Chloromethane (methyl chloride)	X	X
Methylene chloride (dichloromethane)	X	X
<b>Benzene</b>		
Benzene	X	X
Ethylbenzene	X	X
Styrene		X
Toluene	X	X
Xylenes	X	X
<b>Other</b>		
Acetone	X	X
2-Butanone		X
Carbon disulfide		X
Chlorobenzene	X	
1,2-Dichloropropane	X	
4-Methyl-2-pentanone		X
Trichlorofluoromethane (Freon 11)	X	

**Acronyms/Abbreviations:**

DCA - dichloroethane  
DCE - dichloroethene  
PCA - tetrachloroethane  
PCE - tetrachloroethene  
TCA - trichloroethane  
TCE - trichloroethene  
VOC - volatile organic compound

**5.3.4 Phase II Remedial Investigation**

The Phase II RI of Site 24 was designed to characterize the nature and extent of VOCs in soil and groundwater, collect data to be used for a baseline human-health risk assessment, and determine why the area of highest TCE concentrations in groundwater appeared to be separated from the vadose zone source.

**Vadose Zone Investigation**

The horizontal and vertical extent of VOCs in the vadose zone was characterized using Phase I and Phase II soil and soil gas analytical results. The results confirmed that, at the time of the RI, a primary TCE source area was present beneath Buildings 296 and 297. This source area extended vertically to groundwater directly beneath those buildings, with the highest concentrations near the water table. The trend of increasing concentration with depth suggested a depleting source at the surface, which is consistent with the end of TCE usage in approximately 1975.

The maximum concentration of TCE reported in soil during the Phase II RI was 190 micrograms per kilogram ( $\mu\text{g}/\text{kg}$ ), compared with a concentration of 400  $\mu\text{g}/\text{kg}$  during the Phase I investigation. TCE in soil gas was reported at concentrations up to 6,120  $\mu\text{g}/\text{L}$ . This exceeds the concentration in equilibrium with TCE-contaminated groundwater and indicates that an active mechanism existed to transfer TCE in the vadose zone to groundwater.

In addition to TCE, other chlorinated VOCs, such as PCE, carbon tetrachloride, and related organic chemicals, were also reported in soil at Site 24, but with less frequency and at much lower concentrations.

1, 1, 2-Trichloro-1, 2,2-trifluoroethane (Freon 113) had a soil gas volume nearly as large as that of TCE, but was not considered a threat to groundwater due to relatively low concentrations and toxicity.

**Groundwater Investigation**

Beneath Site 24, the VOC groundwater contamination was found to be limited to approximately the top 100 feet of the shallow groundwater unit. Most of the contamination is present in a VOC plume that extends from beneath Buildings 296 and 297 south to the Station boundary and northwest off-Station to approximately 3 miles from the Station boundary. Since strong vertical hydraulic gradients are absent, vertical migration of VOC is effectively impeded by the low permeability of the silt and clay layers that are present. As a result, VOC migration in the area of Site 24 is generally horizontal in a northwest direction along the more permeable sand beds (BNI 1997b).

The maximum areal extent of the VOC groundwater plume that requires remedial action is defined by any VOC reported above its federal or state MCL (i.e., 5  $\mu\text{g}/\text{L}$  in the case of TCE and PCE). Within the boundaries of Site 24, the VOC-contaminated groundwater appears to be confined to the shallow groundwater unit. As the groundwater contamination moves away from Site 24 and off-Station, it turns more westward and migrates to a greater depth in response to hydraulic gradients created by the pumping of principal aquifer agricultural wells.

Figure 5-11 shows the maximum areal extent of the VOC plume in the shallow groundwater unit. Figure 5-6 shows the vertical extent of VOC contamination in the shallow groundwater unit.

Most VOCs reported at Sites 18 and 24 during the Phase I and II RIs belong to one of the following three groups: a PCE/TCE group, a carbon tetrachloride group, or a benzene group (Table 5-2).

- Compounds in the PCE/TCE group are common constituents in industrial solvents. Breakdown products of the PCE/TCE group are formed by dechlorination of the parent compounds.
- Carbon tetrachloride is also a common industrial solvent. Dechlorination of carbon tetrachloride yields chloroform, dichloromethane, and chloromethane.
- Compounds in the benzene group are common fuel constituents. Although remedial action of fuel releases is being addressed under the California Leaking Underground Fuel Tank program, compounds in the benzene group are sporadically present within the regional VOC plume at very low concentrations.

Other VOCs were not grouped, either because there were no obvious relationships or because their detection frequencies were low. The following subsections summarize the results of groundwater sampling conducted during the Site 24 Phase II RI and during groundwater remediation pilot testing conducted at Site 24 between July 1997 and July 1998 (BNI 1998b).

**PCE/TCE Group.** During the Site 24 Phase II RI, TCE was reported in 38 of 62 groundwater samples collected. Of those samples with reportable concentrations, 35 exceeded the MCL of 5 µg/L. During the Site 24 groundwater remediation pilot testing, which was generally conducted within the TCE hot spot (defined as the plume area with TCE concentration greater than 500 µg/L), 119 HydroPunch groundwater samples were collected. Of those samples, 115 had reportable concentrations of TCE and 101 exceeded the MCL. The maximum reported concentration of TCE was 4,850 µg/L near Building 296.

PCE was reported in 10 of 62 groundwater samples analyzed during the Phase II RI. Of those samples, three exceeded the MCL of 5 µg/L. During pilot testing, PCE was reported in 53 of 119 HydroPunch samples of which 11 exceeded the MCL. The maximum reported concentration was 46.5 µg/L near the west side of Building 297.

Other related VOCs were also reported, generally in samples with much higher TCE concentrations.

**Carbon Tetrachloride Group.** Carbon tetrachloride was reported in 11 of 62 groundwater samples analyzed during the Phase II RI. Of those samples, all but one exceeded the MCL of 0.5 µg/L. During pilot testing, 37 of 119 samples had reportable concentrations and 27 exceeded the MCL of 0.5 µg/L. Chloroform, chloromethane, and methylene chloride were also reported in groundwater samples, but concentrations did not exceed MCLs.

**Benzene Group.** None of the compounds in the benzene group exceeded their respective MCLs.

### 5.3.5 Potential for DNAPL

Because solvents were formerly used at the Station in nonaqueous liquid phase as cleaning and degreasing agents, the potential for the existence of dense nonaqueous-phase liquid (DNAPL) at the site was investigated during the Phase I and Phase II RIs. Conclusions reached by both investigative teams were consistent: there is little evidence of DNAPL at Site 24. The VOC concentrations reported in soil, soil gas, and groundwater were

well below levels expected if an active DNAPL source were present at the site (U.S. EPA 1991a).

### 5.3.6 Vadose Zone Remediation

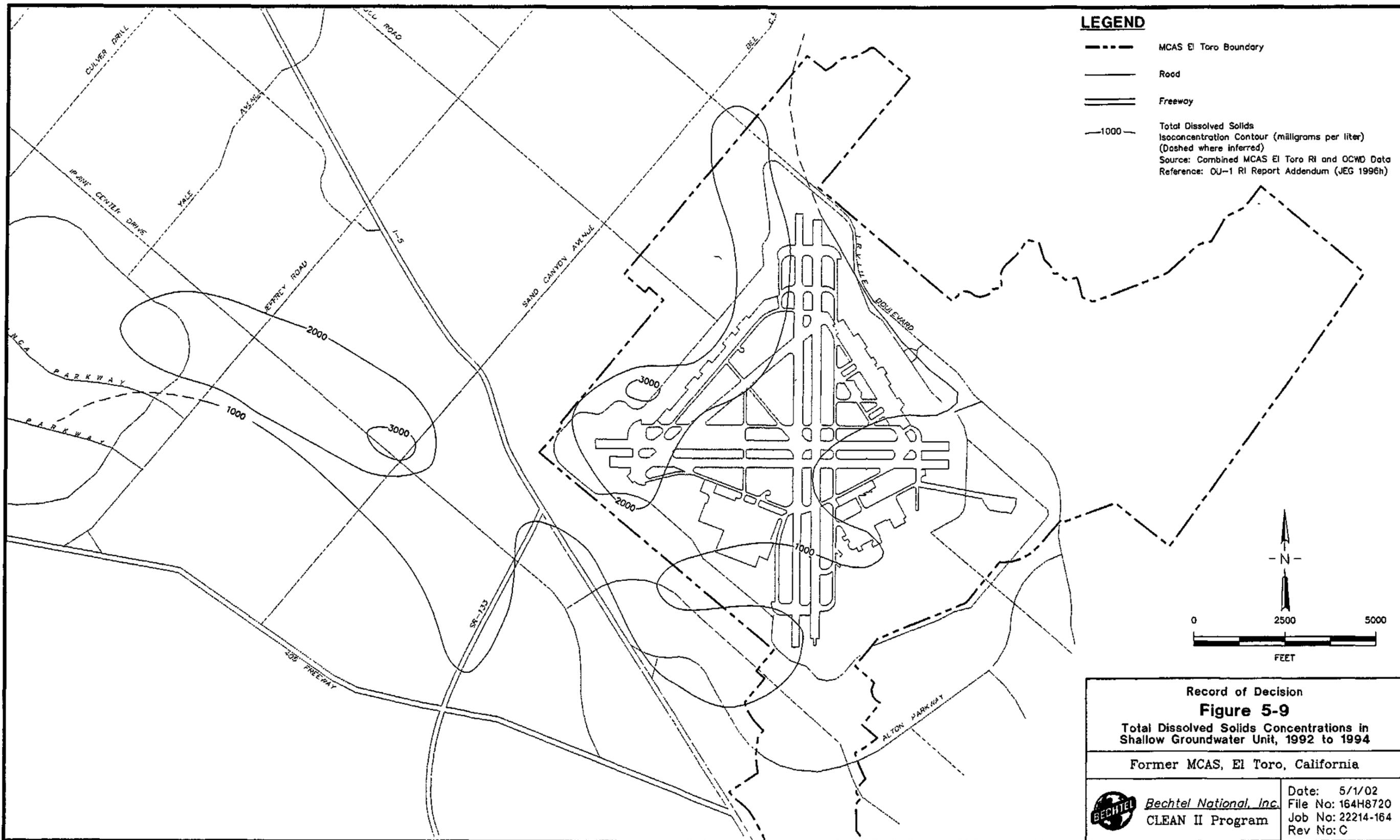
Calculations performed during the Phase II RI showed that the concentrations of VOCs present in deeper subsurface soil at Site 24 were high enough to contaminate groundwater to levels above drinking water standards. For this reason, the following remedial action objectives were developed for the vadose zone:

- Reduce concentrations of VOCs in the VOC source areas to prevent or minimize further degradation of the shallow groundwater unit above the MCLs for drinking water.
- Continue vadose zone remediation until VOC soil gas concentrations are below the established threshold concentrations (concentrations capable of contaminating the shallow groundwater unit above the MCLs).

Table 5-3 presents the threshold concentrations (cleanup goals) for the predominant VOCs present in soil at Site 24.

Alternatives for remediation of the vadose zone were presented in the Phase II FS Report (BNI 1997c). The preferred alternative used a central SVE treatment system that had been successfully used to remediate VOCs at Norton AFB. SVE pilot tests were successfully performed in 1996, and SVE was selected for vadose zone remediation in an interim ROD that was finalized in September 1997 (SWDrV 1997a). Transfer and installation of the SVE system used at Norton AFB was completed in 1998. In January 1999, the remedial design for the SVE system was completed and operational testing of the central treatment system remediation equipment began. Actual remedial action started in March 1999 with the use of portable SVE systems to extract VOCs from existing SVE wells. The central treatment system operation and installation of the initial phase of additional SVE wells and the associated vapor conveyance piping began in May 1999.

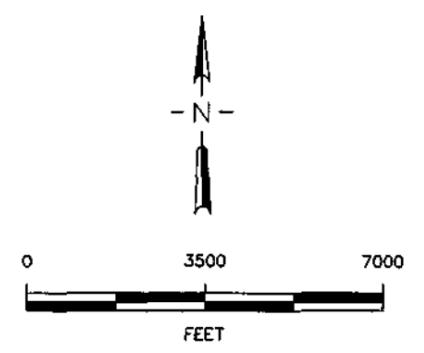
By the end of 1999, significant progress had been made in remediating the vadose zone, and vapor concentrations in all the SVE wells were below the soil gas cleanup (threshold) levels. Rebound testing of existing SVE wells and installation of supplemental SVE wells (to confirm that soil gas cleanup goals had been achieved throughout the soil gas plume) were completed in April 2000. Table 5-4 summarizes the total mass of VOCs extracted. In June 2001, a draft closure report for soil at Site 24 was issued (Earth Tech 2001d). This report is expected to be finalized in spring 2002. Remediation of soil at Site 24 will be discussed further in the final ROD for the Site 24 vadose zone.



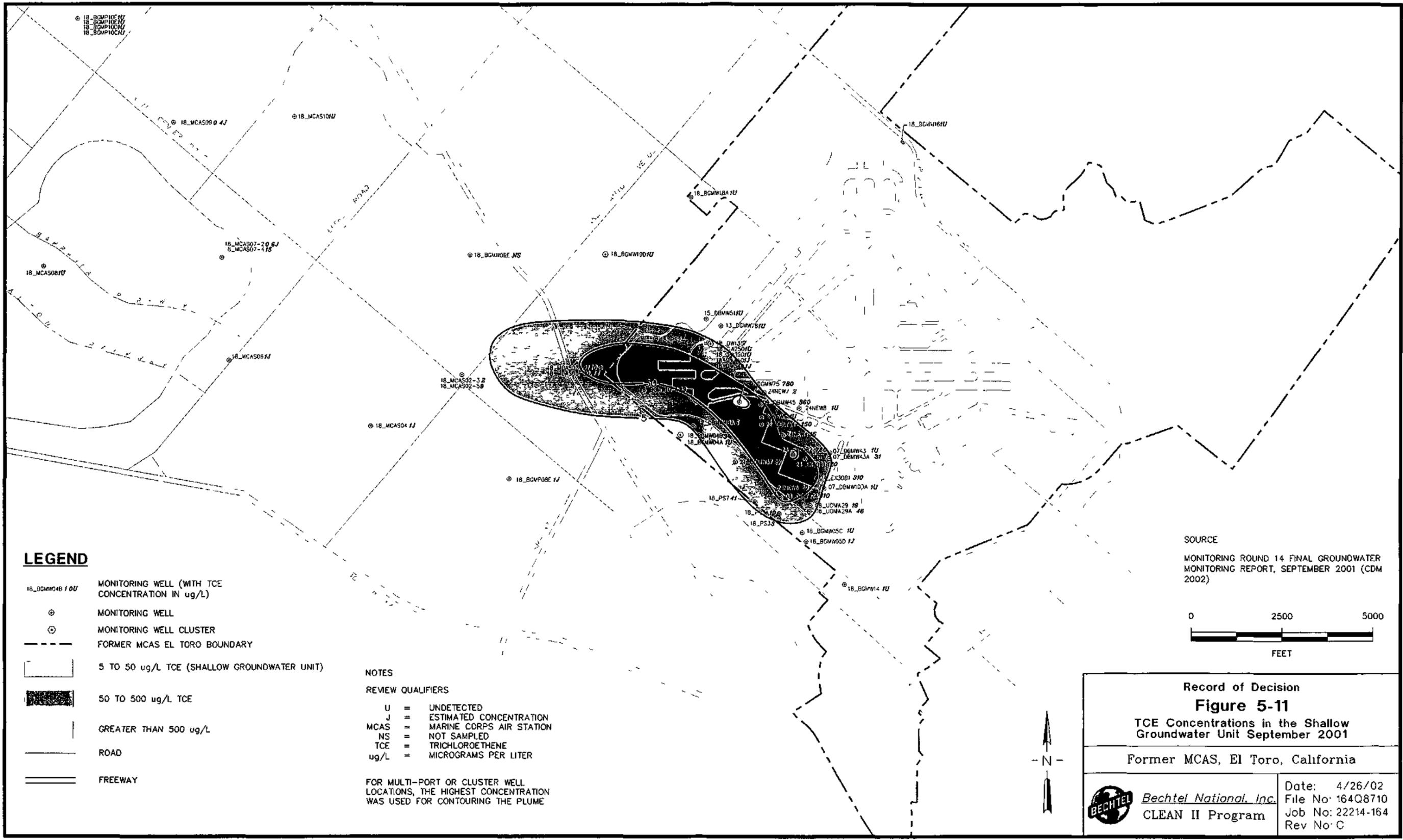


**LEGEND**

- MCAS EL TORO BOUNDARY
- ROAD
- == FREEWAY
- 1000— TOTAL DISSOLVED SOLIDS ISOCONCENTRATION CONTOUR (MILLIGRAMS PER LITER) (DASHED WHERE INFERRED)  
SOURCE: COMBINED MCAS EL TORO RI AND OCWD DATA  
REFERENCE: OU-1 RI REPORT ADDENDUM (JEG 1996h)
- 1000— TOTAL DISSOLVED SOLIDS ISOCONCENTRATION CONTOUR (MILLIGRAMS PER LITER)  
SOURCE: OCWD (1995)  
REFERENCE: OU-1 RI REPORT ADDENDUM (JEG 1996h)



<p>Record of Decision  <b>Figure 5-10</b>          Total Dissolved Solids Concentrations in          Principal Aquifer, 1992 to 1994</p>	
<p>Former MCAS, El Toro, California</p>	
	<p><i>Bechtel National, Inc.</i>          CLEAN II Program</p>
<p>Date: 6/18/02          File No: 164H8721          Job No: 22214-164          Rev No: E</p>	



**Table 5-3**  
**Vadose Zone Cleanup Goals (in micrograms per liter)**

VOC	U.S. EPA MCL	Cleanup Goal (Soil Gas)	Highest Soil Gas Concentration Reported
Trichloroethene	5	27	6,120
Tetrachloroethene	5	69	192
Carbon tetrachloride	0.5*	61	31
1,1-Dichloroethene	6	563	447
Freon 113	1,200*	234,000	2,520

Note:

\* California MCL

Acronyms/Abbreviations:

Freon 113- 1,1,2-trichloro-1,2,2-trifluoroethane

MCL - maximum contaminant level

U.S. EPA - United States Environmental Protection Agency

VOC - volatile organic compound

**Table 5-4**  
**Mass of VOCs Removed During Vadose Zone Remediation at Site 24**

Remediation Phase	Dates	Mass (lbs)*	Remarks
Mass of VOCs removed during pilot scale testing	4/95 - 5/98	1,439	Mass estimates are based on amounts stated in the draft final Engineering Design Report (BNI 1998a).
Mass of VOCs removed by portable SVE units	6/98- 12/98	74	Mass estimates are based on data provided by OHM.
Mass of VOCs removed by central treatment system	5/99- 9/00	283	Mass estimates are based on treatment system inlet concentrations.
Mass of VOCs removed by portable SVE units	1/99- 9/00	193	Mass estimates are based on treatment system inlet concentrations.
<b>Total</b>		<b>1,989</b>	

Note:

\* total mass of VOCs extracted is assumed to equal the total mass of primary contaminants (TCE, Freon, 1,1-DCE, and PCE) extracted

Acronyms/Abbreviations:

BNI - Bechtel National, Inc.

DCE - dichloroethene

lb- pound

OHM - OHM Remediation Services Corp.

PCE - tetrachloroethene

SVE - soil vapor extraction

TCE - trichloroethene

VOC - volatile organic carbon

### 5.3.7 Preliminary Assessment of Building 307

Building 307 is located in the southwest portion of Site 24 and is reported to have been a former dry cleaning plant.

In September 2001, the DON conducted a preliminary assessment at Building 307 to identify and characterize the possible presence of VOCs in soil gas, soil, and groundwater as a result of historical dry cleaning operations (Earth Tech 2001c). The purpose of the preliminary assessment was to determine whether releases had occurred at the building or along the sewer segment from Building 307 to the former industrial wastewater treatment plant. The primary constituents of concern were PCE, TCE, dichloroethene (DCE), and carbon tetrachloride.

The following samples were analyzed for VOCs: 84 shallow soil gas samples collected (between 5 and 15 feet bgs) in and around Building 307 and along the adjacent sewer line; 14 deep soil gas samples collected (between 15 and 90 feet bgs) at Building 307 and along the adjacent sewer line; 6 soil samples collected (between 15 and 25 feet bgs) in and around Building 307 and along the sewer line segment running from Building 307 to the former industrial wastewater treatment plant; and 3 HydroPunch groundwater samples collected (at approximately 100 feet bgs) upgradient, next to, and downgradient of Building 307.

VOCs in excess of the 1 µg/L detection limit were reported in 4 of the 76 shallow soil gas samples submitted to the on-site mobile laboratory. At these locations, Freon 113 was reported at 1.4 µg/L (10 feet bgs) and 4.6 µg/L (15 feet bgs), total xylenes at 1.9 µg/L (5 feet bgs), toluene at 1 µg/L (5 feet bgs), and dichlorodifluoromethane (Freon 12) at 130 µg/L (15 feet bgs). In addition, analyses of eight shallow soil gas duplicate samples conducted at a fixed-base laboratory reported concentrations less than 1 µg/L. These compounds, in addition to having relatively low reported concentrations, were not the primary constituents of concern for this investigation.

VOCs in excess of the 1 µg/L detection limit were reported in 5 of the 12 deep soil gas samples submitted to the on-site mobile laboratory. At these locations, 1,1-DCE was reported at 4.6 µg/L (60 feet bgs); and TCE at 5.0 µg/L (56.6 feet bgs), 2.6 µg/L (42 feet bgs), 7.8 µg/L (66 feet bgs), and 5.9 µg/L (90 feet bgs). However, analyses of two deep soil gas duplicate samples conducted at a fixed-base laboratory reported concentrations of TCE at 10.0 µg/L and Freon 113 at 14.0 µg/L in one of the duplicates at 66 feet bgs.

None of the soil samples collected had concentrations of VOCs above the reporting limit.

TCE was also reported in all three of the HydroPunch samples at concentrations ranging from 4.1 µg/L (100 feet bgs) to 8.4 µg/L (105 feet bgs). These concentrations are of the same order of magnitude as concentrations reported in the basewide plume that also extends beneath the building.

The preliminary assessment of Building 307 confirmed the Site 24 RI conclusions that there has not been a significant release to the environment at Building 307 or along the sewer line segment between the building and the former industrial wastewater treatment plant due to past dry cleaning operations.

### 5.3.8 Aquifer Testing and Air-Sparging Pilot Tests

Aquifer and air-sparging pilot tests were performed as part of the Phase II groundwater FS. The aquifer tests were performed to evaluate the hydraulic characteristics of the shallow groundwater unit, including radius of influence and sustainable extraction and injection rates (BNI 1996c). Groundwater extraction and injection tests were also conducted to help evaluate remedial technologies described in the OU-1 Interim-Action Feasibility Study (IAFS) Report (JEG 1996b) and the OU-2A FS Report (BNI 1997b). The OU-1 IAFS assumed that

extraction and injection wells screened across the shallow groundwater unit would be able to sustain 40 gpm. Aquifer testing was designed, in part, to test this assumption.

Aquifer pumping, recovery, and injection tests indicated hydraulic conductivity values ranging from 4.3 to 10.1 feet per day at Site 24 and between 11.1 and 15.3 feet per day at two locations near the southwestern corner of the Station. Radius-of-influence estimates ranged from 80 to 215 feet. Extraction and injection rates were in the range of 15 gpm, although step tests indicated that an injection rate of 25 gpm might be possible.

The air-sparging pilot test was conducted to determine whether air sparging would be effective in transferring VOCs in groundwater from a liquid to a vapor form, in which they could be captured in the vadose zone using SVE. The pilot test showed that VOC concentrations in groundwater did decline but that the air-sparging radius of influence was limited, suggesting a short circuit for airflow in the aquifer. Because airflow could not be effectively controlled in the subsurface, the pilot-test report concluded that sitewide implementation of air sparging would be problematic because of the heterogeneities in the aquifer. The results of the pilot test allowed the DON to eliminate air-sparging as a potential remedial technology for groundwater at Site 24.

### **5.3.9 Groundwater Remediation Pilot Testing**

Groundwater remediation pilot testing at Site 24 was performed between June 1997 and July 1998. The pilot test collected additional data to assist in the design of a remedial alternative capable of minimizing VOC migration within the shallow groundwater unit and also from the shallow groundwater unit to the principal aquifer. The pilot tests evaluated standard and vacuum-enhanced groundwater extraction and groundwater injection based on their effectiveness to remediate or contain VOCs in groundwater.

Five extraction wells and two injection wells were tested. Extracted groundwater was treated with activated carbon to remove VOCs before being injected back into the aquifer.

The sustained well yields of the extraction and injection wells were estimated using step-drawdown or step-building testing before beginning the pilot testing. Extraction wells were pumped for 1 to 2 weeks using standard pumping and from 1 to 3 weeks with vacuum-enhanced pumping. An extended test at one extraction well was conducted for approximately 5 months. Approximately 6.4 million gallons of groundwater was extracted from the wells, which removed about 28 pounds of TCE from groundwater. Approximately 63 pounds of TCE was removed as vapor during the vacuum-enhanced portion of the test.

### **5.3.10 Perchlorate Evaluation**

In December 1997, perchlorate was identified at low concentrations ( $< 8 \mu\text{g/L}$ ) in groundwater downgradient from Former MCAS El Toro during sampling conducted by OCWD (Earth Tech 2001a). The reported concentrations were below the California PAL of  $18 \mu\text{g/L}$  and the U.S. EPA action level of  $32 \mu\text{g/L}$ . (The California PAL of  $18 \mu\text{g/L}$  was established in 1997. As of January 2002, the California PAL for perchlorate is  $4 \mu\text{g/L}$ .) HydroPunch samples were collected between 26 January and 09 March 1998 to further evaluate the presence of perchlorate at Former MCAS El Toro. Although perchlorate was reported at concentrations from 4 to  $23 \mu\text{g/L}$ , the concentrations of all but one sample were  $12 \mu\text{g/L}$  or less.

In October 1998, January-February 1999, and July-August 1999, Stationwide perchlorate sampling was performed concurrently with groundwater monitoring to assess the presence and concentration of perchlorate in groundwater throughout Former MCAS El Toro. The results of sampling conducted at the Sites 18 and 24 wells are summarized in Table 5-5. The table shows that perchlorate was detected sporadically and at generally low concentrations ( $< 12 \mu\text{g/L}$ ) at the site. For this reason, perchlorate is not considered a COC at Site 18.

### 5.3.11 Groundwater Monitoring

Routine groundwater monitoring has been conducted at Former MCAS El Toro since 1992. The latest published monitoring reports are those from Round 14 conducted in September 2001 (CDM 2002). Round 14 included VOC analysis for all groundwater samples collected from Sites 18 and 24. During Round 14, two groundwater samples from Site 24 were also submitted for analysis of general chemistry parameters. The results are summarized below. Figure 5-5 illustrates the estimated vertical extent of the plume. Figure 5-6 shows the estimated horizontal extent of the plume (CDM 2002).

#### Site 18

Sixteen of the monitoring wells/ports in the principal aquifer unit at Site 18 were monitored during Round 14. VOCs identified in Site 18 samples included TCE, PCE, 1,2-DCE, carbon disulfide, chloroform, styrene, vinyl chloride, and dichlorodifluoromethane. In general, the concentrations and distribution of VOCs identified in the principal groundwater aquifer were similar to those levels of VOCs measured during previous rounds (CDM 2002).

TCE continued to be the analyte most frequently reported above the detection limit in 7 of the 16 Site 18 wells. Reported concentrations were from 1 µg/L to 15 µg/L, with two samples reporting TCE concentrations (15 µg/L in 18\_MCAS07-4 and 9 µg/L in 18\_MCAS02-5) above the MCL (5 µg/L). All other VOC concentrations were reported below their MCLs (CDM 2002).

#### Site 24

Forty-six of the monitoring wells/ports in the shallow groundwater unit at Site 24 were monitored during Round 14. VOCs identified in Site 24 samples included TCE, PCE, 1,1-DCE, 1,2-DCE (total), carbon disulfide, carbon tetrachloride, chloroform, 1,2-dichloropropane, 1,1,2-trichloroethane (TCA), styrene, and Freon 113. In general, the concentrations and distribution of VOCs identified in the shallow groundwater unit were similar to the concentrations of VOCs reported during the previous round. With the exception of TCE, PCE, 1,2-DCE (total), carbon tetrachloride, and 1,1-DCE, the reported concentrations were below their respective MCLs (CDM 2002).

TCE continues to be the most frequently reported analyte in samples collected from the Site 24 wells. Two samples collected from Site 24 were reported to have TCE concentrations that exceeded 500 µg/L: 780 µg/L in a sample from well 09\_DGMW75 and 760 µg/L in a sample from well 24\_EX60B2. These concentrations are similar to those previously reported in the same wells. The concentration of TCE at well 09\_DGMW45, located near the source area, decreased from the previous round (from 580 µg/L to 360 µg/L). The decrease in TCE concentration near the source area may be due to the effectiveness of the SVE system installed and operated between May 1999 and January 2000 at Site 24 and an elevated level of precipitation during the few months prior to sampling.

PCE was reported in samples collected from 16 Site 24 monitoring wells during Round 14. Five of these wells had concentrations of PCE at or above the MCL of 5 µg/L, with a maximum concentration of 30 µg/L reported from well 12JDBMW48A.

1,2-DCE was reported in samples from eight wells at Site 24. Concentrations of cis-1, 2-DCE have remained stable over time. Only the sample from well 18\_MCAS03-2 had a concentration of cis-1, 2-DCE (9 µg/L) above the MCL (6 µg/L).

**Table 5-5**  
**Perchlorate Sampling Results for Wells at Sites 18 and 24 (in micrograms per liter)**

Well	October 1998 Result	April-May 1999 Result	July-August 1999 Result
07_DBMW100	6	6	5
09_DBMW45	< 4	NA	NA
09_DBMW75	< 4	10	9
18_BGMP06D	4	4	7
18_BGMP06E	< 4	NA	NA
18_BGMP08D	< 4	NA	NA
18_BGMP10F	< 4	NA	NA
18_BGMW05D	< 4	NA	NA
18_BGMW101	7	5	6
18_BGMW16	< 4	NA	NA
18_BGMW17	< 4	NA	NA
18_BGMW18	< 4	NA	NA
18_BGMW19D	< 4	NA	NA
18_BGMW24	< 4	NA	NA
18_DW135	13	11	12
18_MCAS01-1	< 4	NA	NA
18_MCAS01-3	< 4	NA	NA
18_MCAS01-5	< 4	4	< 4
18_MCAS01-6	< 4	NA	NA
18_MCAS02-1	< 4	NA	NA
18_MCAS02-3	< 4	NA	NA
18_MCAS02-4	< 4	2	3.3
18_MCAS03-1	< 4	NA	NA
18_MCAS03-2	10	NA	7.7
18_MCAS03-3	< 4	NA	NA
18_MCAS03-4	< 4	NA	NA
18_MCAS07-2	< 4	NA	NA
18_MCAS07-3	< 4	NA	NA
18_MCAS07-4	< 4	NA	NA
18_MCAS10	< 4	NA	NA
19_DGMW86	13	NA	NA
21_DGMW90	6	5	6
24NEW4	< 4	7	5
24NEW8	< 4	NA	NA

Source: Final Technical Memorandum Verification of Perchlorate at IRP Site 1, Explosive Ordnance Disposal Range (Earth Tech 2001a)

Acronym/Abbreviation:

NA - not applicable

Carbon tetrachloride was identified in samples from ten monitoring wells at or above the MCL of 0.5 µg/L. The maximum concentration of 28 µg/L was reported at well 18\_DW135.

1,1-DCE was reported in samples from eight monitoring wells during Round 14. Two of wells had concentrations of 1,1-DCE above the MCL of 6 µg/L, with a maximum concentration of 14 µg/L (estimated) reported at well 09\_DBMW45.

During Round 14, two groundwater samples from Site 24 were also submitted for analysis of general chemistry parameters. The general chemistry analyses included major anions (chloride, sulfate, nitrate/nitrite-N, carbonate, bicarbonate, and alkalinity) and TDS. Elevated chloride, nitrate/nitrite-H, sulfate, and TDS (above the primary MCL [nitrate/nitrite-N] and secondary MCLs [chloride, sulfate, and TDS]) were reported in both groundwater samples. General chemistry parameter results were consistent with previous results.

### 5.3.12 Radionuclide Evaluation

In 2001, a radionuclide evaluation was performed for groundwater throughout the Station (Earth Tech 2001b). The evaluation was designed to use analytical methods sensitive enough to determine conclusively whether the radionuclides present in groundwater at from Former MCAS El Toro are naturally occurring. Key factors in the evaluation were determining if the ratio of uranium<sup>238</sup> to uranium<sup>235</sup> is within naturally occurring limits and assessing whether isotopic strontium<sup>90</sup> (a man-made isotope) is present in groundwater. The evaluation was conducted in concert with OCWD; field activities were conducted by DON contractors and observed by OCWD representatives. Groundwater samples were collected from 23 monitoring wells, including 9 wells associated with Sites 18 and 24, and analyzed for the following constituents:

- tritium and stable isotopes
- uranium isotopes
- radionuclides
- general chemistry parameters

Samples collected for analysis of the uranium<sup>238</sup> to uranium<sup>235</sup> ratio and hydrogen, oxygen, and tritium isotopes were submitted to GeoChron Laboratories in Cambridge, Massachusetts. Samples collected for analysis of gross alpha, gross beta, radium<sup>226</sup>, radium<sup>228</sup>, strontium<sup>90</sup>, americium<sup>241</sup>, and general chemistry parameters were submitted to Paragon Analytical Laboratories in Fort Collins, Colorado. Split samples were also collected from each well on behalf of the OCWD for analysis of uranium<sup>235</sup>, uranium<sup>236</sup>, and uranium<sup>238</sup> at Lawrence Livermore National Laboratory (LLNL) in Livermore, California, using different analytical methods.

Laboratory analyses performed by GeoChron Laboratories and LLNL showed that the ratio of uranium<sup>238</sup> to uranium<sup>235</sup> in groundwater at Former MCAS El Toro is consistent within naturally occurring concentrations of these isotopes. Strontium<sup>90</sup> was not reported above detection limits. Both of these results confirmed that there is no evidence of anthropogenic radionuclides in the groundwater at Former MCAS El Toro. On the basis of these results, the DON concluded that radionuclides are not COCs at Former MCAS El Toro and that no further evaluation of the origin of the radionuclides in groundwater is warranted. The BCT concurred with these conclusions.

## 5.4 ROUTES OF EXPOSURE

Figure 5-12 illustrates the routes of exposure for VOC contamination at Site 24. Due to the depth of the shallow groundwater unit at Site 24 and the principal aquifer in the area of Site 18, exposure to VOC-contaminated groundwater is expected to occur only if the groundwater is brought to the surface for potable or nonpotable uses.

Currently, groundwater in the region of Former MCAS El Toro is not used for drinking water purposes. The nearest drinking-water well (Tustin Walnut Well) is 2.5 miles away from the leading edge of the TCE plume (this well is not located downgradient of the existing TCE plume). The nearest downgradient drinking-water well (Dyer Road Well #3) is 3.2 miles away from the leading edge of the plume. One on-Station well and eight off-Station active agricultural wells are found in the vicinity of Former MCAS El Toro. The agricultural wells

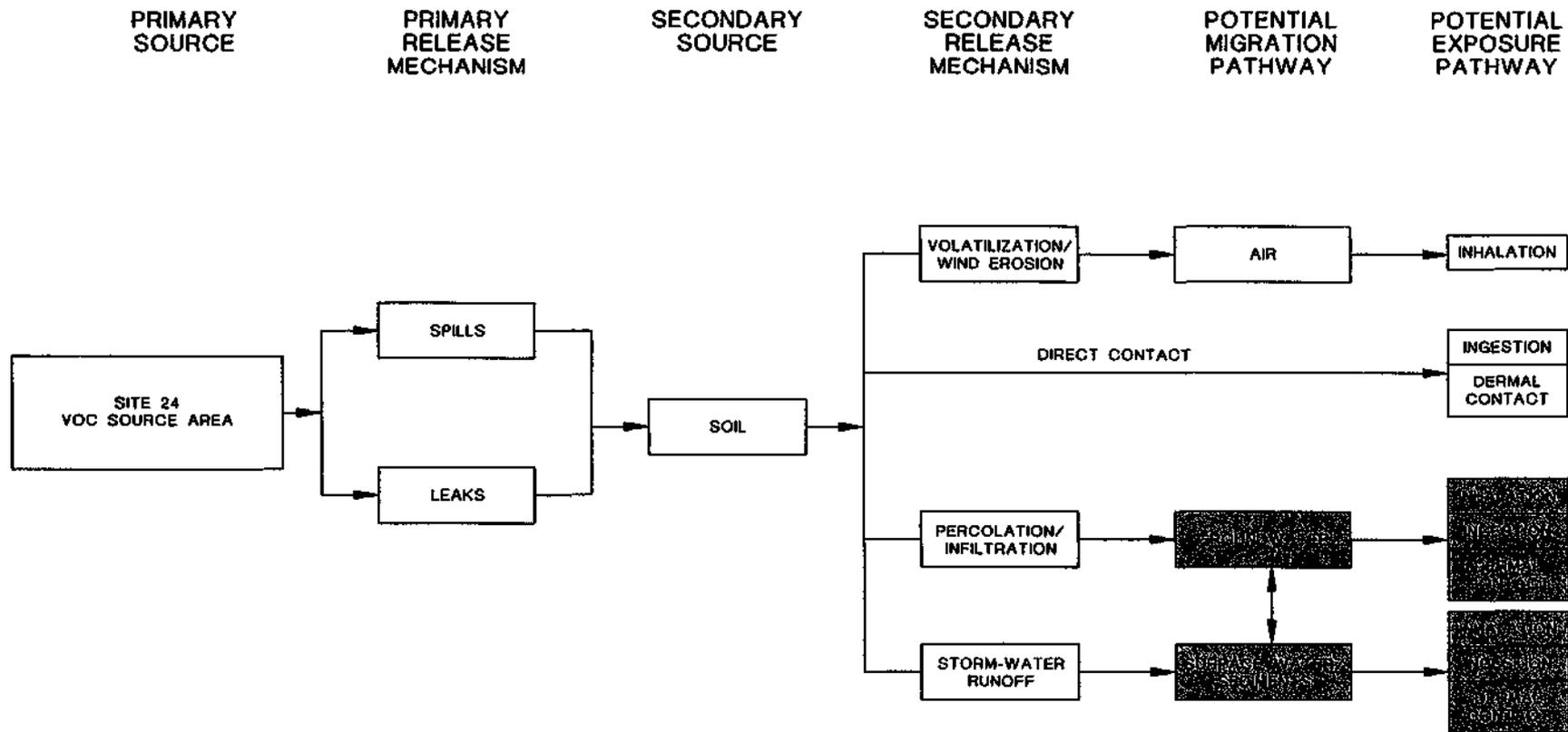
are screened in the principal aquifer. The on-Station well does not extract VOC-contaminated groundwater because VOC contamination is not present in the principal aquifer on-Station. Current and future off-Station agricultural workers could be exposed to COCs in groundwater through dermal absorption and inhalation of VOCs. It is not considered plausible that on-Station agricultural workers could be exposed to VOCs in groundwater because agricultural wells are not screened in the shallow groundwater unit, where VOC contamination is present on-Station. It is also not likely that agricultural wells would be screened in the shallow groundwater unit in the future because of the lower yield and higher TDS and nitrate concentrations present in the shallow groundwater unit.

Groundwater in the OU-1 area is also used to supply North Lake, which is located in the Irvine community of Woodbridge. The lake is used for recreation, including boating, sailing, fishing, and wading. Groundwater samples collected from supply well 18\_NLAKE have contained TCE and cis-1, 2-DCE at low concentrations that do not present a risk to people using the lake (see Section 7.1.5.4). The highest concentration of TCE reported was 9 µg/L, which exceeds the MCL (5 µg/L). The highest concentration of cis-1, 2-DCE was 1.6 µg/L, which is less than the MCL.

Currently, there are no complete exposure pathways to receptors from groundwater at Site 24 because groundwater beneath this site is not being used for potable purposes or for irrigation.

## 5.5 MASS OF TCE

The mass of TCE in groundwater was estimated during the Phase I RI to be approximately 3,630 pounds in the principal aquifer at Site 18 and 4,950 pounds in the shallow groundwater unit at Site 24 (JEG 1996f). The mass of TCE in the shallow groundwater unit was refined during the Phase II RI to be 2,080 pounds (BNI 1997c).




 SHADED AREA DENOTES EXPOSURE PATHWAYS AT SITE 18

SOURCE: OU-3A REMEDIAL INVESTIGATION REPORT

Record of Decision <b>Figure 5-12</b> Potential Routes of Exposure Sites 18 and 24	
Former MCAS, El Toro, California	
 <b>Bechtel National, Inc.</b> CLEAN II Program	Date: 4/23/02 File No: 164C8200 Job No: 22214-164 Rev No: B

## Section 6

# CURRENT AND POTENTIAL FUTURE LAND AND RESOURCE USES

This section summarizes the current and potential future land and resource uses at Sites 18 and 24.

## 6.1 CURRENT LAND USE

Former MCAS El Toro is bordered on the south and west by the city of Irvine and on the north and east by unincorporated lands. The local jurisdictions do not have authority over federal lands. Former MCAS El Toro encompasses about 4,738 acres of which approximately 1,000 acres are designated as outleased lands that are not available for development because of airfield safety clearances. The outleased lands are along the perimeter of the Station and are used for agricultural purposes, including landscape nurseries, livestock grazing, and crop production.

Former MCAS El Toro provided materials and support for aviation activities of the Marine Corps until it was closed in July 1999. Environmental compliance and restoration activities have continued since Station closure, and a caretaker staff will remain at the Station until property transfer is complete.

During operations, land use on Former MCAS El Toro consisted of a few general types. General Station land uses are described below for the following four quadrants, as defined by the bisecting north-south and east-west runways.

- The northwestern quadrant consisted of the Former MCAS El Toro headquarters, administrative services, family and bachelor housing, and community support services.
- The northeastern quadrant consisted of Marine Aircraft Group activities (e.g., training, maintenance, supply and storage, and airfield operations), family housing, community support services, and ordnance storage in areas isolated by topographic relief and distance from other developments.
- The southeastern quadrant consisted of administrative services, maintenance facilities, ordnance storage, and the golf course.
- The southwestern quadrant consisted of aircraft maintenance facilities, supply and storage facilities, and limited administrative services.

Site 24 is located in the southwestern quadrant of Former MCAS El Toro. The site is highly industrialized and contains two large aircraft hangars (Buildings 296 and 297) and several smaller buildings that were used for aircraft and vehicle maintenance and repair.

Historically, land use around Former MCAS El Toro has been largely agricultural. However, land to the south, southeast, and southwest has been developed over the past 10 to 15 years for commercial, light industrial, and residential uses. Currently, expanding commercial areas adjoin the Station and additional residential areas are located to the northwest and west. Adjacent land to the northeast and northwest is used for agriculture.

Site 18 extends from the boundary of Site 24 approximately 3 miles to the west beneath the city of Irvine. Land above the Site 18 groundwater plume is generally used for agricultural, residential, and commercial purposes.

## 6.2 FUTURE LAND USE

Former MCAS El Toro was closed on 02 July 1999. A community reuse plan was prepared and submitted to the DON in 1996 (P&D Consultants Team 1996). The reuse plan proposed to use Former MCAS El Toro for a commercial airport as well as for other public uses including schools, parks, wildlife refuges, golf courses, homeless services, and commercial/light-industrial uses. The 1996 plan was refined by the 1999 Airport System Master Plan, which incorporated airport planning activities that resulted in some land use areas being redefined. The DON and the Federal Aviation Administration are evaluating this proposed reuse of Former MCAS El Toro and other alternatives in their joint environmental impact statement (DON 2000). The proposed reuse for Site 24 is industrial (cargo).

## 6.3 GROUNDWATER USES

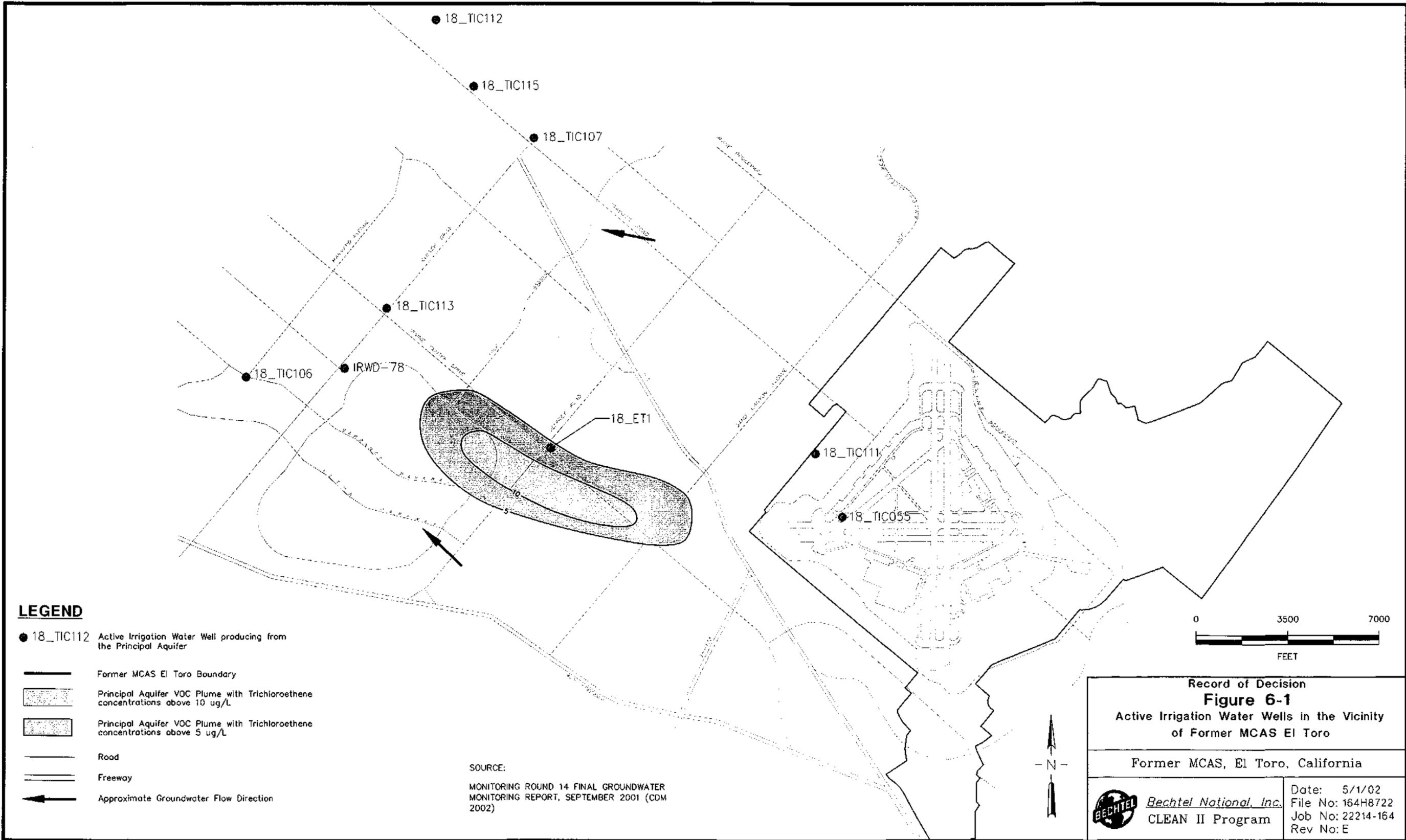
Former MCAS El Toro lies within the Irvine Forebay I Groundwater Subbasin (Irvine Subbasin) (Figure 5-1), which has been designated by RWQCB Santa Ana Region as a public water supply source (RWQCB 1995). The regional aquifer at Sites 18 and 24 is not currently a source of municipal drinking water because of widespread elevated concentrations of TDS and nitrates that exceed water quality standards; however, groundwater near the Station is used for agriculture. On-Station irrigation well 18\_TIC055, at the western end of the east-west runway, is connected to the regional irrigation distribution system. Eight other irrigation wells are located in the vicinity of the Station (Figure 6-1). Well 18\_TIC055 is screened in the principal aquifer upgradient of the principal aquifer VOC plume and, because of its upgradient location, does not extract groundwater from the principal aquifer VOC plume. Well 18ET1 extracts water from an area within the TCE plume. Although a risk assessment performed by OCWD in 1986 showed that the water from this well does not represent an unacceptable human-health risk, the extracted groundwater is treated using air stripping to remove VOCs before it is discharged for irrigation (JEG 1996c).

The nearest drinking-water well (Tustin Walnut Well) is located at the intersection of Redhill and Walnut, approximately 2.5 miles from the leading edge of the TCE plume; however, the well is not hydraulically downgradient of the plume. The nearest downgradient drinking-water well (Dyer Road Well #3) is 3.2 miles from the leading edge of the plume (JEG 1996a). In addition, the IRWD plans to acquire well 18JTIC106, located approximately 1 mile from the leading edge of the plume, as a drinking-water well. Figure 6-1 shows the groundwater flow direction as well as the locations of these wells.

The selected remedy discussed in this ROD will treat contaminated groundwater at Sites 18 and 24 to remove VOCs and then use the treated groundwater for reclaimed water purposes (e.g., irrigation, industrial water). Groundwater will be treated at the Irvine Desalter Project (IDP) central treatment facility. The IDP is a water supply development project initiated by the OCWD in conjunction with the IRWD. The priorities of the IDP are to:

- extract and treat groundwater to develop a drinking-water supply from the principal aquifer outside the VOC plume at the following well locations (IRWD 110 [formerly 18\_T110], 75, 76, and 77); intercept, contain, and treat groundwater with high concentrations of TDS and nitrates; and
- accept and treat for VOC removal the groundwater that the Marine Corps/DON must remediate and use in IRWD's nonpotable water system.

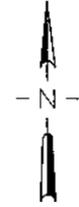
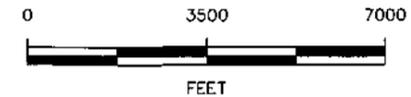
The IDP is a local project prompted by a 1984 regional groundwater study that showed inorganic constituents, mainly TDS and nitrates, were migrating from the Irvine area toward the main portion of the Orange County



**LEGEND**

- 18\_TIC112 Active Irrigation Water Well producing from the Principal Aquifer
- Former MCAS El Toro Boundary
- ▨ Principal Aquifer VOC Plume with Trichloroethene concentrations above 10 ug/L
- ▨ Principal Aquifer VOC Plume with Trichloroethene concentrations above 5 ug/L
- Road
- Freeway
- ← Approximate Groundwater Flow Direction

SOURCE:  
 MONITORING ROUND 14 FINAL GROUNDWATER  
 MONITORING REPORT, SEPTEMBER 2001 (CDM  
 2002)



Record of Decision <b>Figure 6-1</b> Active Irrigation Water Wells in the Vicinity of Former MCAS El Toro	
Former MCAS, El Toro, California	
Bechtel National, Inc. CLEAN II Program	Date: 5/1/02 File No: 164H8722 Job No: 22214-164 Rev No: E

groundwater basin (Banks 1984). The Irvine area's relatively poor quality of groundwater is mostly attributable to local geology and agricultural practices. After later studies identified VOCs, primarily TCE, in area groundwater, the IDP was modified to address VOCs in addition to TDS and nitrates.

The IDP is being designed to meet all federal and state drinking-water standards. The OCWD and IRWD have entered into an agreement that covers design, construction, operation, and funding of the project. The OCWD is responsible for the planning, right-of-way acquisition, design, and construction of project facilities, with full participation by IRWD. IRWD will operate the project facilities.

In June 2001, the DON and the Department of Justice (DOJ), on behalf of the Marine Corps, OCWD, and IRWD reached an agreement on how the IDP could fulfill the DON's obligation to remediate VOCs while achieving the OCWD and IRWD objectives of treating groundwater containing high concentrations of TDS and nitrates to provide a drinking- and reclaimed-water supply from the principal aquifer. A settlement agreement apportioning costs for the IDP components was signed by the OCWD on 13 June 2001, by IRWD on 19 June 2001, by the DON on 18 July 2001, and by DOJ on 07 September 2001. This settlement agreement is contingent upon regulatory agency concurrence with the DON's selected remedy described in this ROD. As discussed in Section 9, the DON's selected remedy uses the IDP as the key component of the groundwater treatment system for VOC removal at Sites 18 and 24.

## Section 7

# SUMMARY OF BASELINE RISKS

Baseline risk assessments provide an evaluation of the potential threat to human health and the environment in the absence of any remedial action. They provide the basis for determining whether remedial action is necessary and the justification for performing remedial actions (U.S. EPA 1988, 1991b). Baseline human-health risk assessments (HHRAs) were conducted for Site 18 using data collected during the Phase I RI and for Site 24 with data from the Phase I and II RIs. The HHRA methodology for Site 18 is described in Volume II of the draft final OU-1 Interim Action RI/FS Report (JEG 1996c). The methodology used at Site 24 is described in Section 6 and Appendix P of the draft final OU-2A RI Report (BNI 1997a). The HHRA results presented in this section support the need for remedial action at Sites 18 and 24. Ecological risk assessments were not performed for these sites. The only complete pathway at Site 18 would be North Lake or South Lake. These recreational lakes are located in an urban environment and is not expected to provide suitable habitat for endangered or threatened species. Likewise, Site 24 is highly industrialized and does not provide a suitable habitat for any endangered or threatened species of wildlife.

## 7.1 SITE 18 RISK ASSESSMENT

The HHRA for Site 18 addressed all constituents in groundwater within the OU-1 investigation area (i.e., groundwater at Site 18 and throughout the entire station including the area later defined as Site 24). This evaluation assessed potential human-health risks from exposure to groundwater if no actions are taken to reduce the risk. The following assumptions were made.

- No remedial actions are undertaken.
- Untreated groundwater is used for drinking water.
- Chemical concentrations remain constant over the assumed exposure period.

At Site 18, potential human-health risks from exposure to groundwater contamination were characterized by estimating risks specific to each well.

### 7.1.1 Chemicals of Potential Concern

Table 7-1 lists the chemicals of potential concern (COPCs) used in the Phase I HHRA for Site 18. A total of 86 chemicals were reported in groundwater samples throughout the OU-1 study area. These chemicals included 56 organic chemicals and 30 inorganic chemicals. Essential nutrients (calcium, iron, magnesium, potassium, and sodium) and major cations/anions (chloride and sulfate) were eliminated from the assessment, leaving 79 chemicals as COPCs. Gross alpha and beta particle activities were also evaluated.

### 7.1.2 Exposure Assessment

Currently, groundwater near Former MCAS El Toro is not used for domestic purposes. The nearest drinking water well is 2.5 miles from the leading edge of the TCE plume, and the nearest downgradient well is 3.2 miles from the plume edge. However, to evaluate risk that could occur in the future if no remedial action is taken, the HHRA assumes that individuals in the future will use untreated groundwater for domestic purposes and be exposed to COPCs through ingestion of water, dermal contact with water, and inhalation of VOCs (e.g., while showering).

Groundwater in the area surrounding the Station is used for agricultural and recreational purposes. Current and future on-Station and off-Station agricultural workers could be exposed to COPCs in groundwater through dermal absorption of chemicals and inhalation of VOCs. Because the groundwater also supplies North Lake,

**Table 7-1  
Chemicals of Potential Concern in Groundwater  
MCAS El Toro OU-1**

VOCs	SVOCs	Pesticides	Herbicides	Metals	General Chemistry	Radionuclides
1,1,1-Trichloroethane	4-Methylphenol	4,4' DDT	2-(2,4,5-Trichlorophenoxy)propionic acid	Aluminum	Ammonia	Gross-alpha
1,1,2-Trichloro-1,2,2-trifluoroethane	Benzyl butyl phthalate	Aldrin	2,4,5-Trichlorophenoxy acetic acid	Antimony	Cyanide	Gross-beta
1,1,2-Trichloroethane	bis(2-ethylhexyl)phthalate	gamma-BHC (lindane)	2,4-Dichlorophenoxy acetic acid	Arsenic	Nitrate/nitrite	
1,1-Dichloroethane	Bromoform	Dieldrin	2-(2-Methyl-4-chlorophenoxy)propionic acid	Barium	Phosphorus	
1,1-Dichloroethene	Chlorodibromomethane	Endosulfan	2-Methyl-4-chlorophenoxyacetic acid	Beryllium		
1,2-Dichloroethane	di-n-butyl phthalate	sulfate	4-(2,4-Dichlorophenoxy)butyric acid	Boron		
cis-1,2-dichloroethene	Diethyl phthalate	Heptachlor	Dalapon	Cadmium		
1,2-Dichloroethene (total)	Dimethyl phthalate	Methoxychlor	Dicamba	Chromium		
1,2-Dichloropropane	n-Nitrosodiphenylamine		Dichloroprop	Cobalt		
2-Butanone	Phenol		Dinoseb	Copper		
2-Hexanone				Lead		
4-Methyl-2-pentanone				Manganese		
Acetone				Mercury		
Benzene				Nickel		
Bromodichloromethane				Selenium		
Carbon disulfide				Silver		
Carbon tetrachloride				Thallium		
Chlorobenzene				Vanadium		
Chloroform				Zinc		
Chloromethane						
Dichlorodifluoromethane						
Ethylbenzene						
Methylene chloride						
Styrene						
Tetrachloroethylene						
Toluene						
Trichloroethylene						
Xylenes (total)						

Source: OU-1 Human Health Risk Assessment Report (JEG 1996c)

Acronyms/Abbreviations:

BHC – benzene hexachloride  
DDT – dichlorodiphenyltrichloroethane  
MCAS – Marine Corps Air Station

OU – operable unit  
SVOC – semivolatile organic compound  
VOC – volatile organic compound

individuals using the lake for recreation could be exposed to low concentrations of VOCs through inhalation of volatilized chemicals, ingestion of contaminated fish (JEG 1996c), or wading. Risks associated with these exposure scenarios are discussed in Sections 7.1.5.3 and 7.1.5.4.

Potential exposure routes evaluated in the Site 18 HHRA are summarized in Table 7-2. Human-health risks were evaluated assuming both the reasonable maximum exposure (RME) and the average exposure. The risk calculations assumed exposure to the same well for a duration of 9 years for the average residential scenario and 30 years for the RME.

U.S. EPA guidance states that potential remedial actions at Superfund sites should be based on an estimate of the RME expected to occur under both current and future land-use conditions. The RME is defined as the "highest exposure that is reasonably expected to occur at a site" (U.S. EPA 1989). The intent of the RME is to estimate a conservative exposure case (i.e., well above the average case) that is still within the range of possibilities. Presentation of both the average and RME portions of the risk distribution allows risk management decisions to incorporate the relative uncertainty in the risk estimates. The average case exposure assumptions largely represent the 50th percentile values within the population.

Exposure-point concentrations were estimated using groundwater data collected during the Phase I RI/FS investigations and data obtained from OCWD/IRWD. It was assumed that the groundwater concentrations remain constant for the duration of the exposure period.

### 7.1.3 Toxicity Assessment

The toxicity assessment categorized the 79 COPCs by their carcinogenic and noncarcinogenic effects. Twenty-four COPCs were classified as known, probable, or possible human carcinogens. The potential for carcinogenic effects was evaluated by estimating excess lifetime cancer risk. Noncarcinogenic risk was assessed by comparing the estimated daily intake of a chemical to the estimated safe level of daily exposure (reference dose). Estimated excess lifetime cancer risks were developed using cancer potency factors developed by both U.S. EPA and Cal/EPA.

### 7.1.4 Risk Characterization

Noncarcinogenic health risks were analyzed quantitatively by comparing the daily chemical intake to the reference dose; the ratio of these is the hazard quotient (HQ). The chemical-specific HQs were added together to generate a total hazard index (HI) for each well from which groundwater data were collected. According to U.S. EPA, an HI of less than 1 is generally protective of human health and the environment. If the HI is greater than 1, the chemicals are assessed further to determine whether the HI represents an unacceptable health risk. This assessment considers the types of chemicals, historical activities at one site, background concentrations, and organs that are targeted by the chemicals (e.g., an HI greater than 1 is a concern only if the risk drivers target the same organ).

Potential carcinogenic health risks were analyzed by estimating the excess lifetime cancer risk. Excess lifetime cancer risk is the incremental increase in the probability of developing cancer during one's lifetime over the background probability of developing cancer if no exposure occurs. For example, an excess lifetime cancer risk of  $2 \times 10^{-6}$  means that for every 1 million people exposed to the carcinogen throughout their lifetimes, the average incidence of cancer may be increased by two additional cases of cancer.

To manage carcinogenic risk and protect human health, U.S. EPA has established the following protective risk ranges: the probability of greater than one additional cancer case in a population of 10,000 ( $10^{-4}$ ) or less is

unacceptable; the range of probability from one additional cancer case in a population of  $10^{-4}$  to 1,000,000 ( $10^{-6}$ ) is generally allowable; and less than one cancer case in a population of greater than  $10^{-6}$  is allowable (U.S. EPA 1991b). Excess cancer risks are only a prediction of a potential increase in cancer incidence and do not represent exact numbers. Because of the health protection methods followed in estimating cancer potency factors, the excess lifetime cancer risks estimated in the HHRA should be regarded as upper bounds on the potential cancer risks.

**Table 7-2  
Potential Exposure Routes and Pathways at Site 18**

<b>Receptor</b>	<b>Route</b>	<b>Is Pathway Feasible?</b>	<b>Is Pathway Addressed in HHRA?</b>	<b>Rationale</b>
Current on-Station commercial/military workers, resident	Inhalation (VOCs), dermal contact, ingestion	No	No	On-Station groundwater not currently used as a drinking water source.
Future on-Station commercial/military worker, resident	Inhalation (VOCs), dermal contact, ingestion	Yes	Yes	On-Station groundwater could be used as a future drinking water source.
Current off-Station commercial worker, resident	Inhalation (VOCs), dermal contact, ingestion	No	No	There are no active domestic wells in the OU-1 study area.
Future off-Station commercial worker, resident	Inhalation (VOCs), dermal contact, ingestion	Yes	Yes	Off-Station groundwater in the OU-1 study area could be used as a future drinking water source.
Current/future on-Station agricultural worker	Inhalation (VOCs), dermal contact	Yes	Yes	One on-Station production well is currently being used for agricultural purposes.
Current/future off-Station agricultural worker	Inhalation (VOCs), dermal contact	Yes	Yes	Eleven off-Station production wells in the study area are currently being used for agricultural purposes.
Current/future recreational users at North Lake	Inhalation (VOCs), ingestion of fish	Yes	Yes	Well 18 NLAKE is used to fill North Lake.

Acronyms/Abbreviations:

HHRA- human-health risk assessment

OU - operable unit

VOC - volatile organic compound

## 7.1.5 Results

The following paragraphs summarize future hypothetical risk from domestic use of untreated groundwater at Site 18.

### 7.1.5.1 NONCARCINOGENIC RISKS - RESIDENTIAL EXPOSURE

The estimated HI for a hypothetical future residential exposure to untreated groundwater at Site 18 was calculated for both the average exposure and RME. Of the 92 wells at Site 18, an HI greater than 1 was calculated in 56 wells under average exposure conditions and in 71 wells under RME conditions. The major chemical group contributing to an estimated HI of greater than 1 for the RME was inorganic compounds. As discussed in Section 5.3.3, an evaluation of inorganic chemicals in groundwater indicated that the concentrations present at Site 18 are within background levels. Therefore, risks from exposure to inorganic chemicals are not attributable to site-specific activities. For this reason, metals are not included as COCs at Site 18. The HI associated with VOCs exceeded 1 only at well 18\_BGMW03E, where the primary risk drivers were nitrate/nitrite, antimony, and TCE.

### 7.1.5.2 CARCINOGENIC RISKS - RESIDENTIAL EXPOSURE

For the average hypothetical future residential exposure to untreated groundwater, the total estimated excess lifetime cancer risk was calculated using both U.S. EPA and Cal/EPA toxicity factors. For the 92 wells at Site 18, the primary chemical group contributing to an estimated excess lifetime cancer risk greater than  $10^{-6}$  was inorganic chemicals. However, as discussed in Section 7.1.5.1, risks from exposure to inorganic chemicals are not attributable to site-specific activities, and inorganic chemicals are not Site 18 COCs. The estimated excess cancer risk associated with VOCs exceeded  $10^{-6}$  in 29 wells. The primary VOCs responsible for these exceedances (i.e., the risk drivers) were the following:

- 1,1,2-TCA
- 1,1-DCE
- 1,2-DCA
- 1,2-dichloropropane
- benzene
- Bromodichloromethane
- carbon tetrachloride
- chloroform
- chloromethane
- PCE
- TCE

### 7.1.5.3 AGRICULTURAL EXPOSURE SCENARIO

Four of the 12 active agricultural wells at Former MCAS El Toro have His greater than 1 for the residential RME. The major chemical contributors to these His are nitrate/nitrite and other inorganic chemicals. As noted previously, these chemicals are thought to represent regional background concentrations.

Two of the active agricultural wells have an estimated excess lifetime cancer risk for the residential RME of greater than  $10^{-6}$  for exposure to untreated groundwater. In well 18\_ET1, the major chemical contributor is TCE, with an estimated excess lifetime cancer risk of  $3 \times 10^{-6}$ . Although this risk is within the range considered generally allowable by U.S. EPA, groundwater from 18\_ET1 is currently being treated before distribution. The major chemical contributors in well 18\_TIC113 are arsenic ( $8 \times 10^{-5}$ ) and beryllium ( $2 \times 10^{-5}$ ), inorganic

chemicals believed to be present at regional background concentrations.

Subsequent to issuance of the Draft Final ROD and pursuant to comments from DTSC, the DON performed a risk assessment (BNI 2002a) to evaluate the non-cancer and cancer risks to an agricultural worker from exposure to VOCs in groundwater in the off-Station portion of the shallow groundwater unit. This portion of the plume contains TCE at a concentration (140 µg/L) over two times greater than the maximum concentration reported in the principal aquifer (61 µg/L) and, therefore, provides an upper-bound estimate of the risk to an off-Station agricultural worker.

The risk assessment was based on the following assumptions:

- the agricultural worker is exposed to VOCs in groundwater 8 hours a day, 250 days a year, for 25 years;
- the only complete pathway for exposure is inhalation;
- the worker is exposed to groundwater from a well (18\_MCAS03) located in the area with the highest concentration of VOCs in the off-Station portion of the shallow groundwater plume; and
- each VOC was evaluated at the highest reported concentration.

The maximum resulting non-cancer risk to the agricultural worker was 0.0012. The maximum excess cancer risk was  $5.2 \times 10^{-8}$ . Both risks are within the range considered allowable by U.S. EPA and Cal/EPA.

#### 7.1.5.4 RECREATIONAL EXPOSURE SCENARIO

Groundwater from well 18\_NLAKE is used to supply four surface water bodies: two artificial lakes (North Lake and South Lake) and a children's pool associated with each lake. The estimated HI for this well calculated during the Phase I RI was 1, and the estimated excess lifetime cancer risk was  $1 \times 10^{-6}$ . The major chemical contributor to the HI was manganese, which is thought to be at background concentration. The major chemical contributors to the estimated excess lifetime cancer risk were 1,2-DCA ( $6 \times 10^{-7}$ ) and TCE ( $6 \times 10^{-7}$ ). The primary removal mechanism for these chemicals was volatilization to the atmosphere; neither chemical is expected to bioaccumulate in aquatic organisms (JEG 1996c). The risk from exposure to VOCs at North Lake and the associated children's pool was reevaluated following the Phase II RI using sampling data collected by OCWD from 1995 to August 2001 (BNI 2002b). All organic chemicals reported above the laboratory detection limits were identified as COPCs. This included only two organic chemicals: cis-1,2-dichloroethene and trichloroethene. The risk assessment considered the following three exposure scenarios.

- Recreational use of the children's pool by a child. The pool is frequented by children who are assumed to live nearby and use the pool throughout the year. The children were assumed to be exposed to COPCs in the surface water through inhalation, incidental ingestion of water, and dermal contact with water.
- Recreational use of North Lake by a swimmer. Exposure was assumed to take place over 30 years and occur through inhalation of vapors, incidental ingestion of surface water, and dermal contact with surface water.
- Recreational use of North Lake by an adult sportfisher who eats the fish that are caught. The sportfisher is assumed to fish throughout the year and be exposed to COPCs through inhalation of vapors and ingestion of fish.

The estimated cancer risk for a child exposed to surface water at the pool (assuming surface water concentrations are equal to groundwater concentrations in the well) for 350 days a year over a period of 7 years is  $1.5 \times 10^{-7}$ . The hazard index is estimated at 0.025. Both risks are within the range considered allowable by U.S. EPA and Cal/EPA. The estimated cancer risk for a hypothetical adult swimmer who uses the lake 350 days a year over a period of 30 years is  $2.9 \times 10^{-7}$ . The hazard index is 0.011. Both risks are within the range considered allowable by U.S. EPA and Cal/EPA. The estimated cancer risk for a hypothetical adult sportfisher exposed to chemicals in the lake through inhalation of vapors and consumption of fish over the course of 30 years is  $2.3 \times 10^{-7}$ . The hazard index is 0.0087. Both risks are within the range considered allowable by U.S. EPA and Cal/EPA.

### 7.1.6 Summary of Site 18 Risks

The HHRA showed that the primary risk drivers for groundwater at Site 18 are inorganics. However, as discussed in Section 5.3.3, an evaluation of metals in groundwater indicated that the concentrations of metals at Sites 18 and 24 are within the range of ambient conditions. Therefore, risks from exposure to inorganic chemicals are not attributable to activities that occurred at these sites.

As a result of the HHRA, the following VOCs were identified as COCs for Site 18:

- 1,1,2-TCA
- 1,1-DCE
- 1,2-DCA
- 1,2-dichloropropane
- benzene
- bromodichloromethane
- carbon tetrachloride
- chloroform
- chloromethane
- PCE
- TCE

## 7.2 SITE 24 RISK ASSESSMENT

An HHRA was conducted for Site 24 using data collected during the Phase I and Phase II RIs and following the methodology discussed in Section 6 and Appendix P of the draft final Phase II RI report (BNI 1997a). No ecological risk assessment was performed for this site because it is highly industrialized and does not provide a suitable habitat for any endangered or threatened species of wildlife. An additional assessment was conducted following issuance of the Draft Final ROD to evaluate the risk to an agricultural worker from groundwater in the off-station portion of the shallow groundwater unit. The results are discussed in Section 7.1.5.3.

### 7.2.1 Chemicals of Potential Concern

The procedures that were used to identify the COPCs in the Site 24 risk assessment are consistent with U.S. EPA Risk Assessment Guidance for Superfund (U.S. EPA 1989) and Guidance for Data Usability in Risk Assessment (U.S. EPA 1992). Only VOCs were evaluated, including those identified as COPCs during the Phase I RI and additional VOCs reported during the Phase II RI. This included 14 VOCs identified in the upper 10 feet of soil and 23 VOCs present in groundwater. COPCs for soil and groundwater are shown in Table 7-3.

## 7.2.2 Exposure Assessment

Located in a highly industrialized portion of Former MCAS El Toro, Site 24 contains buildings supporting aircraft activities and concrete parking areas for vehicles and aircraft. Off-Station land near Site 24 is zoned for commercial, industrial, and agricultural use. Former MCAS El Toro was closed in July 1999, and the proposed reuse plan specifies the primary reuse of Site 24 as industrial (cargo). However, since site-specific reuse plans had not been developed when the risk assessment was performed, a variety of scenarios, including residential, industrial, recreational, and excavation, were considered.

**Table 7-3**  
**Chemicals of Potential Concern in Soil and Groundwater at Site 24**

<b>In Soil (0 to 2 feet bgs)</b>	<b>In Soil (0 to 10 feet bgs)</b>	<b>In Groundwater</b>
Acetone	Acetone	Acetone
Benzene	Benzene	Benzene
2-Butanone	2-Butanone	Bromodichloromethane
Carbon disulfide	Carbon disulfide	Bromoform
Carbon tetrachloride	Carbon tetrachloride	2-Butanone
1,2-Dichloroethene (mixture)	1,2-Dichloroethene (mixture)	Carbon disulfide
Ethylbenzene	Ethylbenzene	Carbon tetrachloride
2-Hexanone	2-Hexanone	Chloroform
Methylene chloride	Methylene chloride	Chloromethane
Tetrachloroethene	Tetrachloroethene	Dibromochloromethane
Toluene	Toluene	1,2-Dichloroethane
1,1,1-Trichloroethane	1,1,1-Trichloroethane	1,1-Dichloroethene
Trichloroethene	Trichloroethene	1,2-Dichloroethene (mixture)
Xylenes	Xylenes	Ethylbenzene
		4-Methyl-2-pentanone
		Methylene chloride
		Styrene
		Tetrachloroethene
		Toluene
		1,1, 1-Trichloroethane
		1,1,2-Trichloroethane
		Trichloroethene
		Xylenes

Source:

Draft Final Remedial Investigation Report Operable Unit 2A - Site 24 (BN11997a)

Acronym/Abbreviation:

bgs - below ground surface

### 7.2.2.1 RESIDENTIAL SCENARIO

Under the residential scenario, the resident is assumed to be a person living in a house on-site from birth to age 30. Thirty years is the 90th percentile of time that people in the United States live at one address (U.S. EPA 1989). Soil excavation to about 10 feet may occur during the construction of basements and swimming pools, and some of the soil from the subsurface may be left on the surface. Therefore, COPCs in soil to 10 feet bgs or samples obtained closest to 10 feet bgs are treated as representative of soil conditions to which a resident could be exposed. Water used in the home is assumed to come from a private well drawing from the shallow aquifer

beneath the site. The exposure routes used in the risk assessment for the resident included ingestion, dermal contact, and inhalation of soil VOCs, and ingestion, dermal contact, and inhalation of groundwater VOCs. Although it is unlikely that anyone would install a private well to obtain water for home use (because of the availability of a municipal water supply), the potential risk from the COPCs was conservatively estimated using exposure conditions associated with residential use of the groundwater as tap water.

#### **7.2.2.2 INDUSTRIAL SCENARIO**

If the site were redeveloped for commercial business, the individuals most likely to be exposed would be owners and employees of the businesses. An office worker representing these individuals is a person who works 8 hours a day in a commercial building on-site for a period of 25 years, the exposure duration recommended by U.S. EPA (U.S. EPA 1989) for workers. Only COPCs in the upper 2 feet of soil are considered to be available to the office worker. Because it is assumed that the workplace water supply is provided by the local water utility, exposure of the office worker to COPCs in the groundwater at the workplace is not considered viable. Exposure routes for soil include ingestion, dermal contact, and inhalation of VOCs.

#### **7.2.2.3 RECREATIONAL SCENARIO**

If the site were redeveloped into a park, the most highly exposed individuals would be grounds maintenance personnel or park users, depending on the frequency and amount of time spent at the park. A park user was chosen for the risk assessment because the risk to the park user approximates the risk to the grounds maintenance worker if the latter spends 1 or 2 days a week performing maintenance work. The park user is assumed to be an older child from age 9 to 16 years who plays unsupervised in the park daily 2 hours a day for 7 years. This exposure regimen was chosen after evaluation for its reasonableness. As with the office worker, only COPCs in the upper 2 feet of soil are considered to be available to the park user. Exposure routes for soil include ingestion, dermal contact, and inhalation of VOCs. COPCs in groundwater are assumed to be unavailable to the park user while at the park.

#### **7.2.2.4 EXCAVATION WORKER SCENARIO**

The excavation worker is a person who works installing underground utility lines, basements, and swimming pools. This worker is assumed to work for 8 hours a day for 1 year (250 workdays). The excavation worker is assumed to be exposed to soil to a depth of 10 feet bgs. Exposure routes for soil include ingestion, dermal contact, and inhalation of VOCs.

#### **7.2.2.5 EXPOSURE ASSUMPTIONS**

Exposure conditions used in the estimation of risk were chosen to represent the RME. These exposure conditions are selected to deliberately overestimate risk, providing risk managers a margin of error for making remediation decisions. The combination of the intake variables, expressing the exposure conditions for each receptor, results in a chronic daily dose. The dose is an estimate of exposure for each pathway.

#### **7.2.2.6 CALCULATION OF EXPOSURE-POINT CONCENTRATION**

An exposure-point concentration is the concentration of a chemical in soil, water, or air at the point of contact with a receptor. To be consistent with the RME, the 95 percent upper confidence limit (UCL) of the arithmetic mean of the measured concentrations of each COPC was used as the exposure-point concentration except when the number of measurements was less than four or when the 95 percent UCL exceeded the highest measured concentration. In those cases, the highest measured concentration was used as the exposure-point concentration. The measured concentrations were assumed to have a lognormal distribution, so the 95 percent UCL for a

lognormal distribution was calculated in accordance with procedures recommended by U.S. EPA (1992).

### 7.2.3 Toxicity Assessment

The toxicity assessment classified the 24 COPCs in Table 7-3 by their carcinogenic and noncarcinogenic effects. Fourteen COPCs were identified as known, probable, or possible human carcinogens. The potential for carcinogenic effects was evaluated by estimating excess lifetime cancer risk. Noncarcinogenic risk was assessed by comparing the estimated daily intake of a chemical to the estimated safe level of daily exposure (reference dose). Estimated excess lifetime cancer risks were developed using cancer potency factors developed by both U.S. EPA and Cal/EPA.

### 7.2.4 Risk Characterization

The results of the risk assessment for Site 24 are summarized in Table 7-4, which identifies the total cancer and/or noncancer risk for each receptor. This table also identifies the chemicals contributing most of the cancer risk and HI (risk drivers), the media associated with the risk drivers, and the exposure routes by which the risk drivers exert their effects. Cancer risks and risk drivers shown in Table 7-4 are based on a combination of U.S. EPA and Cal/EPA cancer slope factors.

The HHRA results for potential exposure to soil showed that the lifetime excess upper-bound cancer risk presented by COPCs in the soil would be no more than about five chances in one billion ( $5 \times 10^{-9}$ ) for the exposure scenarios described in subsections 7.2.2.1 through 7.2.2.4. The results also indicate that the concentrations of the COPCs in the soil are not high enough to cause systemic noncarcinogenic effects to the same people.

The HHRA results indicate that if no remediation occurred and homes were built on-site, the lifetime excess upper-bound cancer risk presented by COPCs in the groundwater to adult occupants of the homes would be about 2 chances in 1,000 (risk estimate of  $2 \times 10^{-3}$ ). The risk is primarily associated with 11 of the 23 COPCs in the groundwater, with TCE accounting for over 95 percent of the risk (BNI 1997a). Risk to children living in the homes from exposure to groundwater COPCs would be less than  $7 \times 10^{-4}$ . The results also showed that the concentrations of TCE and carbon tetrachloride in groundwater from on-site wells are high enough to potentially cause systemic effects in residents because the HI for both of the compounds exceeded 1.0.

### 7.2.5 Summary of Site Risks

Risks posed by VOCs in groundwater are within the range that requires some type of remedial action (U.S. EPA 1991b). Accordingly, alternatives for groundwater remediation are presented and evaluated in Sections 8 through 10. Risks posed by VOCs in soil are within the allowable range and do not, by themselves, indicate that remedial action is necessary for soil. However, modeling performed during the Site 24 RI showed that VOCs present in deeper soil had the potential to contaminate groundwater above MCLs. Subsequent to the RI, an interim ROD (SWDIV 1997a) was produced to address this vadose zone contamination. The ROD established cleanup goals for soil and selected SVE as the remedial alternative. As discussed in Section 5, remediation of soil has been completed, and a closure report for soil at Site 24 is currently in review. Soil at Site 24 will be addressed in a final ROD or ROD amendment, expected to be issued in 2002.

**Table 7-4  
Summary of Risk Assessment Results at Site 24**

Characteristic	Resident Adult	Resident Child	Recreational Child	Office Worker	Excavation Worker
<b>Total cancer risk<sup>a</sup></b>					
COPCs in soil	2.2E-08	9.4E-09	2.4E-09	5.4E-09	5.1E-10
COPCs in groundwater	2.0E-03	7.4E-04	NA	NA	NA
<b>Total</b>	<b>2.0E-03</b>	<b>7.4E-04</b>	<b>2.4E-09</b>	<b>5.4E-09</b>	<b>5.1E-10</b>
<b>Hazard index</b>					
COPCs in soil	9.4E-04	2.5E-03	4.7E-04	2.9E-04	7.8E-04
COPCs in groundwater	8.6E+01	2.0E+02	NA	NA	NA
<b>Total</b>	<b>8.6E+01</b>	<b>2.0E+02</b>	<b>4.7E-04</b>	<b>2.9E-04</b>	<b>7.8E-04</b>
<b>Risk drivers (carcinogenic effects and associated risk)<sup>b</sup></b>	Benzene (1.3E-06) Bromodichloromethane (5.2E-06) Carbon tetrachloride (1.1E-05) Chloroform (1.1E-05) Chloromethane (1.1E-06) Dibromochloromethane (1.1E-06) 1,2-Dichloroethane (4.6E-06) 1,1-Dichloroethene (5.0E-05) Tetrachloroethene (4.7E-06) <sup>c</sup> 1,1,2-Trichloroethane (4.2E-06) Trichloroethene (1.9E-03)	Bromodichloromethane (1.9E-06) Carbon tetrachloride (4.2E-06) Chloroform (4.2E-06) 1,2-Dichloroethane (1.7E-06) 1,1-Dichloroethene (1.8E-05) Tetrachloroethene (1.7E-06) 1,1,2-Trichloroethane (1.6E-06) Trichloroethene (7.1E-04)	None	None	None
<b>Risk drivers (noncancer effects) and associated hazard index</b>	Trichloroethene (8.5E+01)	Carbon tetrachloride (1.3E+00) Trichloroethene (2.0E+02)	None	None	None
<b>Medium of concern<sup>c</sup></b>	Groundwater	Groundwater	NA	NA	NA
<b>Exposure route of concern<sup>d</sup></b>	Ingestion, inhalation, dermal contact	Ingestion, inhalation, dermal contact	NA	NA	NA

**Notes:**

- <sup>a</sup> based on United States Environmental Protection Agency and California Environmental Protection Agency cancer slope factors  
<sup>b</sup> risk driver – COPC that poses a minimum multimedia cancer risk of 1.0E-06 or minimum hazard index of 1.0  
<sup>c</sup> medium of concern – medium (e.g., soil) with COPCs that pose minimum multimedia cancer risk of 1.0E-06 or minimum hazard index of 1.0  
<sup>d</sup> exposure route of concern – intake route through which COPCs pose a minimum multimedia cancer risk of 1.0E-06 or minimum hazard index of 1.0

**Acronyms/Abbreviations:**

COPC – chemical of potential concern  
 NA – not applicable

## Section 8

# DESCRIPTION OF ALTERNATIVES

This section describes the remedial alternatives selected for detailed analysis in the FSs for Sites 18 and 24. The section also describes one additional alternative that was developed by OCWD/TRWD after the FS reports were published. It was evaluated by the DON with respect to nine CERCLA evaluation criteria. All alternatives are based on the Phase I and Phase II RIs, the baseline HHRAs, and a review of applicable or relevant and appropriate requirements (ARARs). The following remedial action objectives were established for Sites 18 and 24.

- Site 18 groundwater
  - Reduce concentrations of VOCs in the AOC in the shallow groundwater unit and in the principal aquifer downgradient of the source areas to federal or state cleanup levels.
  - Contain migration of VOCs above cleanup levels in the principal aquifer.
  - Prevent domestic use of groundwater containing VOCs at concentrations above cleanup levels.
- Site 24 groundwater
  - Reduce concentrations of VOCs in the Site 24 shallow groundwater unit to federal or state cleanup levels.
  - Prevent use of groundwater containing VOCs at concentrations above cleanup levels.
  - Prevent VOCs at concentrations above cleanup levels from migrating beyond the shallow groundwater unit.
- Site 24 soil
  - Reduce concentrations of VOCs in the source areas to prevent or minimize further degradation of the shallow groundwater unit above the MCL for drinking water.
  - Continue vadose zone remediation until the average VOC soil gas concentrations are below threshold concentrations (concentrations capable of contaminating groundwater above the MCLs).

The remedial action objectives for Sites 18 and 24 are intended primarily to assure the continued beneficial use of groundwater from the principal aquifer. Groundwater from this aquifer (Irvine Forebay I) is currently used for agriculture but is also designated by RWQCB as a potential source of drinking water.

Table 8-1 presents numerical cleanup standards for groundwater. These cleanup standards are based on U.S. EPA and Cal/EPA MCLs or were developed using risk-based criteria. (Cleanup standards for soil are addressed in Section 5.3.6.)

Remedial alternatives were developed to meet the remedial action objectives in accordance with CERCLA, as amended by SARA, 42 *United States Code* (U.S.C.) § 9602 et seq., and the NCP. The development of remedial alternatives was also guided by prior U.S. EPA experience at VOC-contaminated sites. Documents considered in the development of remedial alternatives for soil and groundwater include the following.

**Table 8-1**  
**Cleanup Standards for Chemicals of Concern in Groundwater**  
**(reported in micrograms per liter)**

Volatile Organic Compound	CONCENTRATION				
	Federal Maximum Contaminant Level <sup>a</sup>	California Maximum Contaminant Level <sup>b</sup>	Controlling ARAR or Risk-Based Concentration	Maximum Concentration Reported During RI <sup>c</sup>	Maximum Concentration Reported During September 2001 Monitoring Round <sup>d</sup>
Benzene	5	1	1	730	ND
Bromodichloromethane	100 <sup>e</sup>	100	100	11	ND
Carbon tetrachloride	5	0.5	0.5	61	28
Chloroform	100 <sup>e</sup>	100	100	14	4
Chloromethane	— <sup>f</sup>	—	1.5 <sup>g</sup>	1	ND
Dibromochloromethane	100 <sup>e</sup>	100	100	2.6	ND
1,2-Dichloroethane	5	0.5	0.5	2.6	ND
1,1-Dichloroethene	7	6	6	36	14
1,2-Dichloropropane	5	5	5	4	6
Tetrachloroethene	5	5	5	81	30
1,1,2-Trichloroethane	5	5	5	3	2
Trichloroethylene	5	5	5	3,100	780

## Notes:

- <sup>a</sup> source: U.S. EPA Safe Drinking Water Act, 40 C.F.R. § 141, 01 July 1992  
<sup>b</sup> source: Cal. Code Regs. tit. 22, § 64439, Requirements, and § 64444, Maximum Contaminant Levels  
<sup>c</sup> maximum concentrations of contaminants of concern in groundwater are from the draft final OU-1 RI Report (JEG 1996a) and the draft final Phase II RI Report for Site 24 (BNI 1997a)  
<sup>d</sup> source: Groundwater Monitoring Report, September 2001 Monitoring Round 14 (CDM 2002)  
<sup>e</sup> MCL for total trihalomethanes includes chloroform, bromodichloromethane, dibromochloromethane, and bromoform  
<sup>f</sup> dash indicates that MCL has not been established for this chemical  
<sup>g</sup> risk-based concentration for chloromethane is the U.S. EPA 2000 preliminary remediation goal for this chemical

## Acronyms/Abbreviations:

- ARAR – applicable or relevant and appropriate requirement  
 Cal. Code Regs. – *California Code of Regulations*  
 CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act  
 C.F.R. – *Code of Federal Regulations*  
 MCL – maximum contaminant level  
 ND – not detected  
 OU – operable unit  
 RI – remedial investigation  
 § – section  
 tit. – title  
 U.S. EPA – United States Environmental Protection Agency

- Presumptive Remedies: Policies and Procedures (U.S. EPA 1993a). This document describes certain preferred technologies or presumptive remedies for VOC-contaminated soil and groundwater.
- Presumptive Remedies: Site Characterization and Technology Selection for CERCLA Sites With Volatile Organic Compounds in Soils (U.S. EPA 1993b).
- Presumptive Response Strategy and Ex-Situ Treatment Technologies for Contaminated Groundwater at CERCLA Sites (U.S. EPA 1996).
- Presumptive Remedy: Supplemental Bulletin Multi-Phase Extraction (MPE) Technology for VOCs in Soil and Groundwater (U.S. EPA 1997).

Presumptive remedies are preferred technologies for common categories of sites. These technologies are accepted by U.S. EPA based on historical patterns of remedial action selection and on evaluation of performance data on technology implementation; use of these technologies expedites site investigation and selection of remediation alternatives. The presumptive remedy approach allowed the FSs for Sites 18 and 24 to focus on technologies that have proved to be most effective at sites with similar VOC contamination.

The presumptive remedies selected for detailed evaluation were extraction and treatment of groundwater (Sites 18 and 24) and SVE in the vadose zone source area (Site 24). The remedial alternatives developed for groundwater differ in the configuration of the groundwater well fields (e.g., number of wells, location, screened intervals, pumping rates) and in whether the treated groundwater is injected into the aquifer. In addition, several alternatives developed for Sites 18 and 24 rely on natural attenuation, rather than extraction and treatment, to remediate the low concentrations of VOCs in the principal aquifer. Remedial action for VOCs in soil has been implemented and a closure report for this medium has been submitted to the BCT.

The sections that follow provide general descriptions of the groundwater remedial alternatives, including number of wells and well locations. These details were developed for modeling the progress of remediation using computer simulation to compare the remedial alternatives (JEG 1996e). The actual well field design of the selected alternative will be finalized during the engineering design phase. In addition, remedy refinements (e.g., adjustments to the number of extraction wells, modifications to flow rates, changes in well locations) will be made as necessary during the life of the remedy.

## 8.1 SITE 18 ALTERNATIVES

Twelve remedial action alternatives were developed in the IAFS for Site 18. These were grouped as follows.

- **No Action:** A no action alternative (Alternative 1) was developed as required by U.S. EPA as a baseline for comparing the performance of all other alternatives.
- **Former MCAS El Toro Project:** Four alternatives (2A, 2B, 2C, and 2D) were developed that rely on new wells placed to optimize VOC remediation. Treated water is injected back into the aquifer.
- **Irvine Desalter Project:** As discussed in Section 63, OCWD/IRWD is planning a project to extract groundwater, treat the extracted groundwater to reduce elevated TDS and nitrate concentrations, and distribute the treated groundwater for potable-water purposes. Alternative 3 uses the same extraction well configuration as originally planned for the IDP (before the

presence of VOCs was discovered), but modifies the treatment process to treat VOC-contaminated groundwater.

- **Former MCAS El Toro Project and IDP:** Six alternatives (4A, 4B, 5A, 5B, 6A, and 6B) were evaluated that combine wells placed specifically for VOC remediation and wells previously planned for the IDP. Groundwater is treated at the IDP and distributed for potable water purposes.

Alternatives 2C, 3, 4A, 4B, 5A, and 5B were eliminated based on preliminary screening in the IAFS. Alternatives 2B, 2D, and 6B were eliminated through more detailed screening using NCP criteria, leaving only Alternatives 1, 2A, and 6A. However, review comments on the draft OU-1 IAFS Report from U.S. EPA, DTSC, and RWQCB expressed concern over the high cost of groundwater extraction and treatment to reduce low concentrations of TCE in the principal aquifer. These agencies suggested that the DON evaluate lower-cost alternatives and a natural attenuation approach for the principal aquifer. To respond to these comments, the DON developed three additional alternatives (7A, 7B, and 8) that provide the same shallow, on-Station extraction and principal-aquifer background pumping as most of the previous alternatives but also include natural attenuation of TCE in the principal aquifer. These alternatives were added to the draft final IAFS Report in an addendum where they were compared with Alternatives 2A and 6A.

In spring of 1999, IRWD held focus group meetings to evaluate public acceptance of using treated groundwater for domestic purposes. As a result of these meetings, OCWD/IRWD developed a new alternative, Alternative 8A, that uses separate extraction and treatment systems for groundwater inside and outside the VOC plume. Alternative 8A uses the LDP to treat VOC-contaminated groundwater from within the TCE plume but distributes the groundwater for recycled, rather than potable, use. This alternative was evaluated using the same model as that used to evaluate the original OU-1 alternatives. The alternative was also evaluated with respect to NCP criteria and compared to the original OU-1 alternatives with respect to these same criteria. A final technical memorandum summarizing the results of this evaluation was presented to the BCT in October 2001 (BNI2001).

To simplify the discussion in this ROD, only the alternatives that passed the screening in the IAFS Report and the Addendum (i.e., Alternatives 1, 2A, 6A, 7A, 7B, and 8) and Alternative 8 A are addressed. For a complete discussion of all Site 18 alternatives, see the draft final OU-1 Interim Action FS Report (JEG 1996b, g).

### **8.1.1 Alternative 1: No Action**

Alternative 1 is required by CERCLA to provide a basis for developing and evaluating the other remedial alternatives. Under Alternative 1, no remedial measures or access or land-use controls would be initiated at Site 18. Existing production wells that were active at the time of the RI were assumed to continue to pump groundwater (Table 8-2), but the DON would conduct no groundwater extraction and the IDP would not be built. As VOCs spread from the source area at Site 24, off-Station contamination would increase. Eventually, the VOC concentration would decrease to the groundwater cleanup goals because of background production well pumping and natural attenuation in the aquifer. However, without any remedial action, the time required to meet these goals is expected to be greater than 100 years.

### **8.1.2 Alternative 2A: MCAS EL Toro Project Without Well 18\_ET1**

Alternative 2A is a Former MCAS El Toro Project alternative that would use separate groundwater extraction, VOC treatment, and groundwater injection facilities for the shallow groundwater unit and principal aquifer. Institutional controls would be used to protect the remedy and prevent inadvertent use of contaminated

groundwater. Groundwater monitoring would be performed using a network of 44 existing and 14 new wells. It is assumed the IDP would not be constructed.

### 8.1.2.1 SHALLOW GROUNDWATER REMEDIATION

Shallow groundwater would be extracted through a network of 31 new wells, treated, and injected into the shallow groundwater unit using 31 new injection wells (Figure 8-1). Twenty extraction wells would be located along the downgradient edge of the TCE area at Site 24, 5 wells would be installed at the downgradient edge of the TCE area near the southwestern corner of the Station, and 2 wells would be located near the western boundary of the Station. The 27 wells are intended to contain VOC contamination from the source area and avoid its further migration into the principal aquifer. The four remaining extraction wells are placed at the downgradient edge of a benzene plume at Fuel Farm 2.

Groundwater from the shallow groundwater unit would be treated on-Station using an air stripper and two parallel trains of two 20,000-pound carbon vessels in series that would apply liquid-phase LGAC adsorption. Activated carbon is the most common of the adsorbent materials used for treating water contaminated with VOCs and has been identified by U.S. EPA as one of the two best available control technologies (BACTs) for the removal of VOCs from drinking-water supplies (Federal Register, 08 July 1987). Vapor-phase GAC (VGAC) is used to treat off-gas from the air stripper to concentrations below regulatory standards for air emissions prior to its release.

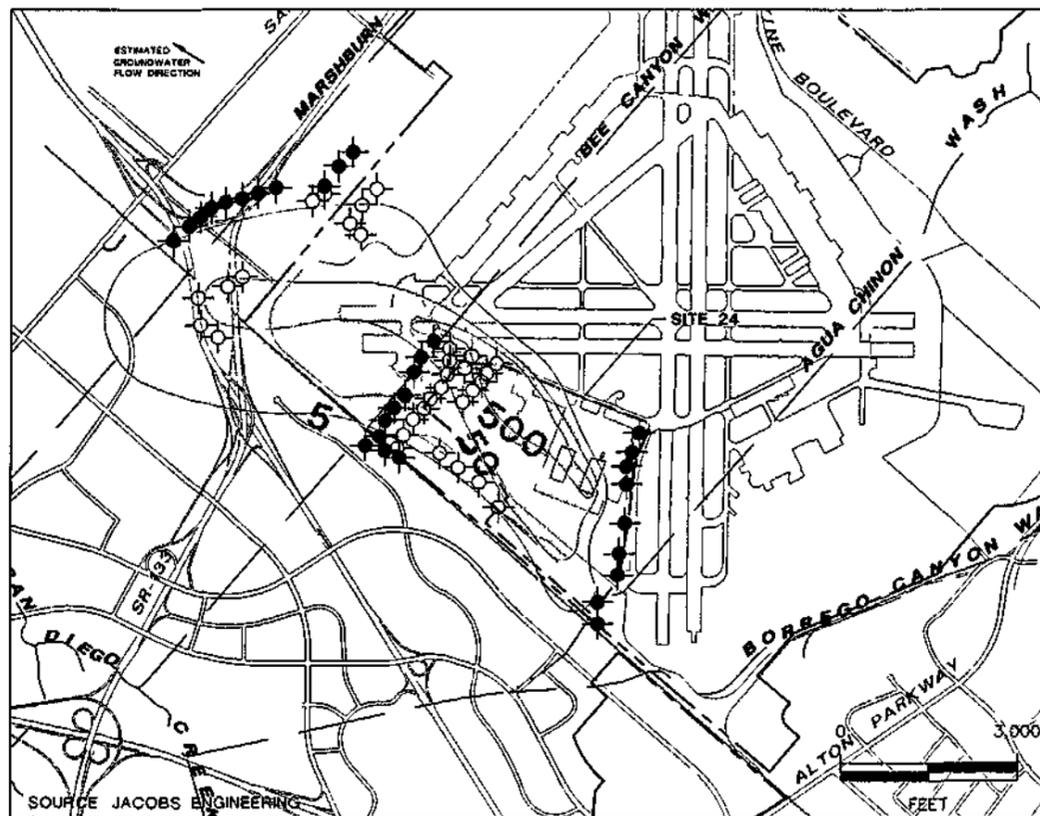
**Table 8-2**  
**Background Irrigation Well Pumping (in gallons per minute)**

Production Well	PUMPING RATE	
	Summer	Winter
18_NLAKE	300	300
18_TIC047	335	—*
18_TIC055	535	—
18_TIC072	800	—
18_RWD78	2,000	—
18_TIC0106	64	—
18_TIC107	1,100	—
18_TIC109	1,594	—
18_TIC111	602	—
18_TIC112	2,197	—
18_TIC113	1,988	—
18_TIC114	275	—
<b>Total</b>	<b>11,790</b>	<b>300</b>

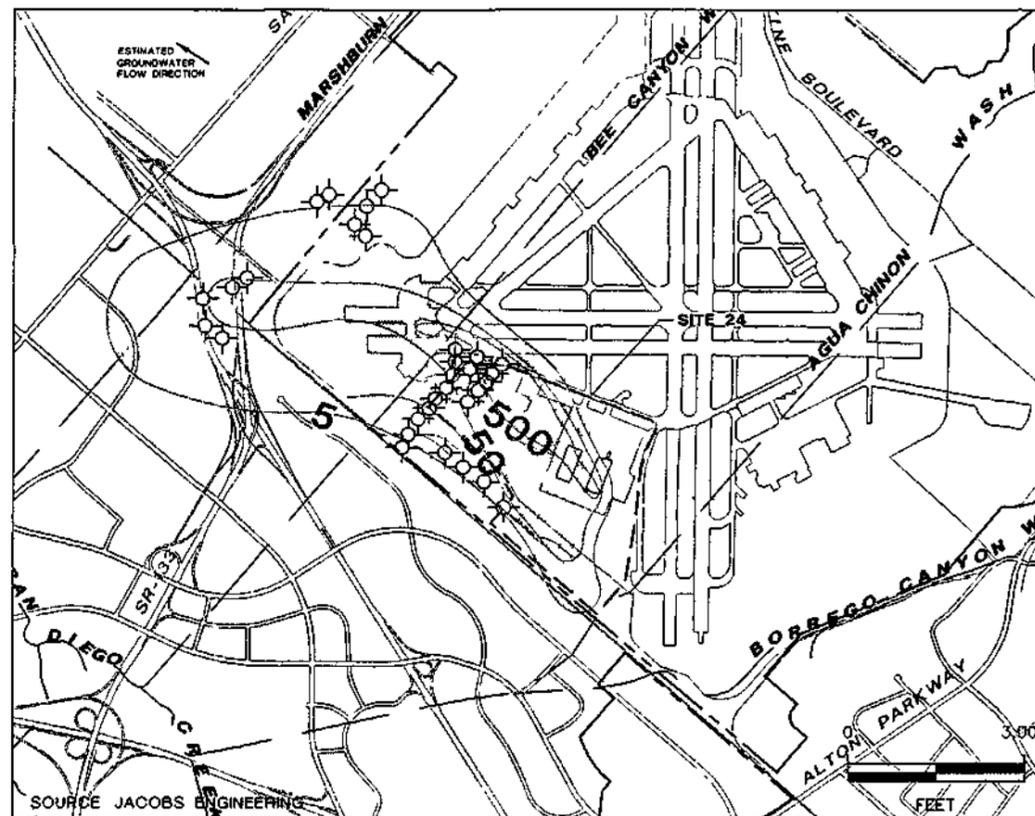
Note:

\* dash indicates that well is not being pumped during winter

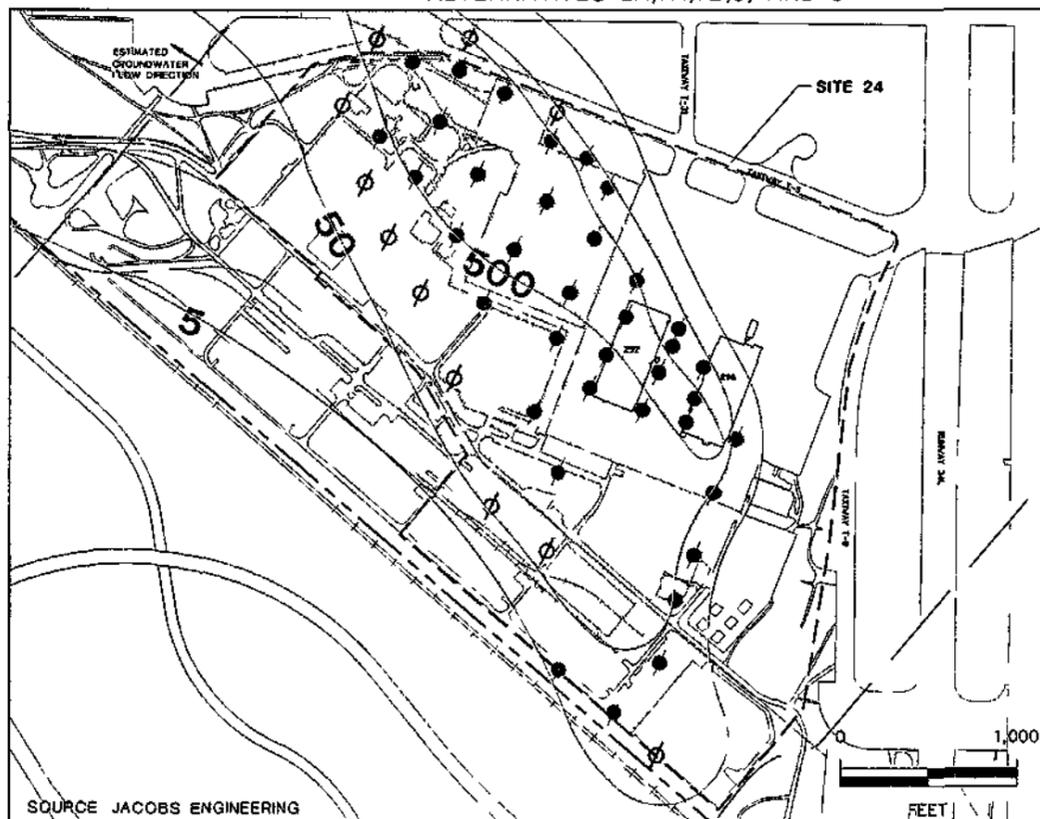
The Alternative 2A treatment system would be designed to treat 1,260 gpm and to remove VOCs, total petroleum hydrocarbons-volatile organic analysis (TPH-VOA), and TPH as diesel to nondetectable levels (0.5 µg/L for TCE and 1 µg/L for other VOCs). Treated groundwater would be injected back into the shallow groundwater unit through 31 injection wells. Ten wells would inject groundwater upgradient of the Site 24 area, 10 wells would inject groundwater near Bee Canyon Wash, and the remaining 11 wells would inject downgradient groundwater near Marshburn Channel. Well locations, shown in Figure 8-1, would be selected so that TDS concentrations of the treated groundwater would not exceed background levels in the area of injection.



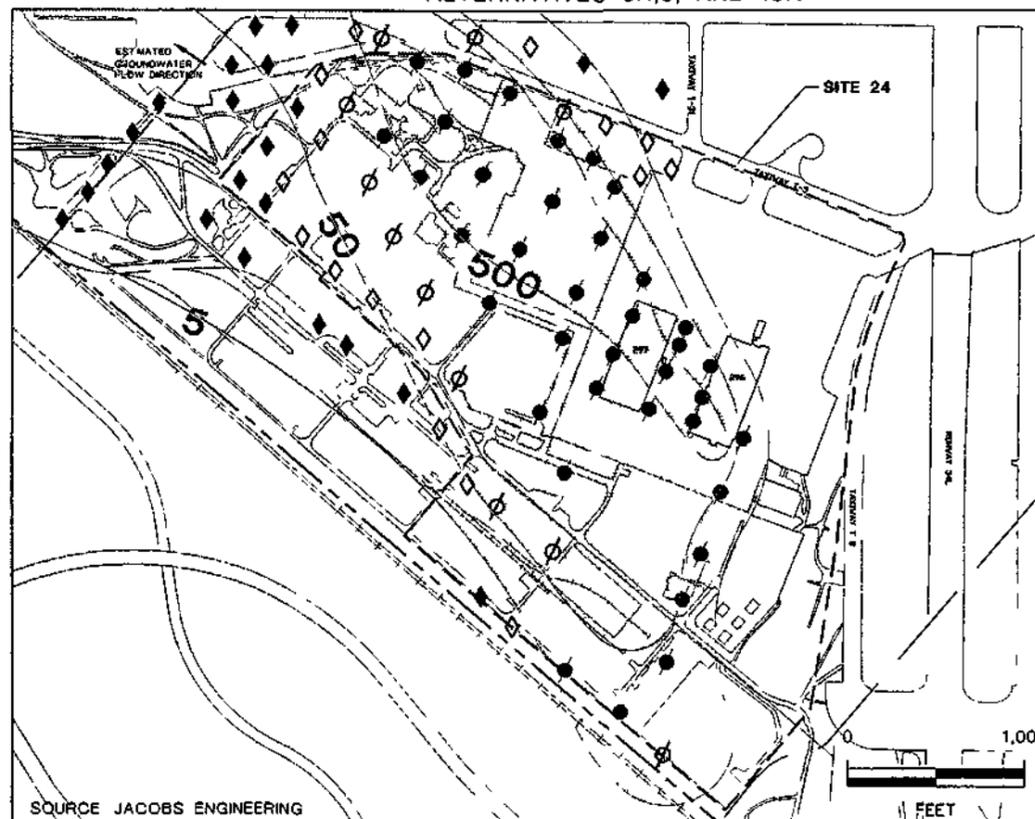
ALTERNATIVES 2A, 7A, 7B, 8, AND 9



ALTERNATIVES 6A, 8, AND 10A



ALTERNATIVE 10B



ALTERNATIVE 11

**LEGEND**

- ROAD
- FREEWAY
- - - FORMER MCAS EL TORO BOUNDARY
- - - SITE 24 BOUNDARY
- - - STREAM OR WASH

**PROPOSED**

- CORE EXTRACTION WELL SCREENED IN UPPER 50 FEET OF SHALLOW GROUNDWATER UNIT
- ⊙ PERIMETER EXTRACTION WELLS SCREENED IN UPPER 50 FEET OF SHALLOW GROUNDWATER UNIT
- ◇ SHORT-SCREEN INJECTION WELLS SCREENED IN UPPER 50 FEET OF SHALLOW GROUNDWATER UNIT
- ◆ FULL-SCREEN INJECTION WELLS SCREENED IN UPPER 100 FEET OF SHALLOW GROUNDWATER UNIT
- ★ FORMER MCAS EL TORO INJECTION WELL
- ⊙ FORMER MCAS EL TORO EXTRACTION WELL

**TCE CONCENTRATIONS IN GROUNDWATER**

- 50 TO 500 MICROGRAMS PER LITER (ug/L) TRICHLOROETHENE (TCE)
- 50 TO 5000 ug/L TCE
- GREATER THAN 5000 ug/L TCE
- 5 INFERRED ISOCONCENTRATION CONTOUR (ug/L)

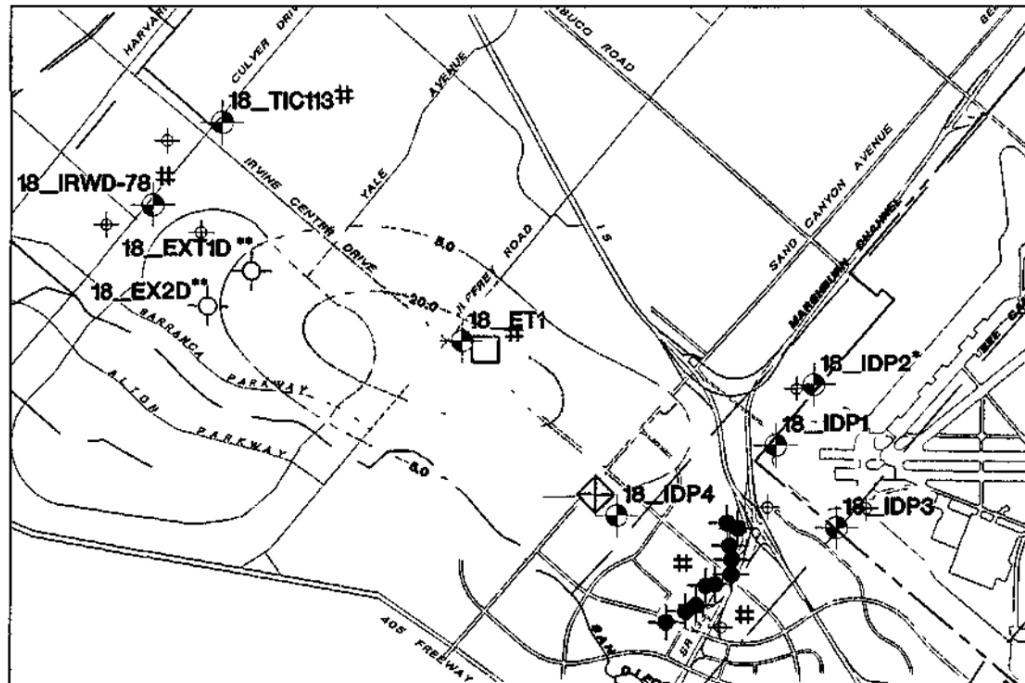
**NOTES**

WELL PLACEMENT BASED ON GROUNDWATER MODELLING CONDUCTED IN 1996 (JACOBS 1996) AND BECHTEL NATIONAL INC (BNI 1997) AND GROUNDWATER SAMPLING DATA COLLECTED IN MARCH 1997

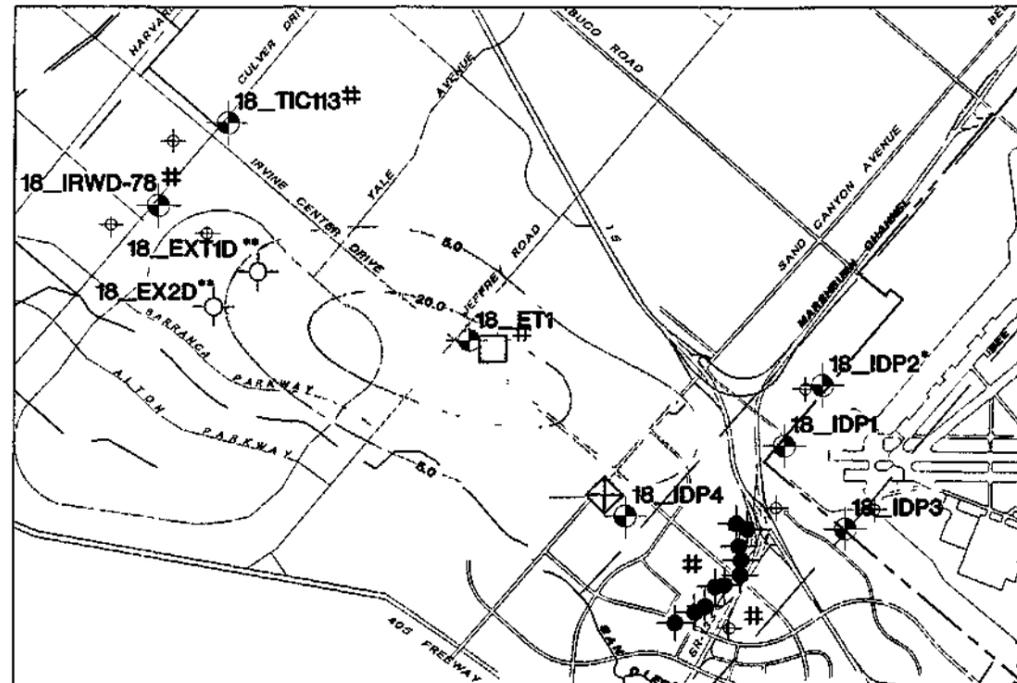
50 AND 500 ug/L CONCENTRATION CONTOURS REVISED TO REFLECT HYDROPUNCH SAMPLES COLLECTED BETWEEN JANUARY AND APRIL 1998

FOR MULTI-PORT OR CLUSTER WELL LOCATIONS THE HIGHEST CONCENTRATION WAS USED FOR CONTOURING THE PLUME

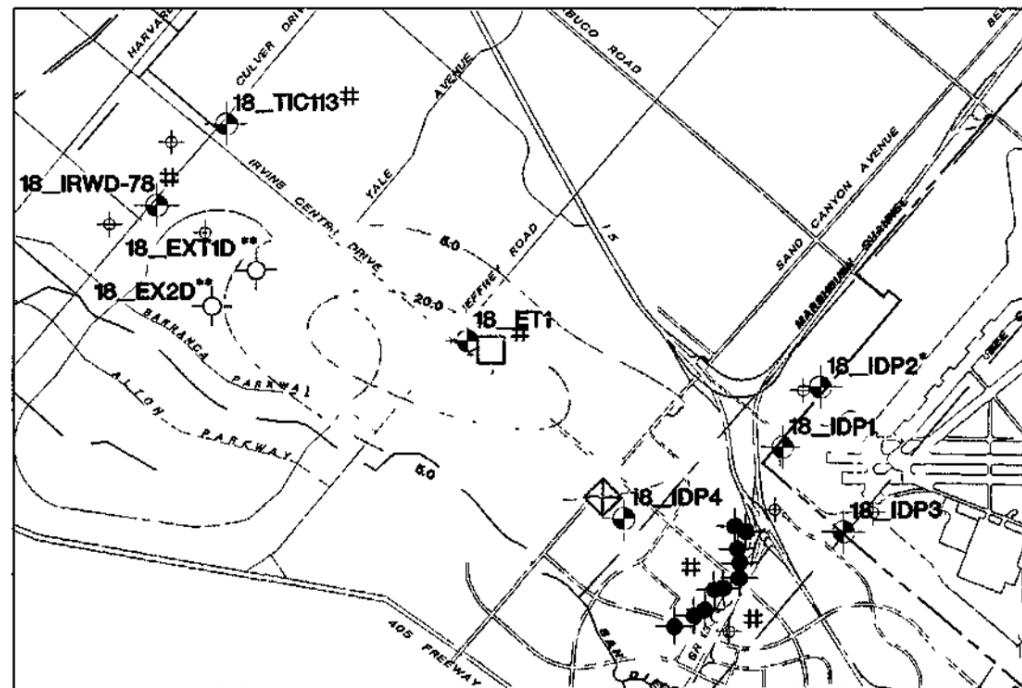
<p><b>Record of Decision</b>  <b>Figure 8-1</b>          Shallow Groundwater Unit Extraction / Injection Wells</p>	
<p>Former MCAS, El Toro, California</p>	
	<p>Date 5/1/02          File No 164H7928          Job No 22214-164          Rev No C</p>



ALTERNATIVES 2A and 9



ALTERNATIVES 6A, 8, 10A and 10B



ALTERNATIVES 7A and 7B

**LEGEND**

- ROAD
- FREEWAY
- - - - - FORMER MCAS EL TORO BOUNDARY
- ... STREAM OR WASH
- PROPOSED MCAS EL TORO TREATMENT FACILITY LOCATION
- ⊠ PROPOSED IDP TREATMENT FACILITY LOCATION
- INJECTION WELLS**
- FORMER MCAS EL TORO INJECTION WELL
- EXTRACTION WELLS**
- FORMER MCAS EL TORO EXTRACTION WELL
- ⊙ OCWD/IRRIGATION WELL
- ⊕ MONITORING WELL CLUSTER
- TCE CONCENTRATIONS IN GROUNDWATER**
- 50 TO 200 ug/L TCE
- GREATER THAN 200 ug/L TCE
- 5 INFERRED ISOCONCENTRATION CONTOUR (ug/L)

**NOTES**

WELL PLACEMENT BASED ON GROUNDWATER MODELLING CONDUCTED IN 1996 (JACOBS 1996a) AND BECHTEL NATIONAL INC (BNI 1997b) AND GROUNDWATER SAMPLING DATA COLLECTED IN MARCH 1997

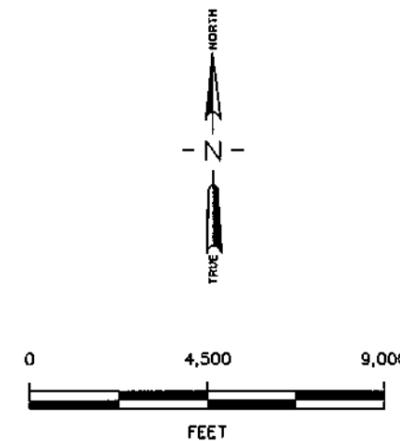
50 AND 500 ug/L CONCENTRATION CONTOURS REVISED TO REFLECT HYDROPUNCH SAMPLES COLLECTED BETWEEN JANUARY AND APRIL 1998

FOR MULTI-PORT OR CLUSTER WELL LOCATIONS THE HIGHEST CONCENTRATION WAS USED FOR CONTOURING THE PLUME

\*18\_IDP2 IS A COMPONENT OF ALTERNATIVE 8 ONLY

\*\*18\_EXT1D AND 18\_EXT2D ARE NOT USED FOR ALTERNATIVE 8

# NAVY ACQUISITION OF EXTRACTION WELLS 18\_IRWD-78 AND 18\_TIC13, INSTALLATION OF TREATMENT FACILITY INJECTION WELLS, AND INJECTION WELL MONITORING WELL IMPLEMENTED AFTER 10 YEARS (ALTERNATIVE 7B ONLY)



Record of Decision	
<b>Figure 8-2</b>	
Principal Aquifer Extraction / Injection Wells	
Former MCAS, El Toro, California	
 <b>Bechtel National, Inc.</b> CLEAN II Program	Date 5/1/02 File No 164H7929 Job No 22214-164 Rev No D

### 8.1.2.2 PRINCIPAL AQUIFER REMEDIATION

Two principal aquifer extraction wells (Figure 8-2) would confine the TCE contamination above the MCL to its present downgradient extent and remove VOC mass. The wells would be located at the downgradient edge of the 5 µg/L concentration of the TCE plume. Each extraction well would be pumped at an annual rate of 1,000 gpm.

The off-Station groundwater treatment system for the principal aquifer would use an air stripper with VGAC off-gas control. The system would be designed to remove VOCs (primarily TCE) from a 2,000-gpm stream to nondetectable levels (0.5 µg/L for TCE) and would be completely independent of the treatment system for shallow groundwater.

After VOC treatment, groundwater would be injected upgradient into the principal aquifer through ten injection wells (Figure 8-2).

Well 18\_ET1 is an existing extraction well located approximately in the middle of the TCE plume. The well is equipped with an air-stripping mechanism to remove VOCs before groundwater is used for irrigation. TDS levels in this well appear to be increasing, and its useful life for irrigation appears to be limited. Alternative 2A assumes 18\_ET1 is not operating.

### 8.1.2.3 INSTITUTIONAL CONTROLS

Institutional controls for the off-Station portion of the groundwater plume are intended to protect residents from use of VOC-contaminated groundwater from the principal aquifer and shallow groundwater unit for domestic purposes until cleanup goals are achieved. The institutional controls for the off-Station portion of the VOC groundwater plume are based on local permit programs administered by two local governmental agencies regulating the installation and use of new groundwater extraction wells. The off-Station VOC groundwater plume lies within the jurisdictional areas of these two local permit programs.

The Orange County Health Care Agency (OCHCA) requires that any person planning to construct a water well must apply for and obtain from OCHCA a permit for construction of such well and authorizes OCHCA to include any necessary conditions in such permit to assure adequate protection of public health (*Orange County Code*, Article 2. Construction and Abandonment of Water Wells). The Irvine Ranch Water District (IRWD) also requires a permit for construction of water wells and authorizes IRWD to include any necessary conditions in such permits to assure adequate protection of public health (*IRWD Rules and Regulations*, Section 16. Water Wells).

The DON is continuing to work with OCHCA and IRWD to assure that any conditions that are necessary to assure adequate protection of public health (e.g., treatment to comply with federal and state drinking water standards) shall be included in any permits that they issue for construction of wells within the groundwater plume. Copies of the well permit form and applicable regulations are found in Appendix C. The DON has also received commitments by OCHCA and IRWD to provide the Navy with copies of any well permit applications received or permits issued within the geographic scope of the off-Station groundwater plume exceeding federal and state MCLs until remediation of the plume has been completed.

The DON has provided to OCHCA and IRWD copies of the maps in this ROD that delineate the off-Station groundwater plume. The DON shall provide annually to OCHCA and IRWD updated copies of the maps beginning 1 year from the date of issuance of this ROD and ending when remediation of the plume has been completed.

## ***Monitoring and Reporting***

Subject to their respective powers and jurisdictions, OCHCA and IRWD shall have the lead in assuring that appropriate permits are obtained for construction of new water wells in the VOC groundwater plume and taking any necessary enforcement action to assure that such permits are obtained and complied with. The DON shall provide annually U.S. EPA, DTSC, and RWQCB with copies of permit applications and permits that it has received from OCHCA and IRWD during the previous year beginning 1 year from the date of issuance of this ROD and ending when remediation of the plume has been completed. The DON will provide these copies to U.S. EPA, DTSC, and RWQCB within 60 days of receipt from OCHCA and IRWD.

### **8.1.2.4 GROUNDWATER MONITORING**

Conceptual groundwater monitoring programs are described in this ROD. The final number and locations of monitoring wells, frequency of monitoring, and types of analyses would be determined during the engineering design phase. The purpose of the groundwater monitoring program would be to monitor remedial action performance, with the following specific objectives.

- Provide additional data on the groundwater flow regime to allow adjustments in pumping rates, groundwater treatment, and future placement of extraction, injection, and monitoring wells.

Monitor the decline of groundwater elevations in the shallow groundwater unit and principal aquifer.

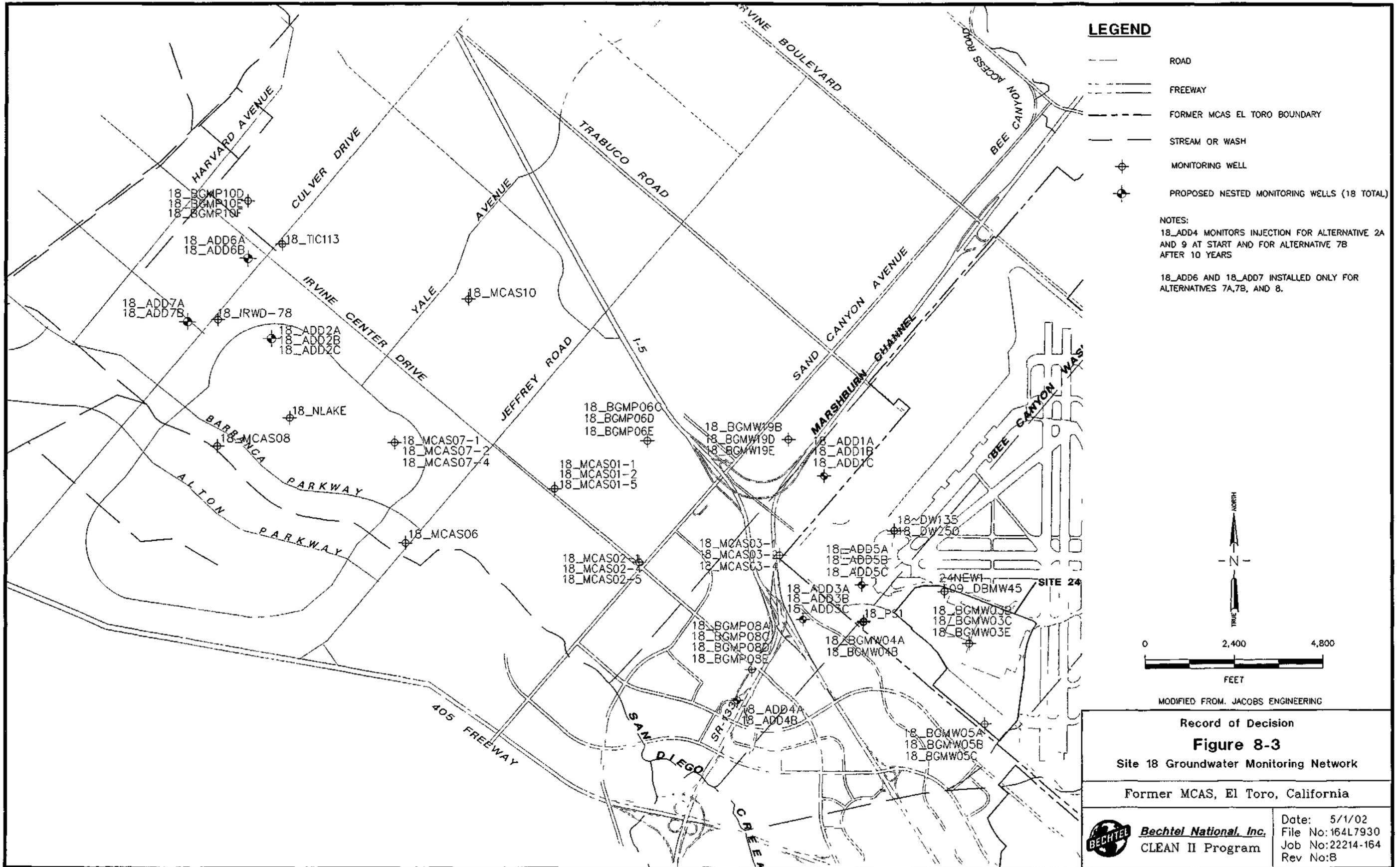
- Evaluate the hydraulic containment of groundwater contamination, focusing on the horizontal and vertical distribution of TCE and benzene contamination.
- Evaluate potential contaminant migration from the shallow groundwater unit to the principal aquifer.
- Refine contaminant removal rates to allow enhancement of aquifer restoration.

The conceptual Alternative 2A monitoring well network would consist of 58 monitoring wells located in the principal aquifer (Figure 8-3). Forty-four existing wells would be used to measure groundwater elevation changes induced by the extraction and injection wells in the shallow groundwater unit and principal aquifer and to evaluate the vertical distribution of VOCs. Fourteen new cluster monitoring wells would be added to monitor groundwater level fluctuations, vertical contaminant concentration profiles near the proposed injection/extraction wells, and the lateral extent of VOCs.

Analytical results from groundwater monitoring wells at the outer edge of the groundwater contamination would indicate whether the selected remedial action has been effective in slowing or stopping the spread of contaminants from the Station. Results from deep and multiport wells at the edge of and within the contaminated area would indicate whether the selected remedial action is mitigating the downward migration of contaminants from the shallow groundwater unit to the principal aquifer.

### **8.1.3 Alternative 6A: MCAS El Toro Project and Partial IDP With Discharge to IDP Only**

Under Alternative 6A, groundwater would be extracted from the shallow groundwater unit using the same extraction well system as Alternative 2A (Figure 8-1) and from the principal aquifer using a combination of two Former MCAS El Toro wells and four IDP wells (Figure 8-2). Extracted groundwater from the shallow and principal aquifers would be combined and discharged to the IDP for treatment using air stripping followed by VGAC adsorption to remove VOCs. The approximate treatment rate is 4,700 gpm. After VOCs are removed,



Record of Decision  
**Figure 8-3**  
 Site 18 Groundwater Monitoring Network

Former MCAS, El Toro, California

	<b>Bechtel National, Inc.</b> CLEAN II Program	Date: 5/1/02 File No: 164L7930 Job No: 22214-164 Rev No: 8
--	---	---

groundwater would be discharged to the remainder of the IDP treatment system for additional treatment (i.e., reduction of TDS and nitrate concentrations) and distribution for use as potable water; however, only those components of the IDP used to remediate VOCs are considered part of the CERCLA remedial action.

Institutional controls identical to those of Alternative 2A would be used to protect the remedy and prevent residents from inadvertent use of contaminated water. Groundwater monitoring is performed using a network of 44 existing and 12 new wells (Figure 8-3). Two monitoring wells (18\_ADD4A and 18\_ADD4B) that were to be added under Alternative 2A to measure the effects of injection would not be used under Alternative 6A because it does not include injection. Otherwise, groundwater monitoring is identical to that for Alternative 2A.

#### **8.1.4 Alternative 7A: MCAS El Toro Shallow Groundwater Project**

Alternative 7A would use the same system for shallow groundwater extraction, VOC treatment, and injection as Alternative 2A (Figure 8-1) but would rely on existing background production wells (Table 8-2) and natural attenuation for remediation of the principal aquifer (Figure 8-2). Twelve production wells were used to extract groundwater for irrigation at Site 18. In addition to natural attenuation processes, these wells are assumed to continue to operate during the early phases of remediation. However, two Culver Drive irrigation wells (18\_IRWD78 and 18\_TIC113) have a projected remaining life of only 10 years, after which it is assumed they will be abandoned.

Institutional controls identical to those of Alternative 2A would be used to protect the remedy and prevent residents from inadvertent use of contaminated water. To assure that plume movement is halted and remediation is occurring as expected, an enhanced well network would be used to monitor potential plume movement at the downgradient edge. If monitoring shows that the plume is moving or that natural attenuation is not remediating groundwater as expected, a contingency plan has been developed for Alternative 7A to protect the beneficial uses of the principal aquifer in the Irvine Subbasin.

##### **8.1.4.1 NATURAL ATTENUATION**

During natural attenuation, contaminant mass is reduced through naturally occurring processes, including nondestructive processes (e.g., advection, dispersion, and sorption) and destructive processes (i.e., abiotic [chemical] and biotic [microbiological] processes). Nondestructive processes reduce the concentration and toxicity of VOCs but do not reduce the mass and generally increase the volume. Destructive processes decrease the mass, toxicity, mobility, and volume of contaminants.

The potential for naturally occurring destructive processes (reductive chlorination) was evaluated during the OU-1 IAFS. This evaluation included a review of site characterization data against four common indicators of degradation: reduction in chemical concentration, presence and uptake of organic substrate, production of daughter products, and oxidation-reduction conditions and the presence of electron receptors. The conclusion of the evaluation was that, although the presence of 1,2-DCE indicates that some reductive chlorination of TCE is occurring, the rate at which it is occurring is slow because of low starting concentrations of TCE, low organic content, presence of an overall aerobic environment, and available supply of alternate electron receptors.

##### **8.1.4.2 MONITORING**

Alternative 7A relies on natural processes for attenuation of VOC contamination in the principal aquifer over time. Therefore, additional monitoring would be used to allow consideration of actions necessary to protect beneficial uses of principal aquifer groundwater in the Irvine Subbasin.

The primary location where TCE contamination could reasonably come into contact with water users is at the downgradient edge of the plume in the principal aquifer. This is approximately 15,000 feet west-southwest of Former MC AS El Toro for the 5µg/L isoconcentration contour and approximately 18,000 feet west-southwest of Former MCAS El Toro for the detection limit (0.5 µg/L).

In the principal aquifer, an additional set of monitoring well clusters (18\_ADD6) would be installed upgradient of the 5-µg/L isoconcentration contour to monitor the potential movement of contamination from the shallow groundwater unit to the principal aquifer. Another set of monitoring well clusters installed downgradient of the 5-µg/L isoconcentration contour (18\_ADD7) would allow further characterization of the plume in this area and monitoring of the attenuation of the plume over time.

The completion intervals of the monitoring wells in each cluster would be selected to allow consistent comparison between well clusters and to monitor primary intervals of the groundwater flow. The monitoring wells would be constructed to provide an appropriate compromise between an interest in vertical variation in contamination and the length of typical production wells that could be affected by contamination.

At the start of implementation of Alternative 7A, two existing irrigation wells at Culver Drive (18\_IRWD78 and 18\_TIC113) would be sampled quarterly for 1 year, and samples would be analyzed for VOCs. The sampling frequency would decrease to semiannually and eventually annually for as long as the wells are in operation. The newly installed monitoring well clusters downgradient of the 5-µg/L isoconcentration contour would be sampled quarterly during the first year and then semiannually or annually during succeeding years. The sampling frequency will be determined on a well-specific basis during the initial phase of groundwater monitoring. Together, wells 18\_IRWD78 and 18\_TIC113 and the new monitoring well clusters downgradient of the 5-µg/L isoconcentration contour would be "sentinel wells" because they would be used to provide early warning of plume movement.

### **8.1.5 Alternative 7B: MCAS El Toro Project With Principal Aquifer Contingency Wells**

Alternative 7B is identical to Alternative 7A except that for Alternative 7A, the two existing irrigation wells at Culver Drive (18\_IRWD78 and 18\_TIC113) are assumed to cease operations after 10 years due to either reduced demand for the water or increasing TDS concentrations (Figure 8-2). Under Alternative 7B, the DON would acquire these wells at that time (or replace them if acquisition is not feasible), treat the extracted groundwater (2,000 gpm on an annual average basis) at an Former MCAS El Toro treatment facility using air stripping and VGAC to remove VOCs, and inject the treated groundwater upgradient of the 5-µg/L isoconcentration contour using ten principal injection wells (Figure 8-2). In the principal aquifer, after 10 years, Alternative 7B is identical to Alternative 2A. In the shallow groundwater unit, groundwater would be also extracted, treated, and reinjected into the shallow unit using the same process as for Alternative 2A (Figure 8-1).

Institutional controls identical to those for Alternative 2A would be used to protect the remedy and prevent residents from inadvertent use of contaminated water. Monitoring would be the same as under Alternative 7A except that after 10 years, one new monitoring well cluster (18\_ADD4) would be installed upgradient of the principal aquifer injection well field to monitor water levels and concentrations of chemicals associated with injection. The contingency plan for Alternative 7B is identical to that for Alternative 7A.

### **8.1.6 Alternative 8: MCAS El Toro Shallow Groundwater Project and Modified Partial IDP With Discharge Only to IDP**

Alternative 8 combines Former MCAS El Toro shallow groundwater extraction (Figure 8-1) with six planned

IDP extraction wells. Five wells are located upgradient of the VOC plume, and well 18\_ET1 is approximately in the center of the plume (Figure 8-2). Groundwater extracted from the shallow groundwater unit and principal aquifer is discharged to the IDP at an approximate rate of 5,700 gpm for treatment and distribution. Well 18\_TIC110, outside the boundaries of the TCE plume, is not considered part of the CERCLA response under Alternative 8, even though groundwater from this well is discharged to the IDP along with groundwater from the other wells discussed above. Downgradient of the IDP wells, natural attenuation would be used to remediate the principal aquifer.

An enhanced monitoring network identical to Alternative 7A (Figure 8-3) would be used to assess the effectiveness of this alternative, and a contingency plan identical to the plan for Alternatives 7A and 7B would be used if trigger levels are exceeded in the monitoring wells. Institutional controls would be identical to those for Alternative 2A.

### **8.1.7 Alternative 8A: MCAS El Toro Shallow Groundwater Project and CERCLA Principal Aquifer Wells With Treatment at IDP and Distribution for Nonpotable Use**

Alternative 8A is a relatively new alternative developed by OCWD/IRWD in 1999 after the OU-1 IAFS had concluded. This alternative was developed to address public concern regarding domestic use of treated groundwater from contaminated portions of the shallow groundwater unit and principal aquifer. Alternative 8A assumes that the IDP would consist of two separate systems designed to treat groundwater from two sources in the principal aquifer and from the shallow groundwater unit at Site 24. Groundwater from the shallow groundwater unit and from areas within the 5- $\mu\text{g/L}$  isoconcentration contour in the principal aquifer VOC plume (which is contaminated at levels above drinking water standards) would be extracted, treated at the IDP, and discharged for use as recycled water.

Groundwater from areas outside the principal aquifer VOC plume (which already meets water quality standards) would be extracted, treated at the IDP to remove trace amounts of VOCs and remove TDS and nitrates. This treated water would then be released for domestic purposes. Groundwater from both sources would be kept separate at all times. An enhanced monitoring network would be used to assess the effectiveness of this alternative, and a contingency plan would be used in the event that trigger levels are exceeded in the monitoring wells.

Only the VOC-related portion of the IDP that treats water from Site 24 and areas inside the principal aquifer VOC plume for nonpotable purposes would be considered part of the CERCLA remedy. The discussion that follows is limited to the CERCLA remedy.

None of the assets of the potable system are included in, associated with, or related to the Former MCAS El Toro groundwater CERCLA actions. Certain specific assets of the nonpotable system are also not associated with or related to the Former MCAS El Toro groundwater CERCLA actions.

The primary components of the Modified IDP are as follows:

#### **CERCLA Component of the Modified IDP**

The CERCLA component of the Modified IDP consists of the following assets of the nonpotable system:

- Extraction Wells IRWD-78, ET-1, and ET-2, and Injection Well IDP-1 which are located within the VOC plume in the principal aquifer;

- pumping and pipeline conveyance system from Wells IRWD-78, ET-1, and ET-2 to the separate nonpotable VOC treatment system located at the Central Treatment Plant (see red line on Figure 8-4); and pumping and pipeline conveyance system from the nonpotable VOC treatment system located at the Central Treatment Plant to Injection Well IDP-1 (see dark blue line on Figure 8-4);
- separate nonpotable VOC treatment system (including air strippers and off-gas granular-activated carbon units) located at the Central Treatment Plant for VOC-contaminated groundwater extracted from both shallow groundwater unit and principal aquifer groundwater;
- the DON's extraction wells for interception and removal of VOC-contaminated groundwater in the shallow groundwater unit; and the DON's pumping and pipeline conveyance from these extraction wells to the nonpotable pipeline conveyance system's point of connection at the Former MCAS El Toro Station boundary; and
- the DON's monitoring wells associated with the remediation of the VOC plume in the shallow groundwater unit and principal aquifer.

### **Non-CERCLA Component of the Modified IDP**

The following potable system and nonpotable system assets of the modified IDP are non-CERCLA:

- the entire potable system of the Modified IDP, including:
  - Extraction Wells TIC-110, IRWD-75, IRWD-76, and IRWD-77 located outside and cross gradient of the VOC plume in the principal aquifer;
  - pumping and pipeline conveyance system from the extraction wells outside and cross gradient of the VOC plume in the principal aquifer to the separate potable system water treatment system (including treatment for VOCs) located at the Central Treatment Plant;
  - the potable water treatment system (including treatment for VOCs) located at the Central Treatment Plant for groundwater extracted from outside and cross gradient of the VOC contaminant plume in the principal aquifer;
  - the potable system desalination treatment assets (including prefilters, chemical feed units, pumps, reverse osmosis units, degassifiers, and controls) and peripheral facilities that include product water delivery/discharge system pumps and pipelines and brine disposal; and
  - monitoring wells associated with the operation and performance of the potable system.
- the nonpotable system desalination treatment assets (including prefilters, chemical feed units, pumps, reverse osmosis units, de-gassifiers, and controls) and peripheral facilities that include product water delivery/discharge system pumps and pipelines and brine disposal

**Shared CERCLA/non-CERCLA Component of the Modified IDP Component Assets at the Central Treatment Plant** (The costs of the following assets were allocated proportionally in the Settlement Agreement.)

- Central Treatment Plant site real property, buildings, site improvements, telemetry, transformers and other electrical improvements, and central monitoring and control systems

The discussion that follows is limited to the CERCLA remedy.

### **8.1.7.1 REMEDIATION OF THE SHALLOW GROUNDWATER UNIT**

Alternative 8A has the same shallow groundwater unit extraction well configuration as Alternative 2A (Figure 8-1). Following extraction, groundwater from the shallow groundwater unit would be blended with groundwater from within the VOC plume in the principal aquifer and discharged to the IDP for treatment.

### **8.1.7.2 REMEDIATION OF THE PRINCIPAL AQUIFER**

Groundwater from contaminated portions of the principal aquifer would be extracted using three extraction wells (Figure 8-4). Together, these wells would extract approximately 2,500 gpm:

<b>Well Number</b>	<b>Extraction Rate (gpm)</b>
18_IRWD78	800
18_ET1	1,000
18_ET2	<u>700</u>
<b>Total</b>	<b>2,500</b>

The extracted groundwater from the principal aquifer would be blended with groundwater from the shallow groundwater unit and discharged to the IDP for treatment.

### **8.1.7.3 INSTITUTIONAL CONTROLS**

Institutional controls would be identical to those for Alternative 2A.

### **8.1.7.4 MONITORING**

The number and location of the monitoring wells would be determined during remedial design. It is anticipated that sentinel wells, similar to those used for Alternative 7A, would be used to provide early detection of any downgradient movement of the plume or movement toward the extraction wells used for domestic water.

### **8.1.7.5 CONTINGENCY PLAN**

A contingency plan would be developed during remedial design to address response actions in the event of unanticipated plume movement.

## **8.2 SITE 24 ALTERNATIVES**

Eighteen remedial action alternatives were evaluated during the FS for Site 24. To expedite remediation of contaminated soil at Site 24 and reduce further contamination of groundwater, the Site 24 remediation was subsequently separated by media, and separate draft final FS reports were issued for soil and groundwater.

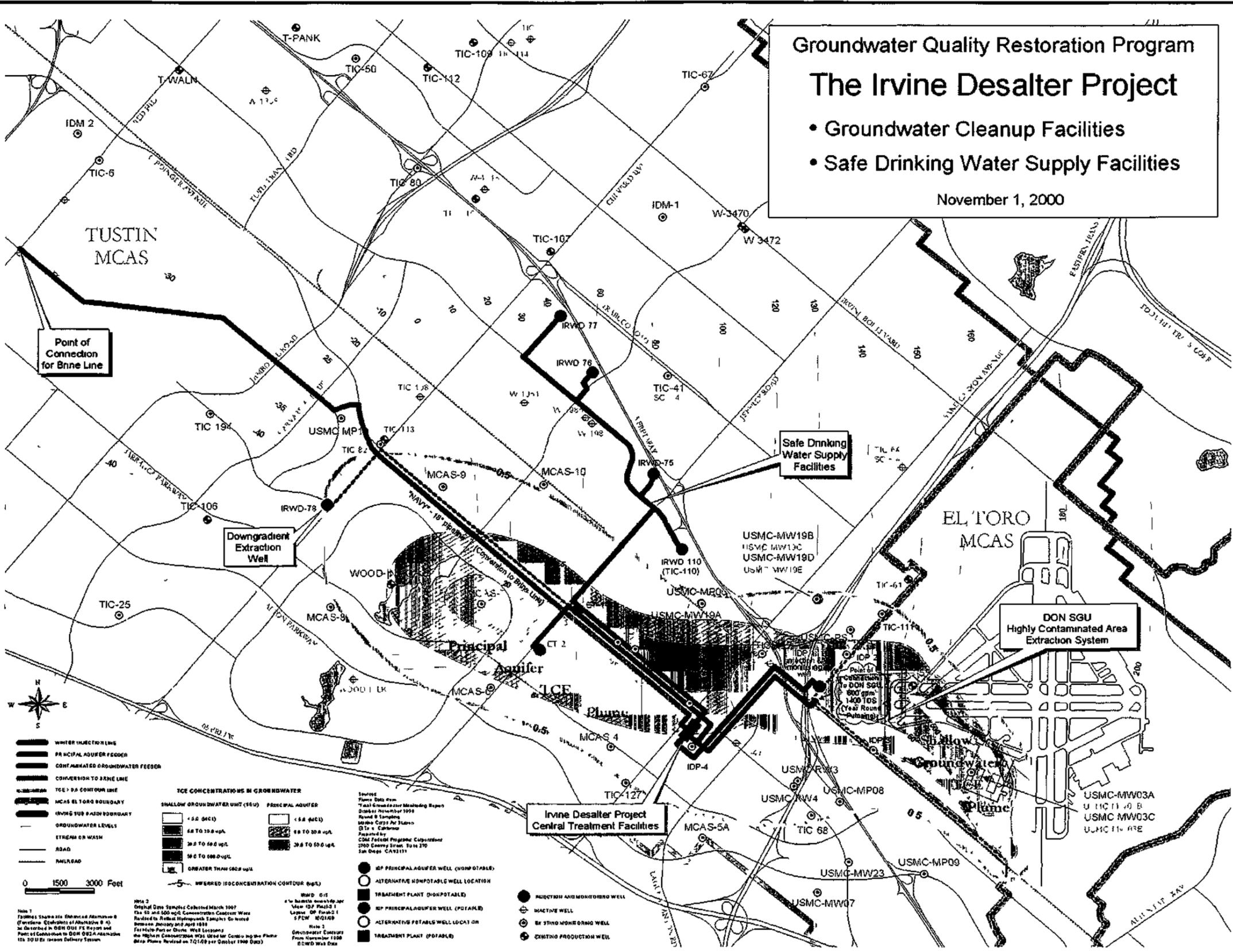
Using the presumptive remedy approach, two alternatives were developed for soil remediation at Site 24: a no action alternative, required by U.S. EPA, and SVE, the U.S. EPA presumptive remedy for VOC-contaminated soil. These alternatives were presented in the Interim ROD for the Site 24 vadose zone (SWDIV 1997a), and

# Groundwater Quality Restoration Program

## The Irvine Desalter Project

- Groundwater Cleanup Facilities
- Safe Drinking Water Supply Facilities

November 1, 2000



Record of Decision  
**Figure 8-4**  
 Alternative 8A  
 Principal Aquifer Well Confirmation  
 Former MCAS, El Toro, California

---

Date 4/25/02  
 File No -  
 Job No 22214-164  
 Rev No A

**Bechtel National, Inc.**  
 CLEAN II Program

SVE was selected as the remedial alternative in September 1997. Remediation of soil took place in 1999 and 2000 and is now considered complete.

Nine remedial action alternatives were presented in the draft final FS Report for Site 24 groundwater. Because the draft final FS Report for groundwater was issued after the Interim ROD for soil had been signed, all nine alternatives assumed that soil would be remediated by SVE. Several of the nine alternatives were eliminated based on preliminary screening, leaving only the following alternatives for a more detailed evaluation using NCP criteria:

- **No Action:** A no action alternative (Alternative 1) was developed as required by U.S. EPA as a baseline for comparing the performance of all other alternatives.
- **Former MCAS El Toro Project:** Alternative 9 is identical to IAFS Alternative 2A but considers that SVE is also operated to reduce future mass loading from the vadose zone to groundwater.
- **Irvine Desalter Project:** Alternatives 10A and 10B extract groundwater from the shallow groundwater unit and principal aquifer and discharge the water to the IDP for treatment. These alternatives differ in the type, number, and placement of wells in the shallow groundwater unit. Alternative 10A is identical to IAFS Alternative 6A but includes SVE to reduce future mass loading from the vadose zone to groundwater. In Alternative 10B, extraction wells in the shallow groundwater unit are located in the areas of highest groundwater contamination. In these locations, the extraction wells not only minimize migration into the principal aquifer but also actively reduce the contaminant mass in the shallow groundwater unit.
- **Alternative 11:** Alternative 11 consists of extraction, treatment, and injection into the shallow groundwater unit coupled with natural attenuation of the principal aquifer. Extraction wells are placed in the areas of highest groundwater contamination to maximize VOC mass removal, and SVE reduces future mass loading from the vadose zone to groundwater.

To simplify the discussion in this ROD, only the groundwater alternatives that were retained after preliminary screening (i.e., Alternatives 1, 9, 10A, 10B, and 11) are addressed. A complete discussion of all Site 24 alternatives is found in the draft final FS reports for soil and groundwater (BNI 1997b, c).

### 8.2.1 Alternative 1: No Action

Alternative 1, no action, is required by CERCLA to provide a basis from which to develop and evaluate the other alternatives. Under Alternative 1, no remedial measures or access or land-use controls would be initiated at Site 24. The no action alternative would have no effect on the physical, biological, or chemical processes controlling the fate and transport of existing contamination at the site. Because remediation of VOCs in soil is complete, VOCs in the soil beneath Site 24 will no longer continue to contaminate the shallow groundwater at levels exceeding the federal MCLs for drinking water. However, VOCs in the shallow groundwater unit could continue to migrate to the principal aquifer.

### 8.2.2 Alternative 9: MCAS El Toro Project With SVE

Alternative 9 consists of the following main components:

- soil remediation using SVE (complete)
- shallow groundwater remediation using extraction, treatment, and injection
- principal aquifer remediation using extraction, treatment, and injection
- institutional controls
- groundwater monitoring

Each component of Alternative 9 is discussed briefly below. Additional details are available in the draft final FS Reports for soil and groundwater (BNI 1997b, c).

### **8.2.2.1 GROUNDWATER REMEDIATION**

Groundwater remediation in Alternative 9 consists of extraction, treatment, and injection in the shallow groundwater unit and extraction, treatment, and injection in the principal aquifer. Groundwater remediation in the shallow groundwater unit and principal aquifer is identical to IAFS Alternative 2A (Figures 8-1 and 8-2, respectively).

### **8.2.2.2 INSTITUTIONAL CONTROLS**

Institutional controls in the form of land-use restrictions will be used to limit the exposure of future landowner(s) and/or user(s) of the property to hazardous substances and to maintain the integrity of the remedial action until remediation is complete and federal and state cleanup levels have been met. Monitoring and inspections will be conducted to assure that the land-use restrictions are being followed. Land-use control objectives to be achieved through the land-use restrictions include:

- preventing the use of VOC-contaminated groundwater until cleanup objectives have been achieved; and
- protecting the groundwater extraction, injection, and monitoring wells and associated piping and equipment.

Institutional controls will also be used to assure access to the site by the DON and regulatory agencies to assure that construction, operation and maintenance, and monitoring of the final remedy and any further investigation and response action are implemented. Land-use restrictions will be applied to the property and included in findings of suitability to transfer (FOSTs), findings of suitability for early transfer (FOSETs), findings of suitability to lease (FOSLs), covenant agreement(s) between the DON and DTSC, and any quitclaim deeds or leases conveying or leasing real property containing the Site 24 Shallow Groundwater Plume.

#### ***Land-Use Restrictions on Property Overlying the Site 24 Shallow Groundwater Plume***

The following are land-use restrictions on property overlying the Site 24 Shallow Groundwater Plume.

1. No new wells of any type shall be installed within the Site 24 Shallow Groundwater Plume or buffer zone without prior review and written approval from the DON, DTSC, U.S. EPA, and RWQCB. The transferee/lessee shall also obtain permits for such wells as required by OCHCA and IRWD as described in Section 8.1.2.3.
2. Extraction, injection, and monitoring wells and associated piping and equipment that are included in the remedial action shall not be altered, disturbed, or removed without the prior review and written approval from the DON, DTSC, U.S. EPA, and RWQCB.

3. The DON, U.S. EPA, DTSC, RWQCB and their authorized agents, employees, contractors and subcontractors shall have the right to enter upon the premises to conduct investigations, tests, or surveys; inspect field activities; or construct, operate, and maintain the remedial action described in this ROD or undertake any other remedial response or remedial action as required or necessary under the cleanup program, including but not limited to monitoring well, pumping wells, and treatment facilities.

### ***Additional Specific Requirements***

The DON will also include the following specific requirements in the FOST, FOSET, and/or FOSL covenant agreement(s), and quitclaim deed(s) or lease(s).

- The transferee/lessee and future transferees/lessees must comply with all terms and conditions relating to land-use restrictions set forth in this ROD.
- The transferee/lessee and future transferees/lessees must notify subsequent future transferees/lessees of all land-use restrictions and access provisions set forth herein.
- The transferee must notify the DON, DTSC, U.S. EPA, and RWQCB of any transfer of all or a portion of that property by the transferee not later than 30 days after the conveyance.

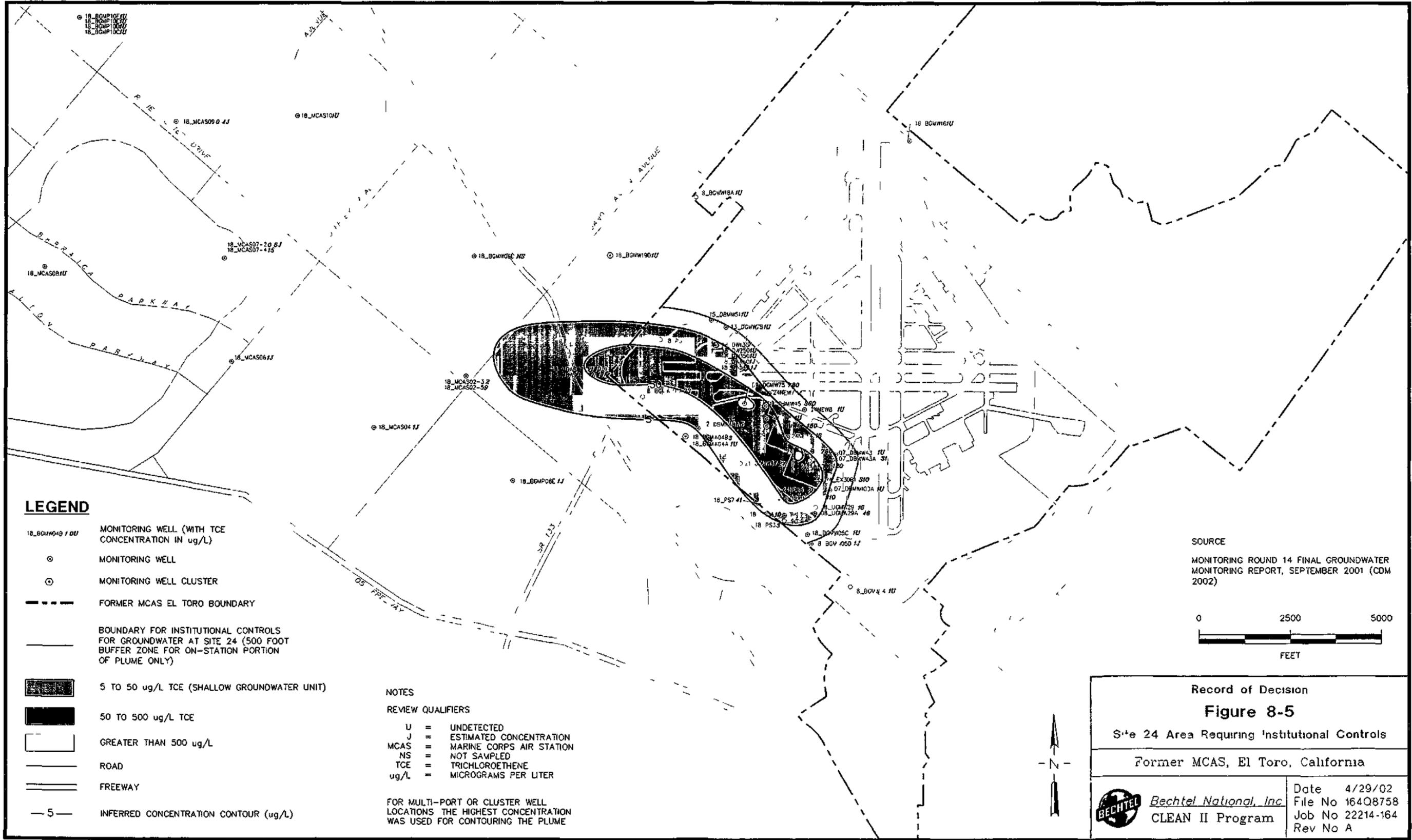
### **8.2.2.3 IMPLEMENTATION OF INSTITUTIONAL CONTROLS**

The on-Station land-use restrictions set forth in this ROD will be incorporated into and implemented through two separate legal instruments: 1) one or more covenant agreements with DTSC addressing on-Station real property containing the Site 24 Shallow Groundwater Plume and associated buffer zone and 2) one or more quitclaim deeds/leases between transferee(s)/lessee(s) and the DON conveying/leasing on-Station real property containing the Site 24 Shallow Groundwater Plume and associated buffer zone. The covenant agreement(s) will incorporate the land-use restrictions into restrictive covenants that run with the land and that are enforceable by DTSC against future transferees. The Deed(s) will include the identical land-use restrictions in environmental restrictive covenants that run with the land and that will be enforceable by the DON against future transferees. In essence, the DON and DTSC will each have the legal authority to enforce the land-use restrictions and will share responsibility for their enforcement.

The on-Station Site 24 Shallow Groundwater Plume and associated buffer zone that are the areas requiring institutional control are shown on Figure 8-5.

### ***Environmental Restriction Covenant and Agreement (Chapters 6.5 and 6.8 of Division 20 of the California Health and Safety Code and California Civil Code Section 1471)***

The DON and DTSC shall enter into good-faith negotiations to enter into an Environmental Restriction Covenant and Agreement(s) pursuant to the substantive requirements of *California Health and Safety Code* (Cal. Health & Saf. Code) division 20 chapters 6.5 and 6.8 and *California Civil Code* (Cal. Civ. Code) § 1471 regarding environmental land-use restrictions, restrictive covenants, and access provisions. A sample of such an agreement is included in Attachment D. The Environmental Restriction Covenant and Agreement(s) will be consistent with and serve as a mechanism to implement the restrictions set forth in Section 8.2.2.2 of this ROD in accordance with DON policy. Once the Environmental Restriction Covenant and Agreement(s) is finalized, it will be executed and recorded immediately prior to the recordation of a quitclaim deed for conveyance of the property pursuant to the Defense Base Closure and Realignment Act of 1990, 10 U.S.C. § 2687.



The Environmental Restriction Covenant and Agreement(s) will be executed by the DON on behalf of the United States and assigns (the covenantor) and DTSC and its successors and assigns, who shall be identified in the Environmental Restriction Covenant and Agreement(s) as the covenantee, pursuant to Cal. Civ. Code § 1471. The Environmental Restriction Covenant and Agreement(s) will provide for access as set forth in Section 8.2.2.2 of this ROD. The Environmental Restriction Covenant and Agreement(s) will include the legal description of the property overlying the on-Station Site 24 Shallow Groundwater Plume and associated buffer zone and the location of extraction, injection, and monitoring wells that are included in the remedial action. The Environmental Restriction Covenant and Agreement(s) will be binding upon all future owners and/or occupants until legally terminated; that is, it will run with the land. The Environmental Restriction Covenant and Agreement(s) will include information summarizing the remedial actions at Site 24 and provisions for terminating or modifying the Environmental Restriction Covenant and Agreement(s) when cleanup levels established in this ROD have been achieved and the remedial equipment has been removed. The Environmental Restriction Covenant and Agreement(s) will be recorded by the DON in the office of the county recorder for the county of Orange. The DON will provide a copy to DTSC following recordation.

### ***Environmental Restrictive Covenants in the Quitclaim Deed (California Civil Code Section 1471)***

Pursuant to Cal. Civ. Code § 1471, the DON shall include in the quitclaim deed(s) between the United States and the transferee(s) the same land-use restrictions and equivalent access provisions that are set forth in Section 8.2.2.2 of this ROD and the Environmental Restriction Covenant and Agreement(s). All such provisions shall use the language contained herein.

The deed(s) will include the legal description of the property overlying the Site 24 shallow groundwater plume and associated buffer zone and associated buffer zone and the location of the extraction, injection, and monitoring wells required for the remedial action. The land-use restrictions and access provisions in the deed(s) will be binding upon all future owners and/or occupants until legally terminated; that is, they will run with the land. The deed(s) will include information summarizing the remedial actions at Site 24 and provisions for terminating or modifying the restrictive covenants in the deed(s) when cleanup levels established in this ROD have been achieved and the remedial equipment has been removed.

The DON would provide DTSC, U.S. EPA, and RWQCB with a copy of the relevant language for the proposed deed for DTSC's, U.S. EPA's, and RWQCB's review and comment in connection with DTSC's and U.S. EPA's review of the FOST or FOSET documents, as appropriate. The scope of DTSC's and U.S. EPA's review of the deed would be to evaluate whether the use restrictions set forth in the Environmental Covenant and Agreement(s) and Section 8.2.2.2 of this ROD have been incorporated into the deed language in accordance with the DON's commitments in the ROD. The deed will be recorded in the office of the county recorder for the county of Orange. A copy of the recorded deed will be provided to DTSC, U.S. EPA, and RWQCB following recordation.

### ***Monitoring and Reporting***

Subject to their respective powers and jurisdictions, OCHCA and IRWD shall have the lead in assuring that appropriate permits are obtained for construction of new water wells in the VOC groundwater plume and taking any necessary enforcement action to assure that such permits are obtained and complied with. The DON shall annually provide U.S. EPA, DTSC, and RWQCB with copies of permit applications and permits that it has received from OCHCA and IRWD during the previous year beginning 1 year from the date of issuance of this ROD and ending when remediation of the plume has been completed. The DON will provide these copies to U.S. EPA, DTSC, and RWQCB within 60 days of receipt from OCHCA and IRWD.

The DON shall monitor and inspect the status of compliance with the land-use restrictions in the Environmental Restriction Covenant and Agreement(s) and quitclaim deed(s) protecting on-Station extraction, injection, and drinking water wells, monitoring wells, and associated piping and equipment concurrently with inspections of such engineering controls and equipment as provided in the operations and maintenance plan. The DON shall report the results of the inspections to the U.S. EPA, DTSC, and RWQCB. The operations and maintenance plan shall address the frequency of such reporting and the contents of the reports of the inspections.

If a violation of such an on-Station land-use restriction is identified and/or documented by either the DON or DTSC, the entity identifying the violation will notify the others within 10 working days of identifying the violation. The DON, U.S. EPA, DTSC, and RWQCB shall then consult to determine what, if any, action(s) should be taken, which of them shall undertake the action(s), and when it/they shall be undertaken. The results of such a consultation shall be formally documented in writing. DTSC may enforce the Environmental Restriction Covenant and Agreement provisions.

#### **8.2.2.4 MONITORING**

The groundwater monitoring well network for Alternative 9 consists of the same 58 groundwater monitoring wells used for Site 18 Alternative 2A plus an additional 38 groundwater monitoring wells screened in the shallow groundwater unit and intermediate zone at Site 24. Site 18 monitoring wells are shown on Figure 8-3; Site 24 monitoring wells are shown on Figure 8-6.

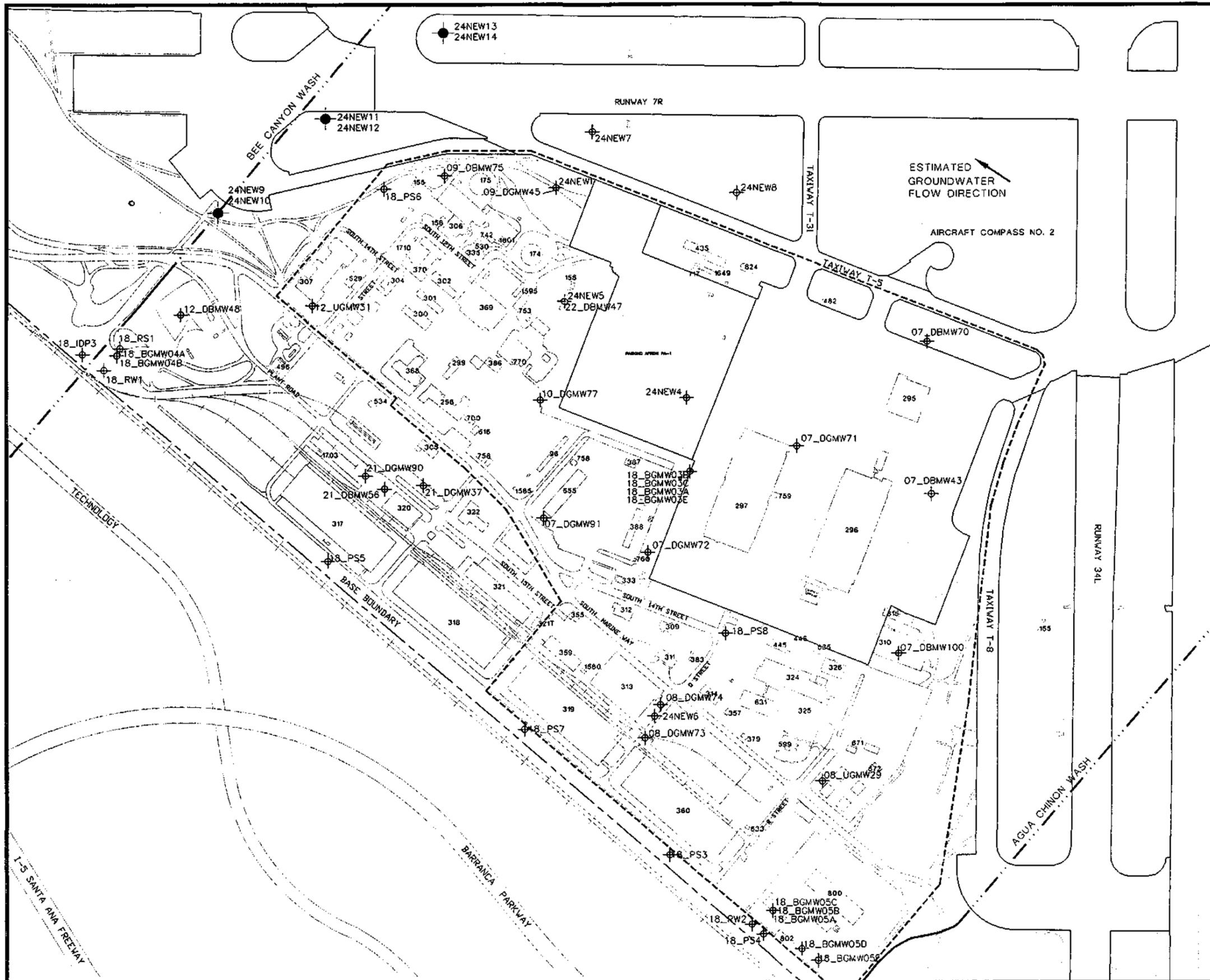
Thirty-two Phase I and Phase II RI groundwater monitoring wells are already included in the sampling program for Site 24. Six additional groundwater monitoring wells are proposed to complete the monitoring network at Site 24. The six additional wells are intended to monitor VOC concentrations at the downgradient edge of the 5- $\mu\text{g/L}$  contour at Site 24 (three locations with two well clusters each). The actual number and locations of the groundwater monitoring network would be finalized during the engineering design phase.

#### **8.2.3 Alternative 10A: Irvine Desalter Project With SVE**

In Alternative 10A, groundwater is extracted from the shallow groundwater unit and from the principal aquifer, combined, and discharged to the EDP central treatment system for removal of VOCs and subsequent treatment and distribution. The configurations of the extraction system in the shallow groundwater unit and principal aquifer are identical to those in Alternative 6A. SVE is used to remediate contaminated soil and minimize future groundwater loading. Institutional controls are used to protect equipment, allow access for monitoring and maintenance, and prevent residents from inadvertent use of contaminated water at Site 24. Institutional controls are identical to those of Alternative 9. Groundwater monitoring is performed using a network of 56 wells at Site 18 and 38 wells at Site 24. The monitoring well configuration would be identical to Alternative 6A.

#### **8.2.4 Alternative 10B/10B': Modified Irvine Desalter Project With SVE**

Alternatives 10B and 10B' are similar to Alternative 10A except that the extraction wells for the shallow groundwater unit are relocated to extract groundwater from the VOC hot spot where concentrations of contaminants are highest (Figure 8-1). Extraction of contaminated groundwater within the shallow groundwater unit is accomplished using 49 extraction wells (Figure 8-1). Thirty-seven core extraction wells are planned to be placed within the central portion of the plume where TCE concentrations exceed 500  $\mu\text{g/L}$ . For Alternative 10B, the assumed pumping rate for core extraction wells is approximately 18 gpm. Twelve perimeter extraction wells are located farther out, near the 50- $\mu\text{g/L}$  TCE concentration contour. The assumed pumping rate for perimeter extraction wells is approximately 12 gpm. Both core extraction wells and perimeter wells are screened in the top 50 feet of the shallow groundwater unit where TCE concentrations are highest. By



**LEGEND**

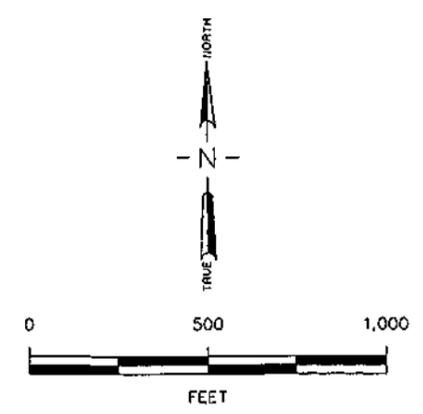
- BUILDING OR PAD
- STREAMS OR WASH
- IMPROVED ROADS
- UNIMPROVED ROADS
- RAILROAD
- SITE 24 BOUNDARY
- FENCE
- BASE BOUNDARY

**EXISTING:**

- EXISTING MONITORING WELL

**ADDITIONAL:**

- PROPOSED NESTED MONITORING WELLS, ONE IN SHALLOW GROUNDWATER UNIT, ONE IN INTERMEDIATE ZONE.



Record of Decision  
**Figure 8-6**  
 Site 24 Conceptual Groundwater Monitoring Network

Former MCAS, El Toro, California

**Bechtel National, Inc.**  
 CLEAN II Program

Date: 4/26/02  
 File No: 164L7932  
 Job No: 22214-164  
 Rev No: B

relocating wells to this area, mass removal is optimized and time to remediate the shallow groundwater unit is reduced. Alternative 10B' differs from Alternative 10B only in the total pumping rate. Alternative 10B has a total pumping rate of approximately 800 gpm; Alternative 10B' has a total pumping rate of approximately 440 to 550 gpm.

In Alternatives 10B and 10B', the extraction rates for the core extraction wells are higher than the extraction rates for the perimeter extraction wells to produce an overall capture zone within the core of the plume, thereby enhancing the extraction of contaminated groundwater. The core extraction wells can also be operated in the vacuum-enhanced mode to remove adsorbed-phase VOCs from the partially dewatered shallow groundwater. In addition to VOC removal, the groundwater capture zone also serves to limit the horizontal migration of VOCs. As groundwater extraction continues for this alternative, the TCE plume will shrink, and some of the wells can be taken out of service as they begin to pump clean water. As a result, the pumping rate will decline over time and the cost of system operation and maintenance will decline.

The total pumping rate for the shallow groundwater unit in Alternative 10B was assumed to be 800 gpm. However, based on Phase II aquifer testing (BNI 1996c, 1998b) and groundwater model simulations (BNI 1997b), the sustainable pumping rate for the shallow groundwater unit may be less. Sensitivity runs performed during the FS indicated that reducing the pumping rate to as low as 400 gpm would not adversely impact operation of the remediation system.

Monitoring would be performed using the same Site 18 monitoring well network as IAFS Alternative 6A (Figure 8-3) and the same Site 24 monitoring well network as Alternative 9 (Figure 8-5). Institutional controls are identical to those of Alternative 9.

### **8.2.5 Alternative 11: Extraction/Treatment/Injection in the Shallow Groundwater Unit With SVE**

Under Alternative 11, groundwater would be extracted from the shallow groundwater unit using 49 extraction wells in the same configuration as Alternative 10B and 10B' (Figure 8-1). The groundwater would be treated on-Station using air stripping with VGAC and injected back into the shallow groundwater unit. Groundwater in the principal aquifer and in the shallow groundwater unit past the Site 24 boundary would be remediated using natural attenuation.

Treated groundwater would be injected back into the shallow groundwater unit through a network of 44 injection wells. Two types of injection wells will be used: short-screen injection wells and full-screen injection wells. The short-screen injection wells are located near the present 50- $\mu\text{g/L}$  TCE concentration contour. Considering that the TCE plume is concentrated mainly within the upper 50 feet of the shallow groundwater unit, the short-screen wells are designed to contain the horizontal migration of the TCE plume. In areas with relatively high TCE concentrations, injection over the entire thickness of the shallow groundwater unit may lead to cross-contamination of the lower portion of the shallow groundwater unit.

The full-screen injection wells are located near the 5- $\mu\text{g/L}$  TCE concentration contour. These wells are designed to inject treated water into the entire thickness (100 feet) of the shallow groundwater unit. Injection of treated water near the edges of the TCE plume serves to limit the horizontal and vertical migration of TCE-contaminated groundwater. Groundwater injection forms hydraulic barriers that limit the horizontal and vertical migration of TCE. Injection also replenishes groundwater while providing a viable discharge and disposal option.

Groundwater monitoring in the shallow groundwater unit for Alternative 11 is identical to Alternative 9 (Figure 8-5). Principal aquifer monitoring is identical to Alternative 7A (Figure 8-3). Institutional controls are identical to Alternative 9.

### **8.3 PERIODIC REVIEWS**

As required by CERCLA Section 121(c), periodic reviews would occur at least every 5 years. Five-year reviews of federal facilities are a federal agency function intended to evaluate whether immediate threats have been addressed, whether the remedial action remains protective of public health and the environment, whether the remedy is functioning as designed, and that necessary operation and maintenance (O&M) is being performed. The review at Sites 18 and 24 is expected to focus on whether the institutional controls are in place and are sufficient to assure protection and whether groundwater remediation is reducing contaminant concentrations and preventing migration of VOCs.

The 5-year review will be conducted by the DON, which will prepare and submit a report to the regulatory agency members of the BCT for review. The review will 1) clearly state whether the remedy is expected to be protective, 2) document any deficiencies identified during the review, and 3) recommend specific actions to assure that the remedy will continue to be protective (DON 2001). If necessary, the 5-year review report will include descriptions of follow-up actions needed to achieve, or to continue to assure, protectiveness along with a timetable for these actions.

### **8.4 OPERATION AND MAINTENANCE PLAN**

An operation and maintenance plan will be developed during the remedial design phase. The plan will establish the exact number and location of monitoring wells. It will also outline sampling and analysis methods, periods and frequency for each well, and major decision points to be made during monitoring (e.g., adding or removing wells, or changing sampling frequency or analytical parameters). The criteria for assessing the effectiveness of the remedial action will also be included in the operation and maintenance plan.

Each extraction well will remain in operation until it has been demonstrated that cleanup goals have been achieved or the extraction well is no longer effective in contributing to the restoration of the aquifer. Criteria for shutoff will be developed during the remedial design phase and incorporated into the operation and maintenance plan. Once all extraction wells have met the established cleanup goals or it is demonstrated that the remedy is no longer effective in meeting the remedial action objectives, extraction will be discontinued.

## Section 9

# SUMMARY OF THE COMPARATIVE ANALYSIS OF ALTERNATIVES

This section summarizes the comparative analyses conducted to evaluate the relative advantages and disadvantages of each remedial alternative in relation to the nine evaluation criteria outlined in CERCLA § 121 (b), as amended. The original Site 18 alternatives were evaluated in the OU-1 IAFS Addendum (JEG 1996g). Alternative 8 A, added after completion of the Phase II AFS, was evaluated against the original Site 18 alternatives by the DON in 2001 (BNI 2001). Site 24 alternatives were evaluated in the FS report for groundwater (BNI 1997b).

The CERCLA evaluation of nine criteria is categorized into three groups: threshold criteria, primary balancing criteria, and modifying criteria. The threshold criteria must be satisfied in order for an alternative to be eligible for selection. The primary balancing criteria are used to weigh major tradeoffs among alternatives. Generally, the modifying criteria are taken into account after public comment is received on the proposed plan.

### 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

Computer modeling supported the comparative analysis by assessing the effect of each alternative on VOC contamination. The modeling was used primarily to evaluate long-term effectiveness; short-term effectiveness (i.e., time to achieve cleanup objectives); and reduction of toxicity, mobility, or volume of contaminants. Modeling at Site 18 was performed using the coupled fluid energy and solute transport model and considered only groundwater.

Modeling at Site 24 was performed using three separate but linked computer codes (MODFLOW, MT3D, and MODPATH) and considered both soil and groundwater. Because different models with different input parameters were used for Site 18 and Site 24, a comparison of alternatives for Site 18 conditions with alternatives for Site 24 conditions is not meaningful.

Section 9.1 presents a comparison of Site 18 alternatives, and Section 9.2 presents a comparison of Site 24 alternatives. Table 9-1 summarizes the comparative analyses for both sites. The selected alternative is a combination of a Site 18 alternative for remediation of the principal aquifer and a Site 24 alternative for remediation of groundwater in the shallow groundwater unit. (Remediation of soil is addressed in a separate ROD.)

## 9.1 COMPARISON OF SITE 18 ALTERNATIVES

Table 9-2 compares Alternatives 1, 2A, 6A, 7 A, 7B, 8, and 8A in terms of TCE mass removed in 20 years, simulated time to clean up the principal aquifer to achieve TCE concentrations less than the MCL, and cost. The information from this table and additional information provided in the OU-1 IAFS and the Alternative 8A technical memorandum (BNI2001) provide the basis for the comparative analysis presented below.

### 9.1.1 Threshold Criteria

Threshold criteria include overall protection of human health and the environment and compliance with applicable or relevant and appropriate requirements. An alternative must meet both threshold criteria to be eligible for selection.

#### 9.1.1.1 OVERALL PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT

*Assesses whether a cleanup remedy provides adequate public health protection and describes how health risks posed by the site will be eliminated, reduced, or controlled through treatment, engineering controls, or institutional and regulatory controls.*

Alternative 1 (no action) would not substantially alter the current or potential future risks to human health or the environment. The HHRA performed in the OU-1 RI/FS showed that the risks based on results from two wells in the principal aquifer exceeded the U.S. EPA guideline of  $10^{-4}$  because of the presence of benzene or TCE. Noncarcinogenic risks in the principal aquifer also exceeded U.S. EPA guidelines because of the presence of TCE in five wells and the presence of carbon tetrachloride in two wells.

Alternative 1 would not reduce these risks significantly, nor would it reduce the potential for further migration of VOCs from the shallow groundwater unit to the principal aquifer. Because it does not reduce risks or provide source control measures to prevent migration from the shallow groundwater unit to the principal aquifer, Alternative 1 is not considered protective of human health and the environment.

Alternatives 2A, 6A, 7A, 7B, 8, and 8A would reduce risks by inhibiting contaminant migration from on-Station source areas and by reducing the VOC concentrations in the principal aquifer to MCLs. These measures would assist in restoring the principal aquifer to allow its designated beneficial uses. Although the time required to remediate the principal aquifer is significant (Table 9-2), Alternatives 2A, 6A, 7A, 7B, 8, and 8A would be more effective than Alternative 1. Until cleanup goals are achieved, Alternatives 2A, 6A, 7A, 7B, 8, and 8A would use institutional controls to prevent inadvertent use of contaminated groundwater.

Section 9 Summary of the Comparative Analysis of Alternatives

**Table 9-1  
Comparative Analysis of Remedial Alternatives<sup>a</sup>**

U.S. EPA Criteria	No Action 1	Site 18 Alternatives						Site 24 Alternatives				Preferred Remedy 8A/10B'	
		2A	6A	7A	7B	8	8A	9	10A	10B	11		
1 Overall Protection of Human Health and the Environment	X	4	4	4	4	4	4	4	4	4	4	4	4
2 Compliance with Applicable or Relevant and Appropriate Requirements	NA	4	4	4	4	4	4	4	4	4	4	4	4
3 Long-Term Effectiveness and Permanence	○	●	●	◐	◐	●	●	●	●	●	●	●	●
4 Reduction of Toxicity, Mobility, or Volume of Contaminants Through Treatment	○	●	●	◐	◐	●	●	●	◐	●	●	●	●
5 Short-Term Effectiveness	○	●	●	●	●	◐	● <sup>b</sup>	●	◐	●	●	●	●
6 Implementability	●	◐	NAF	●	●	NAF	●	◐	NAF	●	●	●	●
7 Cost	●	○	◐	●	◐	●	●	◐	◐	◐	●	●	●
8 State Acceptance – State concurs with the preferred remedy.												●	
9 Community Acceptance – This criteria will be addressed in the Record of Decision.													

Notes:

<sup>a</sup> in this analysis, remedial alternatives for each site are only evaluated against each other; thus, Site 18 Alternatives are not to be compared with Site 24 Alternatives

<sup>b</sup> by further optimizing the placement of extraction wells in the remedial design phase, remediation time may be significantly shortened

X – does not meet criteria

4 – meets criteria

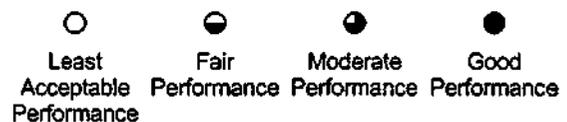
Acronyms/Abbreviations:

NA – not applicable

NAF – not administratively feasible

U.S. EPA – United States Environmental Protection Agency

Relative Performance in Satisfying Criteria



**Table 9-2**  
**Summary of Modeling Results for Site 18 Alternatives**

<b>Alternative</b>	<b>TCE Mass Removed from Shallow Groundwater Unit and Principal Aquifer in 20 years (lb)</b>	<b>Simulated Time to Clean Up Principal Aquifer (years)</b>	<b>Present Worth Cost<sup>a,b</sup> (\$million)</b>
1	3,110	> 100	0
2A	12,540	43	56.4
6A	13,750	49	40.3
7A	11,830	60	34.0
7B	11,750	54	48.2
8	13,200	70	32.3
8A	14,000	95 <sup>c</sup>	33.6

## Notes:

<sup>a</sup> cost estimates are taken from the OU-1 IAFS and are presented in 1995 dollars

<sup>b</sup> for comparison purposes, indemnification costs from the settlement agreement are not included in any of the DP alternatives

<sup>c</sup> computer modeling shows that Alternative 8A is the most effective alternative during the first 20 years of operation at removing the initial mass of VOC contamination; by further optimizing placement of the extraction wells in the remedial design phase, remediation time may be significantly shortened

## Acronyms/Abbreviations:

IAFS - interim-action feasibility study

IDP - Irvine Desalter Project

lb - pound

OU - operable unit

TCE - trichloroethene

VOC - volatile organic compound

Because Alternatives 2A, 6A, 7A, 7B, 8, and 8A would inhibit migration of contaminated groundwater from the source area, remediate groundwater to MCLs within a reasonable time period, and prevent use of groundwater until it is remediated, these alternatives are considered protective of human health and the environment.

### 9.1.1.2 COMPLIANCE WITH APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS

*Addresses whether a cleanup remedy will meet all federal, state, and local environmental statutes or requirements.*

CERCLA § 121(d)(1) (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 § 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. Because ARARs are triggered only when a remedial action is taken, no discussion of ARARs is needed for Alternative 1.

Alternatives 2A, 6A, 7A, 7B, 8, and 8A are expected to comply with all ARARs for Site 18, meeting the remedial goals for the principal aquifer and thereby complying with the requirements of the Water Quality Control Plan (WQCP), federal or state MCLs for organic compounds, and RCRA groundwater protection standards. The time needed to meet the remedial goals would be significant (Table 9-2). In the interim, these alternatives would rely on institutional controls to prevent exposure to contamination in groundwater.

Alternatives 2A, 6A, 7A, 7B, 8, and 8A would also comply with RCRA hazardous waste management requirements for managing extracted groundwater (as needed) and other potentially hazardous waste such as drill cuttings from well installations (as needed) and would comply with the executive orders on floodplain protection, National Archaeological and Historical Preservation Act, Clean Air Act, and substantive portions of the South Coast Air Quality Management District (SCAQMD) rules for VOCs in emissions from the air stripper.

The state of California interprets State Water Resources Control Board (SWRCB) Resolution (Res.) 68-16 as prohibiting migration of existing groundwater contamination. The DON has considered this position and has determined that further migration of already contaminated groundwater is not a discharge governed by the language of the resolution. That is, the resolution is intended to apply to new discharges to maintain existing high-quality waters and is not intended to apply to restoration of waters that have already been degraded. Therefore, the DON accepts Resolution 68-16 as an ARAR for new discharges only.

For alternatives involving injection (Alternatives 2A, 7A, and 7B), extracted groundwater would be treated to remove VOCs to a concentration at or below the analytical detection limits before injection into the shallow groundwater unit or the principal aquifer. The treated groundwater would be injected into an area of the same aquifer where it would not exceed the background levels of TDS and nitrates.

### **9.1.2 Primary Balancing Criteria**

Primary balancing criteria include long-term effectiveness and permanence, reduction of toxicity, mobility or volume, short-term effectiveness, implementability, and cost. These are used to weigh trade-offs among alternatives and identify the most favorable.

#### **9.1.2.1 LONG-TERM EFFECTIVENESS AND PERMANENCE**

*Refers to the ability of a remedy to continue protecting human health and the environment over time after the cleanup action is completed.*

Alternative 1 would have little long-term effectiveness at reducing risk from VOC contamination in the groundwater or lessening VOC migration from the shallow groundwater unit to the principal aquifer. As shown in Table 9-2, Alternatives 2A, 6A, 7A, 7B, 8, and 8A would remove TCE mass more effectively than Alternative 1, and this removal would be permanent. The VOC contamination would be captured by GAC and destroyed when the carbon is regenerated. Alternatives 6A, 8, and 8A would be the most effective in reducing contaminant mass in the first 20 years of remediation because these alternatives each contain one or more extraction wells located in the area of highest TCE concentrations in the principal aquifer.

The residual risk remaining when Alternatives 2A, 6A, 7A, 7B, 8, and 8A attain cleanup levels would be represented by MCLs and risk-based concentrations for VOCs, which U.S. EPA has determined are acceptable risk levels. Because of the chemical interactions among organic compounds, soil, and water, VOC contamination may never be eliminated completely. In an aquifer, TCE is in equilibrium between the soil and water phases. As contaminated groundwater is extracted, it is replaced by cleaner groundwater, and the concentration of TCE is lowered. TCE is sorbed to the solid phase then dissolves into the groundwater to

recover the equilibrium, thereby raising the concentration, although theoretically to a lower level. This cycle continues as long as groundwater continues to be extracted. However, the process of desorption is not rapid and gradually slows over time, especially in aquifers where the contamination is not recent. Also, sorbed organics may become trapped in pore spaces that are not in contact with the free water available for extraction. For these reasons, while groundwater extraction is initially effective in removing VOCs, at some point a minimal concentration (i.e., an asymptotic condition) would be reached and continued extraction would produce negligible reduction.

### 9.1.2.2 REDUCTION OF TOXICITY, MOBILITY, OR VOLUME

*Refers to the degree to which a cleanup alternative uses treatment technologies to reduce 1) harmful effects to human health and the environment (toxicity), 2) the contaminant's ability to move (mobility), and 3) the amount of contamination (volume).*

Alternative 1 would provide no treatment or other active approach for the reduction of toxicity, mobility, or volume of the contaminants. Based on simulation, a small amount of TCE mass (about 3 percent of the total) would be removed after 20 years by the background water pumping through the irrigation wells at the downgradient edge of the plume, and about 13 percent would biodegrade during 20 years. However, this would be substantially less reduction of TCE mass than any of the other Site 18 alternatives would achieve.

Alternatives 2A, 6A, 7A, 7B, 8, and 8A provide a significant reduction in toxicity, mobility, and volume. Groundwater extraction and treatment using GAC are demonstrated remedial technologies that are permanently effective in removing VOCs. VOCs are pulled to the surface through extraction wells where the VOC-laden stream is treated with GAC to reduce concentrations to levels below detection limits. During this treatment, the VOCs are temporarily transferred to the carbon. Once the GAC capacity has been attained, the activated carbon is removed from the site and transported to a regeneration facility where the VOCs are desorbed and thermally destroyed. Groundwater modeling indicates that for Alternative 1, the plume of TCE in the principal aquifer exceeding 5 µg/L would increase in extent after 20 years to cover an 1,428-acre area (Table 9-3). In contrast, the plume area under Alternative 8A would be 1,073 acres (a 25 percent reduction over Alternative 1). Under Alternatives 6A and 8, the plume area would be 939 and 979 acres, respectively, representing a 34 percent and 31 percent reduction over Alternative 1. Alternatives 6A and 8 would be the most effective alternatives at reducing the areal extent of the TCE plume. Alternative 8A would be moderately effective at reducing the areal extent of the plume but the most effective at reducing the mass of TCE in the principal aquifer (Table 9-3).

**Table 9-3**  
**Plume Area in Principal Aquifer After 20 Years (in acres)**

Alternative	TCE Plume Area Exceeding MCL in Principal Aquifer
1	1,428
2A	1,080
6A	939
7A	1,308
7B	1,303
8	979
8A	1,073

Acronyms/Abbreviations:

MCL - maximum contaminant level

TCE - trichloroethene

### 9.1.2.3 SHORT-TERM EFFECTIVENESS

*Assesses how well human health and the environment will be protected from impacts due to construction and implementation of a remedy. Also considers time to reach cleanup goals.*

Alternative 1 would not entail any on-site remedial activities and, therefore, would not impact the surrounding community, workers, or the environment. The time required for Alternative 1 to be protective of human health and the environment would be controlled by background pumping and the rate of natural attenuation processes and is expected to exceed 100 years.

Short-term impacts associated with the implementation of Alternatives 2A, 6A, 7A, 7B, 8, and 8A include the increased risk of exposure to workers through the handling of contaminated soils and groundwater. An additional short-term impact of these alternatives is the risk of vehicular accidents and releases during transport of contaminated GAC.

Potential on-site exposures and risks from these activities would be controlled through use of personal protective equipment, monitoring, and compliance with a site-specific safety and health plan. Transport risks would be minimized to the extent feasible by using a licensed commercial hauler, and impacts on the surrounding community or the environment are expected to be negligible. None of the actions taken in Alternatives 2A, 6A, 7 A 7B, 8, and 8A are expected to cause adverse short-term health effects.

The time to achieve remediation goals (Table 9-2) is highly dependent on well location and subsurface conditions. Alternative 1 requires the most time (100 years) to achieve cleanup because this alternative uses no containment wells to prevent movement of contaminated groundwater from the shallow groundwater unit to the principal aquifer and no extraction wells to remove and treat contaminated groundwater.

Alternatives 8 and 8A also require a considerable time to reach cleanup goals (70 and 95 years, respectively). These alternatives use containment wells to prevent migration from the source area and one (Alternative 8) or two (Alternative 8A) wells within the hot spot in the principal aquifer to extract contaminated groundwater. The extraction wells within the hot spot reduce the gradient between the center and toe of the plume, slowing down the flow of contaminated groundwater and extending the cleanup time.

Alternative 7A, which requires approximately 60 years to reach cleanup goals, uses containment wells to prevent migration from the source area but allows the plume to attenuate naturally once it reaches the principal aquifer.

Alternatives 6A and 7B reduce the cleanup time over Alternatives 7A, 8, and 8A by adding two extraction wells at the toe of the plume.

Alternative 2A requires the least time to reach cleanup goals (43 years) because treated groundwater is injected back into the principal aquifer to flush the aquifer and increase movement of groundwater toward the extraction wells at the toe of the plume.

### 9.1.2.4 IMPLEMENTABILITY

*Refers to the technical feasibility (how difficult the remedy is to construct and operate) and administrative feasibility (coordination with other agencies) of a remedy. Factors such as availability of materials and services needed are considered.*

Alternative 1 is the most easily implemented alternative from a technical perspective because it would involve no on-site construction or other remediation activities.

Alternatives 2A, 6A, 7A, 7B, 8 and 8A would include the construction of extraction and monitoring wells, conveyance piping, and treatment facilities, as well as operation, maintenance, and performance monitoring. Construction and operation of these components entail standard, proven practices known to be readily implementable. Difficulties regarding feasibility, availability of equipment and services, or schedule are not anticipated.

The monitoring program used by these alternatives would provide early warning of changes in contaminant concentrations or groundwater flow that may require modification of extraction rates, well locations, or treatment methods to attain remedial objectives.

Wells located off-Station require acquisition of property or easements for the construction of extraction wells and conveyance facilities. Coordination with California Department of Transportation or local transportation authorities would be sought if the installation of conveyance facilities were to affect transportation rights-of-way. Alternatives 6A, 8, and 8A require the DON and OCWD/IRWD to agree on and resolve operational, financial, and liability concerns, including responsibility for capital investments and use of shared facilities for the IDP, before implementation. Such a settlement agreement has been reached and is discussed further in Section 10. A copy of the agreement is included as an attachment to this ROD and in the administrative record for Former MCAS El Toro.

#### **9.1.2.5 COST**

Evaluates the estimated capital costs and present worth in today's dollars required for design and construction and long-term operation and maintenance costs of a remedy. Table 9-2 lists cost estimates for the Site 18 alternatives. There are no costs associated with Alternative 1. Alternative 8 is the least costly of the other alternatives, followed closely by Alternatives 8A and 7A.

### **9.1.3 Modifying Criteria**

Modifying criteria include state and community acceptance. State acceptance is taken into account during development of the proposed plan and ROD. Public acceptance is considered through comments received during the public comment period.

#### **9.1.3.1 STATE ACCEPTANCE**

*Reflects whether the state of California's environmental agencies agree with, oppose, or have no objection to or comment on the Marine Corps' preferred alternative.*

DTSC and RWQCB have reviewed the Site 18 Interim Action RI/FS Report and the Proposed Plan and concur with the selected remedy for groundwater remediation at Site 18.

#### **9.1.3.2 COMMUNITY ACCEPTANCE**

*Evaluates whether community concerns are addressed by the remedy and if the community has a preference for a remedy. Although public comment is an important part of the final decision, the Marine Corps is compelled by law to balance community concerns with the other criteria.*

The Proposed Plan has been presented to the community and discussed at a public meeting. The responsiveness summary portion of this ROD addresses the public's comments and concerns about the selected remedy.

## 9.2 COMPARISON OF SITE 24 ALTERNATIVES

Table 9-4 compares Alternatives 1, 9, 10A, 10B/10B', and 11 in terms of TCE mass removed in 20 years, simulated time to clean up the shallow groundwater unit, and present worth cost. The information from this table and additional information provided in the Site 24 FS Report (BNI 1997c) provide the basis for the comparative analysis presented below.

**Table 9-4**  
**Summary of Modeling Results for Site 24 Alternatives**

<b>Alternative</b>	<b>TCE Mass Removed from the Shallow Groundwater Unit in 20 years (pounds)</b>	<b>Simulated Time to Clean Up Shallow Groundwater Unit (years)</b>	<b>Present Worth Cost* (\$million)</b>
1	0	> 80	0
9	1,860	44	41.7
10A	1,340	80	46.2
10B/10B'	1,550	19/20	47.6
11	1,830	38	23.8

Note:

\* cost estimates are taken from the Site 24 FS Report and are presented in 1997 dollars

Acronyms/Abbreviations:

FS - feasibility study

TCE - trichloroethene

### 9.2.1 Threshold Criteria

Threshold criteria include overall protection of human health and the environment and compliance with applicable or relevant and appropriate requirements. An alternative must meet both threshold criteria to be eligible for selection.

#### 9.2.1.1 OVERALL PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT

*Assesses whether a cleanup remedy provides adequate public health protection and describes how health risks posed by the site will be eliminated, reduced, or controlled through treatment, engineering controls, or institutional and regulatory controls.*

The excess upper-bound cancer risk presented by exposure to VOCs in the shallow groundwater unit based on a residential exposure scenario was on the order of 2 in 1,000 ( $2 \times 10^{-3}$ ), which exceeds U.S. EPA guidelines for generally acceptable carcinogenic risks. The HHRA also indicated that the VOC concentrations in groundwater of the shallow groundwater unit were high enough to potentially cause noncarcinogenic effects to receptors.

Alternative 1 would not reduce these risks significantly, nor would it reduce the potential for further migration of VOCs from the shallow groundwater unit to the principal aquifer and thus would not provide for the protection of human health or the environment.

Alternatives 9, 10A, 10B/10B', and 11 would reduce risks by minimizing VOC migration from the shallow groundwater unit to the principal aquifer. The alternatives would, over time, also reduce VOC concentrations in the shallow groundwater unit to MCLs. These measures would assist in the restoration of both the shallow groundwater unit and principal aquifer to their designated beneficial uses. Until cleanup goals are achieved, Alternatives 9, 10A, 10B/10B', and 11 would use institutional controls (land-use restrictions) to prevent domestic use of contaminated groundwater.

Because Alternatives 9, 10A, 10B/10B', and 11 would inhibit migration of VOCs from the shallow groundwater unit to the principal aquifer, remediate groundwater to MCLs within a reasonable time, and prevent domestic use of contaminated groundwater until remediation has been accomplished, these alternatives are considered protective of human health and the environment.

### **9.2.1.2 COMPLIANCE WITH APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS**

*Addresses whether a cleanup remedy will meet all federal, state, and local environmental statutes or requirements.*

Because ARARs are only triggered when a remedial action is conducted, they are not applicable for Alternative 1.

Alternatives 9, 10A, 10B/10B', and 11 are expected to comply with all ARARs for Site 24, meeting the remedial goals for the shallow groundwater unit and thereby complying with the requirements of the WQCP, federal and state MCLs for organic compounds, and RCRA groundwater protection standards. The time required to meet the remedial goals would be significant (Table 9-4); in the interim, these alternatives would rely on institutional controls to prevent exposure to contamination in groundwater.

Alternatives 9, 10A, 10B/10B', and 11 also comply with the RCRA hazardous waste management requirements for managing extracted groundwater and other potentially hazardous waste such as drill cuttings from well installations and spent GAC.

Characterization of groundwater extracted from the shallow groundwater unit will be performed during the remedial design phase to evaluate whether RCRA design standards apply.

Alternatives 9, 10A, 10B/10B', and 11 would also comply with the executive orders on floodplain protection, National Archaeological and Historical Preservation Act, Clean Air Act, and substantive requirements of the SCAQMD for VOCs in emissions from the SVE treatment facility. Alternatives 9 and 11 would comply with SWRCB Res. 68-16 in that groundwater would be extracted, treated to reach a concentration at or below the analytical detection limit, and injected into an area of the shallow groundwater unit where the background levels of TDS and nitrates are not exceeded.

## **9.2.2 Primary Balancing Criteria**

Primary balancing criteria include long-term effectiveness and permanence, reduction of toxicity, mobility or volume, short-term effectiveness, implementability, and cost. These are used to weigh trade-offs among alternatives and identify the most favorable.

### **9.2.2.1 LONG-TERM EFFECTIVENESS AND PERMANENCE**

*Refers to the ability of a remedy to continue protecting human health and the environment over time after the*

*cleanup action is completed.*

Alternative 1 would have little long-term effectiveness at reducing risk from VOC contamination in the groundwater. Alternative 1 is assumed to have no impact on the mass of TCE in the shallow groundwater unit (Table 9-4).

Alternatives 9, 10 A, 10B/10B', and 11 would remove TCE mass from groundwater much more effectively than Alternative 1, and removal would be permanent. The VOC contamination would be captured by GAC and destroyed when the carbon is regenerated. Alternatives 9 and 11 would be the most effective in removing contaminant mass in the first 20 years of remediation (Table 9-4).

The extraction and treatment technology used to remediate groundwater is expected to achieve MCLs. However, VOC contamination in groundwater is not likely to be completely eliminated through extraction and treatment (see Section 9.1.2.1).

### 9.2.2.2 REDUCTION OF TOXICITY, MOBILITY, OR VOLUME

*Refers to the degree to which a cleanup alternative uses treatment technologies to reduce 1) harmful effects to human health and the environment (toxicity), 2) the contaminant's ability to move (mobility), and 3) the amount of contamination (volume).*

Alternative 1 would provide no treatment or other active approach for the reduction of toxicity, mobility, or volume of the contaminants.

Alternatives 9, 10A, 10B/10B', and 11 would reduce toxicity, mobility, and volume of TCE. Groundwater extraction and treatment with GAC are well-demonstrated technologies for removing VOCs from groundwater. The VOCs present in groundwater are drawn to the surface through extraction wells, piped to a treatment unit, and passed through GAC. Once the GAC capacity is attained, the activated carbon is removed from the site and transported to a regeneration facility where the VOCs are desorbed and thermally destroyed.

Under Alternative 1, the length of the TCE plume in the shallow groundwater unit exceeding 5 µg/L would be 5,900 feet, and its area would be 9,800,000 square feet (Table 9-5). In contrast, the plume length and area for Alternative 10B/10B' would be reduced to zero because this alternative would achieve cleanup goals in less than 20 years. Alternatives 9 and 11 are more effective for mass removal than Alternative 10B/10B' (Table 9-4) because they involve injecting water into the shallow groundwater unit to flush out residual contamination from the pore spaces. Alternatives 10A and 10B/10B', which would not involve injection, may dewater portions of the shallow groundwater unit over time.

**Table 9-5**  
**Length and Area of TCE Plume Exceeding MCL in Shallow Groundwater Unit**

Alternative	TCE Plume Length Exceeding MCL (feet)	TCE Plume Area (1,000 square feet)
1	5,900	9,800
9	870	209
10A	2,900	2,200
10B/10B'	0	0
11	480	8

Acronyms/Abbreviations: MCL - maximum contaminant level ; TCE - trichloroethene

### 9.2.2.3 SHORT-TERM EFFECTIVENESS

*Assesses how well human health and the environment will be protected from impacts due to construction and implementation of a remedy. Also considers time to reach cleanup goals.*

Alternative 1 would not entail any on-site remedial activities and, therefore, would not impact the surrounding community, workers, or the environment. The time required for this alternative to be protective of human health and the environment would be controlled by the rate of natural attenuation processes and is expected to exceed 80 years (Table 9-4).

Short-term impacts of Alternatives 9, 10A, 10B/10B', and 11 include the increased risk of exposure to workers from handling contaminated soils, vapors, and groundwater. An additional short-term impact of these alternatives is the risk of vehicular accidents and releases during transport of contaminated GAC. Potential on-site exposures and risks from these activities would be controlled through use of personal protective equipment, monitoring, and compliance with a site-specific safety and health plan. Transport risks would be minimized to the extent feasible by using a licensed commercial hauler. Impacts on the surrounding community or the environment are expected to be negligible, because any inadvertent releases to the atmosphere would be diluted before reaching the closest communities. None of the actions in Alternatives 9, 10A, 10B/10B', or 11 would cause adverse short-term health effects.

Groundwater is expected to reach MCLs in 19/20 (Alternative 10B/10B') to 80 years or longer (Alternatives 1 and 10A) (Table 9-4). Alternative 10B would require the shortest time to remediate the shallow groundwater unit.

### 9.2.2.4 IMPLEMENTABILITY

*Refers to the technical feasibility (how difficult the remedy is to construct and operate) and administrative feasibility (coordination with other agencies) of a remedy. Factors such as availability of materials and services needed are considered.*

Technically, Alternative 1 is the easiest to implement because it would involve no on-site construction or other remedial activities.

Implementation of Alternatives 9, 10A, 10B/10B', and 11 would include construction of extraction wells, treatment facilities, interconnecting piping, and, for Alternatives 9 and 11, injection wells and associated piping. The groundwater extraction and treatment portion of Alternatives 9, 10A, 10B/10B', and 11 would be readily implementable. Extraction and injection wells, piping, and treatment facilities are readily constructed, and treatment of groundwater using GAC is a proven, reliable technology. Implementation of Alternatives 10A and 10B/10B' would require the DON and OCWD/IRWD to reach agreement on operational, financial, and liability concerns, including responsibility for capital investments and use of shared facilities for the IDP. However, as noted in Section 10.4, such air agreement has already been reached, so there are no anticipated technical or administrative barriers to implementation of any of the active Site 24 alternatives.

### 9.2.2.5 COST

*Evaluates the estimated capital costs and present worth in today's dollars required for design and construction and long-term operation and maintenance costs of a remedy.*

Table 9-4 shows cost estimates for groundwater remediation at Site 24. There are no costs associated with Alternative 1. Alternatives 9 and 11 are the least costly alternatives for remediation of groundwater at Site 24.

### **9.2.3 Modifying Criteria**

Modifying criteria include state and community acceptance. State acceptance is taken into account during development of the proposed plan and ROD. Public acceptance is considered through comments received during the public comment period.

#### **9.2.3.1 STATE ACCEPTANCE**

*Reflects whether the state of California's environmental agencies agree with, oppose, or have no objection to or comment on the DON's preferred alternative.*

DTSC and RWQCB have reviewed the Site 24 RI report for soil and groundwater, the Site 24 FS Report for groundwater, and the Proposed Plan for Site 18 and Site 24; both concur with the selected remedy for remediation of groundwater at Site 24. The state has also reviewed the closure report for vadose zone remediation at Site 24.

#### **9.2.3.2 COMMUNITY ACCEPTANCE**

*Evaluates whether community concerns are addressed by the remedy and if the community has 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 the other criteria.*

The Proposed Plan has been presented to the community and discussed at a public meeting. The responsiveness summary (located at the end of this ROD) addresses public comments and concerns about the selected remedy.

## Section 10

# SELECTED REMEDY

Based on the RI/FS reports for Sites 18 and 24, the administrative record for these sites, as well as an evaluation of comments submitted by interested parties during the public comment period, the DON has selected Alternative 8A as the remediation method for the principal aquifer at Site 18 and Alternative 10B' (pronounced 10B prime) as the remediation method for the shallow groundwater unit at Site 24. This represents the final remedy for groundwater at Sites 18 and 24. Remediation of soil is addressed in a separate ROD.

The selected remedy for groundwater includes:

- construction, operation, and maintenance of a groundwater extraction system to remove VOCs from groundwater;
- performance monitoring throughout the remedial action;
- treatment of VOC-contaminated groundwater using air stripping and treatment of VOC vapors with activated carbon filters to meet air quality standards before discharge to the atmosphere;
- confirmatory groundwater sampling at the end of the remediation to confirm that VOC concentrations meet federal and state cleanup levels; and
- institutional controls to prevent use of contaminated groundwater, protect equipment, and allow access to the DON, OCWD/IRWD, and regulatory agency personnel.

## 10.1 GROUNDWATER REMEDIATION

The CERCLA component of Alternative 8A consists of three extraction wells within the TCE plume in the principal aquifer (ET-1, ET-2, and IRWD-78) (Figure 10-1 and Section 10.2). The exact number and locations of the wells will be established by OCWD/IRWD and regulatory agencies during the remedial design phase. Groundwater is extracted from wells ET-1 and ET-2 and conveyed to the IDP treatment plant where it is treated to remove VOCs (CERCLA treatment) and reduce dissolved solids (non-CERCLA treatment). The treated groundwater is then distributed for nonpotable uses. Initial extractions from well IRWD-78 will be conveyed to IRWD's nonpotable water system. If the VOCs exceed their respective MCLs in this well, the extracted groundwater will be conveyed to the IDP treatment plant for VOC removal.

Alternative 10B' consists of 49 extraction wells within the areas of highest TCE concentration in the shallow groundwater unit at Site 24 (Figure 10-2). The exact number and locations of the wells will be established by the DON and regulatory agencies during the remedial design phase. Alternative 10B' differs from Alternative 10B (as described in Section 8) in that the total extraction rate is reduced from 800 gpm to 440 to 550 gpm. Alternative 10B' was evaluated by means of a sensitivity run during groundwater modeling for the Site 24 FS. Even though the total pumping rate is reduced, the time to remediate TCE in groundwater in the shallow groundwater unit to the MCL is approximately the same for Alternative 10B' as for Alternative 10B (i.e., 20 years for Alternative 10B' and 19 years for Alternative 10B). A schematic process flow diagram of Alternative 8A and Alternative 10B' is included as Figure 10-3. Groundwater from the shallow groundwater unit is blended with groundwater from the principal aquifer prior to treatment at the IDP.

The conceptual groundwater monitoring well network consists of approximately 58 groundwater monitoring wells in the principal aquifer plus an additional 38 groundwater monitoring wells screened in the shallow groundwater unit and intermediate zone at Site 24. The number of wells and configuration of the monitoring well network will be established by the DON and regulatory agencies during the remedial design phase.

## 10.2 CERCLA COMPONENTS OF THE IDP

CERCLA groundwater remediation components in the principal aquifer consist of the following:

- extraction wells IRWD-78, ET-1, and ET-2, and injection well IDP-1 located within the VOC plume in the principal aquifer
- piping and pipeline conveyance system from wells TRWD-78, ET-1, and ET-2 to the CERCLA VOC treatment system located at the Central Treatment Plant (reference red line on Figure 10-1), and the piping and pipeline conveyance system from the CERCLA nonpotable VOC treatment system located at the Central Treatment Plan to injection well IDP-1 (reference blue line on Figure 10-1)
- separate CERCLA nonpotable VOC treatment system (including air strippers and off-gas granular-activated carbon units) located at the Central Treatment Plant for VOC-contaminated groundwater extracted from both the shallow groundwater unit and principal aquifer
- shared component assets at the Central Treatment Plant including site real property, buildings, site improvements, telemetry, transformers, and other electrical improvements and central monitoring and control systems
- groundwater monitoring wells associated with remediation of the VOC plume

CERCLA groundwater remediation components in the shallow groundwater unit consist of the following:

- DON's extraction wells for interception and removal of VOC-contaminated groundwater in the shallow groundwater unit
- DON's pumping and pipeline conveyance from those extraction wells to the IDP nonpotable pipeline feedwater conveyance system's point of connection at the Former MCAS El Toro boundary
- groundwater monitoring wells associated with remediation of the VOC plume

## 10.3 NON-CERCLA COMPONENTS OF THE IDP

The DON is obligated under CERCLA and the NCP to remediate releases of hazardous substances at Former MCAS El Toro. Groundwater in the vicinity of the Station contains inorganic compounds, including TDS, sulfate, nitrate, and chloride, at concentrations exceeding the drinking water standards and the applicable water quality objectives in the WQCP, Santa Ana River Basin (RWQCB 1995).

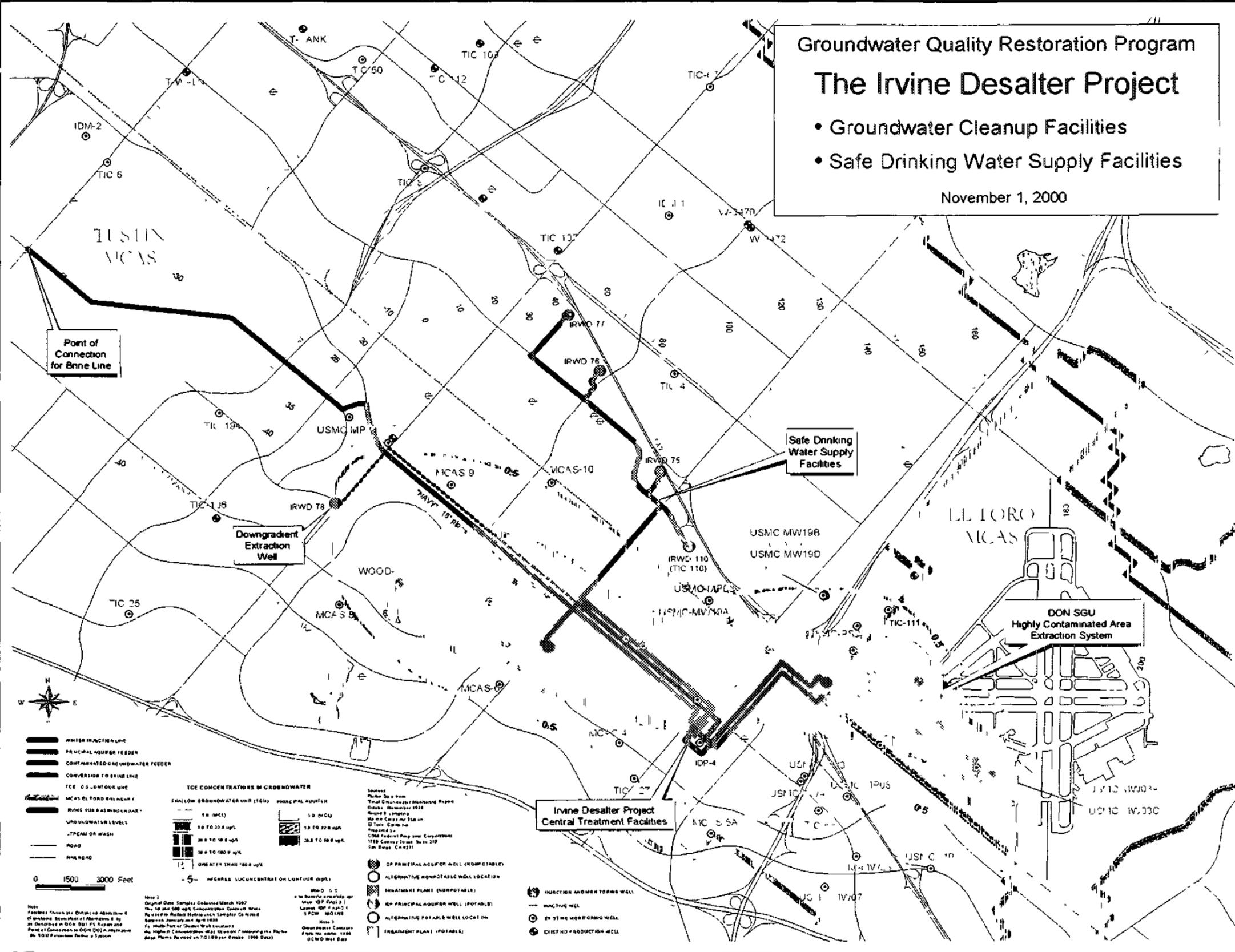
Former MCAS El Toro is located in an area where the historically predominant land uses have been for citrus orchards, field crops, and grazing. The observed concentrations of inorganic parameters in groundwater, particularly TDS and nitrate, are generally considered to be the result of naturally occurring subsurface conditions and past and current land uses, particularly past agricultural practices.

The Interim Action OU-1 RI Report Appendices (JEG 1996d) provide the following conclusions on the occurrence of TDS and nitrate contamination in groundwater in the Irvine Subbasin.

**Groundwater Quality Restoration Program**  
**The Irvine Desalter Project**

- Groundwater Cleanup Facilities
- Safe Drinking Water Supply Facilities

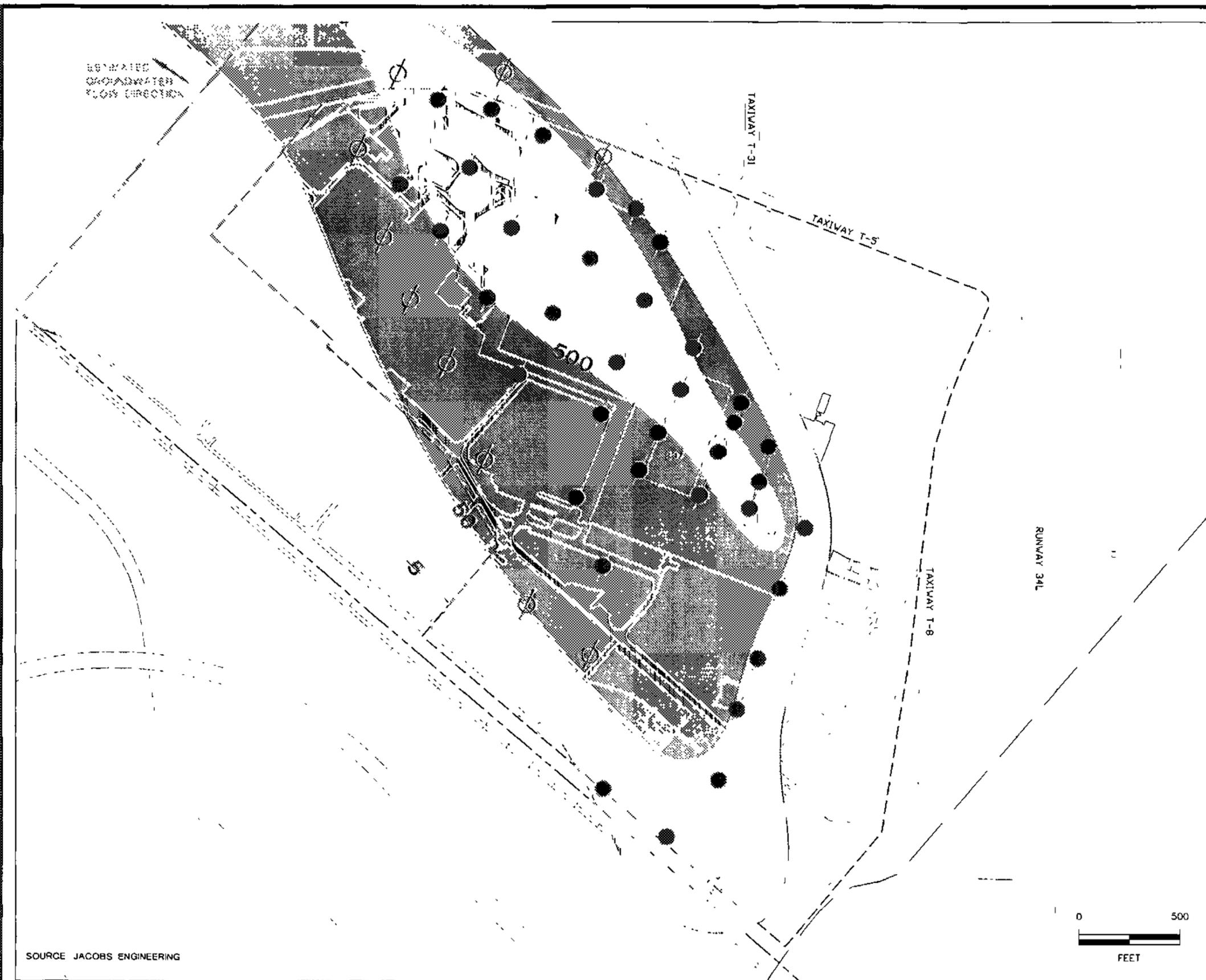
November 1, 2000



Record of Decision  
**Figure 10-1**  
 Alternative 8A  
 Principal Aquifer Well Confirmation  
 Former MCAS, El Toro, California

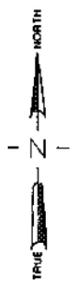
**Bechtel National, Inc.**  
 CLEAN II Program

Date 4/25/02  
 File No -  
 Job No 22214-164  
 Rev No A



**LEGEND**

- ROAD
- FREEWAY
- FORMER MCAS EL TORO BOUNDARY
- SITE 24 BOUNDARY
- STREAM OR WASH



**PROPOSED**

- CORE EXTRACTION WELL SCREENED IN UPPER 50 FEET OF SHALLOW GROUNDWATER UNIT
- ⊘ PERIMETER EXTRACTION WELLS SCREENED IN UPPER 50 FEET OF SHALLOW GROUNDWATER UNIT

**TCE CONCENTRATIONS IN GROUNDWATER**

- [White box] 50 TO 500 ug/L TCE
- [Hatched box] 50 TO 5000 ug/L TCE
- [Dotted box] GREATER THAN 5000 ug/L TCE
- - - 5 - - - INFERRED ISOCONCENTRATION CONTOUR (ug/L)

**NOTES**

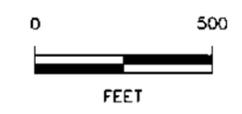
WELL PLACEMENT BASED ON GROUNDWATER MODELLING CONDUCTED IN 1996 (JACOBS 1996e) AND BECHTEL NATIONAL INC (BNI 1997b) AND GROUNDWATER SAMPLING DATA COLLECTED IN MARCH 1997

50 AND 500 ug/L CONCENTRATION CONTOURS REVISED TO REFLECT HYDROPUNCH SAMPLES COLLECTED BETWEEN JANUARY AND APRIL 1998

FOR MULTI-PORT OR CLUSTER WELL LOCATIONS THE HIGHEST CONCENTRATION WAS USED FOR CONTOURING THE PLUME

<p>Record of Decision  <b>Figure 10-2</b>          Alternative 10B'          Shallow Groundwater Unit Well Configuration</p>	
<p>Former MCAS, El Toro, California</p>	
	<p><b>Bechtel National, Inc.</b>          CLEAN II Program</p>
<p>Date 4/29/02          File No 164H8762          Job No 22214-164          Rev No C</p>	

SOURCE JACOBS ENGINEERING



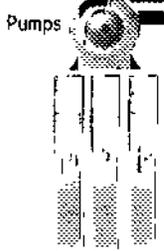
# Alternative 8A/10B<sup>1</sup> Conceptual Design

Shallow Groundwater Unit  
(on-Station)



Extraction Wells  
Downgradient of the  
VOC Source Area

Principal Aquifer  
(Deep Groundwater  
off-Station)

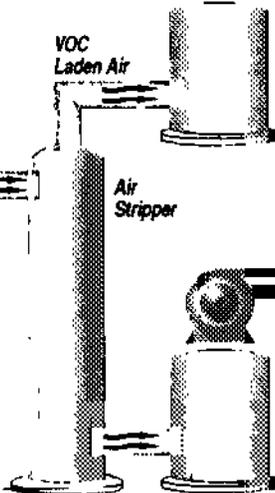


3 Extraction Wells  
Within VOC Plume



4 Extraction Wells  
Outside of VOC Plume\*

VOC Treatment



Vapor Granular Activated  
Carbon Treatment  
(clean air released to atmosphere)

Air  
Stripper

Cleanwell  
Disinfection\*

Irvine Ranch Water District  
Distribution System  
for Recycled, Nonpotable  
Water Use\*\*

Separate  
Irvine Desalter Project  
Nonpotable System

\* Non-CERCLA treatment is associated with local water supply and is not a component of the CERCLA remedial action requirements.

\*\*During periods of low recycled water demand, only shallow groundwater will be treated and either injected into an IDP injection well or stored in the IDP reservoir.

Reverse Osmosis  
Treatment of  
Groundwater Extracted  
Outside of VOC Plume\*

Non-CERCLA (VOC and  
Cleanwell Disinfection)  
Treatment for Domestic Use\*

Irvine Ranch Water District  
Distribution System  
for Potable Use\*

Separate  
Non-CERCLA  
Irvine Desalter Project  
Potable System

Record of Decision

Figure 10-3

Alternative 8A/10B<sup>1</sup> Conceptual Design

Former MCAS, El Toro, California



Bechtel National, Inc.  
CLEAN II Program

Date: 01/04/02  
File No: 164F7959  
Job No: 22214-164  
Rev No: B

- The widespread occurrence of elevated TDS concentrations in groundwater near Former MCAS El Toro has been documented for more than 100 years.
- Former MCAS El Toro is not the source of the regional TDS concentrations in the Irvine Subbasin. The principal sources of TDS appear to be marine sediments; fine-grained materials, specifically clays, in the sediments of the Irvine Subbasin; subsurface inflow of groundwater through marine sedimentary rocks of the Santa Ana Mountains and San Joaquin Hills; and accumulated salts in irrigation return flow.
- The widespread occurrence of nitrate contamination near former MCAS El Toro has been documented for the past 25 years.
- Former MCAS El Toro is not the source of the regional nitrate groundwater contamination. Nitrate contamination is attributed to past agricultural use, farm animal waste, landscaping, domestic septic tank wastewater disposal, and industrial operation discharges.

Because elevated concentrations of TDS and nitrate result from naturally occurring subsurface conditions and past and current land uses not associated with the Former MCAS El Toro, the remedial objectives do not include cleanup goals for TDS and nitrates. Cleanup of these substances at the IDP is considered outside the scope of the CERCLA action for Sites 18 and 24 and is being separately addressed by OCWD/IRWD.

In addition to the three CERCLA extraction wells located within the VOC groundwater plume, OCWD/IRWD also plan to extract groundwater from four wells (ERWD 75, 76, 77, and 110) located outside the VOC plume in the principal aquifer. This water will be conveyed to the IDP treatment plant via a separate conveyance line for treatment to remove dissolved solids and nitrates. Treated groundwater from areas outside the VOC plume will be distributed to the public for domestic purposes. Because groundwater in the potable system is extracted from areas that already meet cleanup standards for VOCs, treatment of this groundwater is not considered part of the CERCLA remedy.

## 10.4 SETTLEMENT AGREEMENT

Groundwater extracted from the shallow groundwater unit and from areas within the VOC plume in the principal aquifer will be blended and transported to the IDP for treatment. The DON, DOJ, OCWD, and IRWD have reached a Settlement Agreement regarding modification of the IDP to accept and treat groundwater from Sites 18 and 24 for VOC removal. According to this agreement, the United States will bear the VOC treatment costs, and OCWD/IRWD will continue to bear the normal costs associated with reclaimed water supply treatment requirements, including those for TDS and nitrates. The conceptual IDP that is modified to receive and treat VOCs is referred to in the Settlement Agreement as the modified IDP.

Under terms of the Settlement Agreement, OCWD and IRWD have agreed that they shall not permanently terminate operation of the nonpotable portion of the IDP unless it has been demonstrated, and the DON has approved and U.S. EPA, DTSC, Cal/EPA Department of Health Services (DHS), and RWQCB have concurred in writing, that either a Force Majeure condition exists (as set forth in Section 10 of the FFA [1990]) or, in the alternative, that treatment of extracted groundwater to meet federal and state drinking water standards and adequately protect human health and the environment is technically impracticable from an engineering perspective consistent with the substantive criteria of 40 C.F.R. § 300.430(f)(1)(ii)©(3) and the NCP preamble at 55 Federal Register (Fed. Reg.) 8748 (08 March 1990). (40 C.F.R. § 300.430[f][2][ii][C][3] provides that an alternative that does not meet an ARAR under federal environmental or state environmental facility citing laws may be selected when compliance with the requirement is technically impracticable from an engineering perspective.) The availability of water from sources other than the principal aquifer and IDP at a lower cost to

OCWD/IRWD and its customers (taking into account groundwater treatment costs) shall not be considered in evaluating technical impracticability.

Temporary shutdown of the IDP is allowed:

- for short-term routine maintenance;
- in the event that contaminants not listed in Appendix 3 of the Settlement Agreement are reported in extracted groundwater during area groundwater monitoring or at extraction well locations; or
- in the event that concentrations or equivalent mass levels are reported in excess of the concentrations for the contaminants listed in Appendix 2 of the Settlement Agreement at the point of connection of the DON's shallow groundwater unit conveyance pipeline or the IDP central VOC treatment plant intake.

The party discovering the contaminants or concentrations shall promptly notify in writing the other parties, FFA signatories, DTSC, DHS, and the Santa Ana RWQCB; in this case, OCWD/IRWD may, without further notice, temporarily shut down the IDP.

Within 7 calendar days following such initial notification, the parties, FFA signatories, and DHS will determine whether through adjusting flow rates, blending, or similar measures the Modified IDP can continue to adequately treat extracted groundwater to assure compliance with applicable federal and state drinking water standards at the point of distribution into the water supply infrastructure following treatment. If the standards can be met, OCWD/IRWD shall immediately resume operations.

If OCWD/IRWD determine that the drinking water standards cannot be met at the point of distribution into the water supply infrastructure following treatment, OCWD/IRWD may continue temporary shutdown of the modified IDP and shall develop a response plan. This plan must be submitted to the DON, U.S. EPA, and Cal/EPA (including DTSC, DHS, and RWQCB) within 60 days and shall propose all practicable means to minimize the extent and duration of interruption of all or part of the groundwater extraction and treatment activities. The response plan shall also specify a schedule for resumption of operations.

Under the Settlement Agreement, the DON will provide OCWD/IRWD a copy of analytical data reports of all the validated analytical data collected by the DON and its-authorized representatives and contractors from groundwater monitoring wells and on-Station extraction wells within 60 calendar days after such reports become available to the DON. OCWD/IRWD will provide the DON with copies of analytical data reports of all analytical data they have collected from groundwater monitoring wells and Modified IDP production wells within 60 calendar days after the reports become available to OCWD/IRWD.

A copy of the Settlement Agreement is included as Attachment E to this ROD. The copy is attached for informational purposes only. Contents of this agreement are not subject to comment nor deemed to be an enforceable component of this ROD.

## **10.5 REMEDIAL DESIGN OF THE MODIFIED IDP**

In accordance with the Settlement Agreement (Attachment E), OCWD/IRWD will develop remedial design and remedial action deliverables for the Modified IDP and provide them to the DON so that the DON can review and submit them to U.S. EPA, DTSC, and RWQCB in accordance with the FFA schedule.

Except with regard to the DON's obligations as provided in the FFA, OCWD/IRWD is responsible for obtaining all locally issued licenses, permits, and approvals for construction and operation of the Modified IDP.

## **10.6 CONTRACT FOR SHALLOW GROUNDWATER UNIT**

The DON, OCWD, and IRWD have entered into a separate contract to accept, treat, and take ownership of up to 440 to 550 gpm of groundwater extracted by the DON from the shallow groundwater unit and delivered to OCWD/IRWD for VOC treatment. OCWD/IRWD is required to provide VOC remediation services regardless of whether the groundwater can be used for a reclaimed water supply. If OCWD/IRWD determines that the groundwater cannot be used for the reclaimed water supply after treatment, OCWD/IRWD will be responsible for otherwise disposing of the treated groundwater at no additional cost to the DON. One option being considered for disposal is injection into the principal aquifer via well IDP-1 (BNI2001).

The contract between the DON and OCWD/IRWD will remain in effect until U.S. EPA, DTSC, and RWQCB agree that the requirements of this ROD for cleanup of the shallow groundwater unit have been met. At that time, remediation will be complete, the DON will discontinue extraction from the shallow groundwater unit and delivery to OCWD/IRWD, and the contract will be terminated.

Permanent termination by OCWD/IRWD of the shallow groundwater treatment activities before completion of remediation will be considered a breach of contract unless the DON is relieved of its obligation to U.S. EPA, DTSC, and RWQCB to remediate VOC contamination in the shallow groundwater unit by an amendment of the ROD.

The contract with OCWD/IRWD to accept, treat, and take ownership of groundwater from the shallow groundwater unit will continue even if the Modified IDP is terminated.

## **10.7 BACKUP REMEDY FOR PRINCIPAL AQUIFER**

Based on currently available information, it is anticipated that the backup, contingency remedial action for the VOC contamination in the principal aquifer will consist of monitored natural attenuation if the IDP is terminated for any reason. Natural attenuation was modeled in the OU-1 IAFS Addendum (Alternative 7A) and is discussed in Section 8.1.4. An enhanced monitoring well network would be used to assure that plume movement is halted and remediation is occurring as expected. Modeling in the OU-1 IAFS showed that this alternative will achieve the cleanup goals in the principal aquifer in approximately 60 years, which is shorter than the 95 years required for Alternative 8A (as currently designed) to achieve these goals.

The U.S. EPA, DTSC, and RWQCB have indicated that they require the effectiveness of natural attenuation to be demonstrated before this technology may be selected as a remedial action alternative. An evaluation of biodegradation at Site 18 (in Attachment A-2 of the OU-1 IAFS) concluded that if any TCE degradation were occurring, reductive dechlorination would be the principal degradation pathway, and the presence of 1,2-DCE appears to indicate that such degradation is occurring. After the IAFS, the U.S. Air Force Center for Environmental Excellence issued a technical protocol for evaluating natural attenuation (Wiedemeier et al. 1996). This protocol was used to assess whether natural attenuation is occurring at Site 2, the Magazine Road Landfill (BNI 1998c). Should termination of the modified IDP become an issue, the DON will use a similar methodology to evaluate monitored natural attenuation as a backup remedy for Site 18.

A contingent remedial action is not necessary for the shallow groundwater unit because the DON, OCWD, and IRWD have entered into a contract stipulating that OCWD/IRWD accept, treat, and take ownership of groundwater extracted by the DON from the shallow groundwater unit. The contract will remain in effect until

U.S. EPA, DTSC, and RWQCB agree that the requirements of this ROD for cleanup of the shallow groundwater unit have been met. At that time, remediation will be complete, and the DON will discontinue groundwater extraction from the shallow groundwater unit.

## 10.8 INSTITUTIONAL CONTROLS

Institutional controls for the off- and on-Station portions of the groundwater plume are discussed in Sections 8.1.2.3, 8.2.2.2, and 8.2.2.3 and summarized below.

### 10.8.1 Off-Station Groundwater Plume

Institutional controls for the off-Station portion of the groundwater plume are intended to protect residents from use of VOC-contaminated groundwater from the principal aquifer and shallow groundwater unit for domestic purposes until cleanup goals are achieved. The institutional controls for the off-Station portion of the VOC groundwater plume are based on local permit programs administered by the OCHCA and IRWD. These agencies require that any person planning to construct a water well must apply for and obtain a permit for construction of such well. The agencies are also authorized to include any necessary conditions in the permit to assure adequate protection of public health (*Orange County Code*, Article 2. Construction and Abandonment of Water Wells, and *IRWD Rules and Regulations*, Section 16. Water Wells). The DON has received commitments from OCHCA and IRWD to provide the DON with copies of any well permit applications received or permits issued within the geographic scope of the off-Station groundwater plume exceeding federal and state MCLs until remediation of the plume has been completed.

The DON has provided OCHCA and IRWD with copies of the maps in this ROD that delineate the off-Station groundwater plume. The DON shall provide annually to OCHCA and IRWD updated copies of the map(s) beginning 1 year from the date of issuance of this ROD and ending when remediation of the plume has been completed.

The OCHCA and IRWD shall have the lead in assuring that appropriate permits are obtained for construction of new water wells in the VOC groundwater plume and taking any necessary enforcement action to assure that such permits are obtained and complied with. The DON shall provide annually U.S. EPA, DTSC, and RWQCB with copies of permit applications and permits that it has received from OCHCA and IRWD during the previous year, beginning 1 year from the date of issuance of this ROD and ending when remediation of the plume has been completed.

### 10.8.2 On-Station Groundwater Plume

Institutional controls for the on-Station portion of the groundwater plume are intended to prevent use of VOC-contaminated groundwater until cleanup goals are achieved in the shallow groundwater unit; protect the groundwater extraction, injection, and monitoring wells and associated piping and equipment; and assure access to the site by the DON and regulatory agencies to assure that construction, O&M, and monitoring of the final remedy and any further investigation and response action are implemented.

OCWD/IRWD will require access to Station property to implement the IDP. The DON has agreed to provide reasonable access to the Station, including necessary rights-of-way or easements, for as long as the DON owns the property. If the DON sells or leases property associated with this remedial action, the sale or lease agreements will contain provisions for continuing access, rights-of-way licenses, and easements as necessary. The DON will inform all prospective purchasers and lessees that a treatment system will be operating in accordance with this ROD and that the operator has the right (with reasonable notice and so as not to

unreasonably interfere with the purchaser's or lessee's operations) to take soil samples on the property to confirm that current operations have not released hazardous substances that could impact the treatment system.

OCWD/IRWD will also provide reasonable access to the DON, U.S. EPA, and Cal/EPA during normal business hours to sample pretreated and treated groundwater and groundwater collected in groundwater monitoring wells.

On-Station institutional controls will consist of land-use restrictions that will be implemented through two separate legal instruments: 1) one or more Environmental Restriction Covenant and Agreements with DTSC addressing on-Station real property containing the Site 24 Shallow Groundwater Plume and associated buffer zone and 2) one or more quitclaim deeds/leases between transferee(s)/lessee(s) and the DON conveying/leasing on-Station real property containing the Site 24 Shallow Groundwater Plume and associated buffer zone. The area requiring institutional controls at Site 24 is shown on Figure 10-4. The Environmental Restriction Covenant and Agreement(s) will incorporate the land-use restrictions into restrictive covenants that run with the land and that are enforceable by DTSC against future transferees. The Deed(s) will include the identical land-use restrictions in environmental restrictive covenants that run with the land and that will be enforceable by the DON against future transferees. In essence, the DON and DTSC will each have the legal authority to enforce the land-use restrictions and will share responsibility for their enforcement.

The OCHCA and IRWD shall have the lead in assuring that appropriate permits are obtained for construction of new water wells in the on-Station VOC groundwater plume and taking any necessary enforcement action to assure that such permits are obtained and complied with. The DON shall provide annually U.S. EPA, DTSC, and RWQCB with copies of permit applications and permits that it has received from OCHCA and IRWD during the previous year beginning 1 year from the date of issuance of this ROD and ending when remediation of the plume has been completed.

The DON shall monitor and inspect the status of compliance with the land-use restrictions in the Environmental Restriction Covenant and Agreement(s) and quitclaim deed(s)/leases protecting on-Station extraction, injection, and drinking water wells, monitoring wells, and associated piping and equipment concurrently with inspections of such engineering controls and equipment as provided in the operations and maintenance plan. The DON shall report the results of the inspections to the U.S. EPA, DTSC, and RWQCB. The operations and maintenance plan shall address the frequency of such reporting and the contents of the reports of the inspections.

If a violation of such on-Station land-use restrictions is identified and/or documented by either the DON or DTSC, the entity identifying the violation will notify the others within 10 working days of identifying the violation. The DON, U.S. EPA, DTSC, and RWQCB shall then consult to determine what, if any, action(s) should be taken, which of them shall undertake the action(s), and when it/they shall be undertaken. The results of such a consultation shall be formally documented in writing. DTSC may enforce the Environmental Restriction Covenant and Agreement provisions.

## **10.9 MONITORING**

Groundwater monitoring will be performed to assess the effectiveness of groundwater remediation and to provide early notice of potential groundwater plume movement. The monitoring well configuration will be designed to assess changes in VOC concentrations and plume configuration and to determine whether downgradient plume migration or migration toward the non-CERCLA potable extraction wells is occurring. Parameters to be monitored at the Site 18 and Site 24 monitoring wells/ports include water level, VOCs, general chemistry/TDS, and natural attenuation parameters. The monitoring frequency and parameters and the exact number of monitoring wells, well locations, and well construction details will be finalized during the

remedial design phase. Based on sampling results, it is anticipated that groundwater sampling at each monitoring well/port will then be conducted quarterly, semiannually, and/or annually in accordance with the groundwater monitoring frequency decision tree (Figure 10-5) until the remedial action objectives for groundwater have been met. Water-level monitoring is expected to be conducted quarterly. Water-level monitoring will be used to confirm the hydrogeologic model for the shallow groundwater unit. The quarterly water-level data will also be used to evaluate changes in the groundwater flow direction and the hydraulic gradients (horizontal and vertical) throughout the year.

## 10.10 RATIONALE FOR REMEDY SELECTION

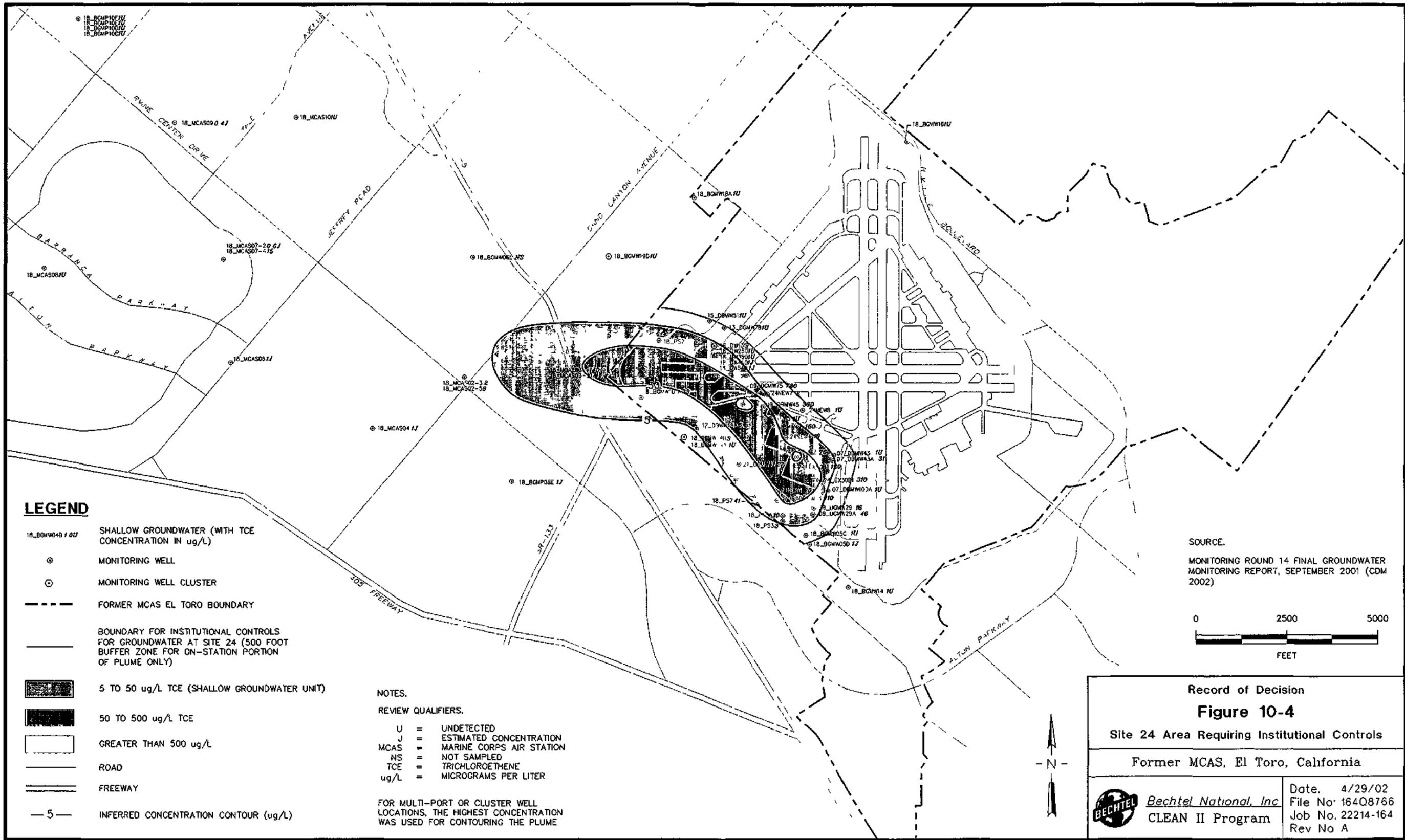
The selected alternative provides the best balance with respect to the NCP evaluation criteria. Based on the information available at this time, the preferred alternative offers:

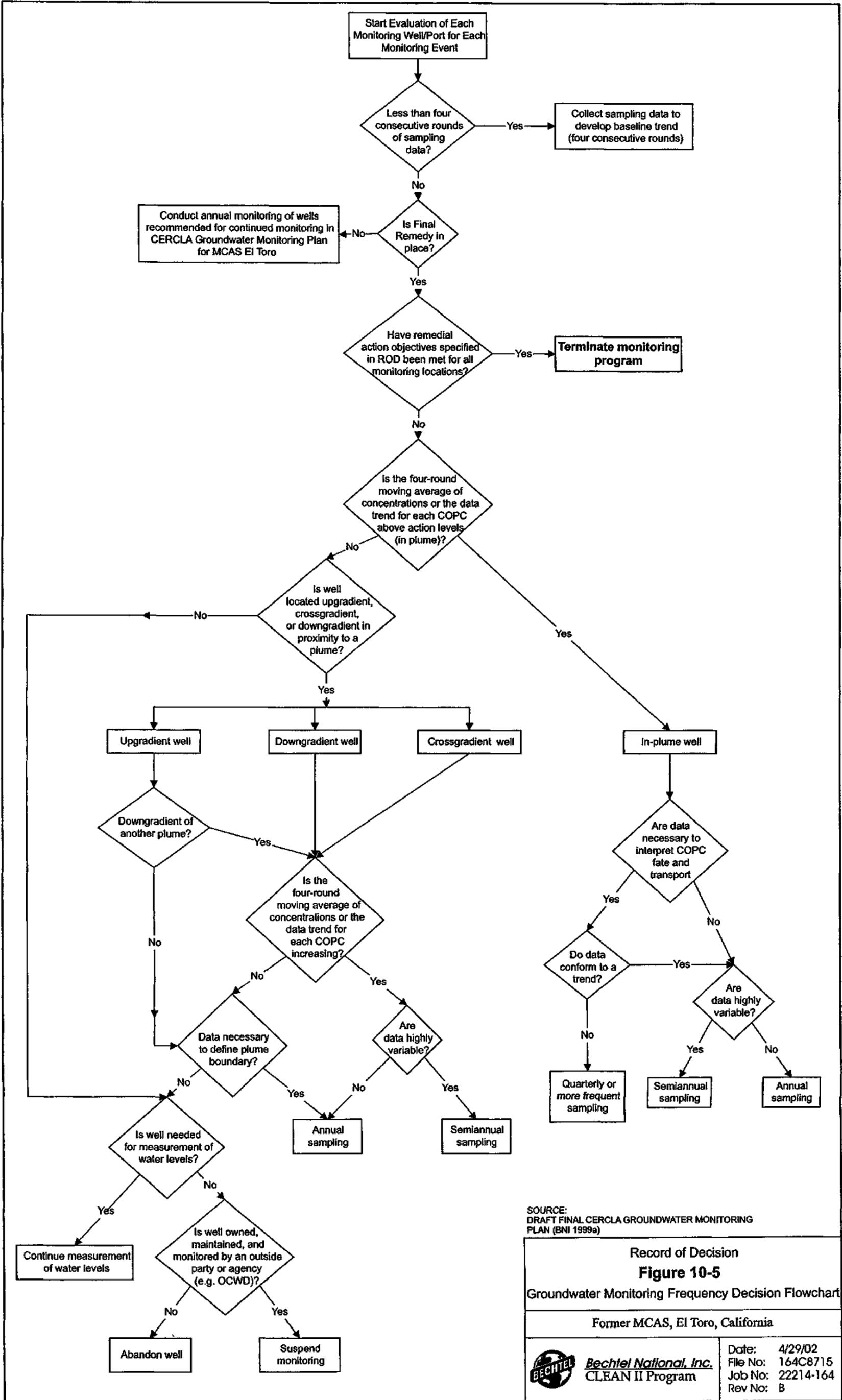
- a high level of performance when assessed against the following NCP evaluation criteria: short-term effectiveness, long-term effectiveness and permanence, implementability, compliance with ARARs, and overall protection of human health and the environment; and
- a cost-effective means of accomplishing the remedial action objectives for the site.

Table 10-1 summarizes the cost estimate for the selected alternative, including capital costs and O&M costs assumed to extend for 20 to 40 years. The 20- to 40-year time frame does not necessarily reflect the duration of the O&M activities at the site; the discontinuation or extension of O&M activities will be determined based on the results of sampling designed to evaluate the effectiveness of remediation.

Other advantages of the selected remedy include its ease of implementation (it uses readily available, proven technologies to extract and treat vapors), compatibility with current and future land uses, and inclusion of provisions for future assessments at the conclusion of groundwater remediation. Impact on the existing infrastructure at Site 18 and Site 24 will be minimized to the extent practical provided that remedial action efforts are not compromised.

Some modifications to the selected remedy (e.g., locations and number of extraction and monitoring wells pumping rate) may be necessary as a result of the remedial design and construction processes. Detailed design specifications, performance evaluations, and schedule will be determined during the remedial design phase.





SOURCE:  
DRAFT FINAL CERCLA GROUNDWATER MONITORING  
PLAN (BNI 1999a)

<b>Record of Decision</b> <b>Figure 10-5</b> <b>Groundwater Monitoring Frequency Decision Flowchart</b>	
Former MCAS, El Toro, California	
 <b>Bechtel National, Inc.</b> CLEAN II Program	Date: 4/29/02 File No: 164C8715 Job No: 22214-164 Rev No: B

## Section 10 Selected Remedy

**Table 10-1**  
**Estimated Costs for Remediation of Groundwater at Sites 18 and 24<sup>a</sup>**

Cost Category	Net Present Worth Cost (\$ million)
<b>Capital Costs</b>	
SGU well and conveyance system installation <sup>b</sup>	\$ 5,869,000
DON contribution to capital costs of IDP <sup>c</sup>	7,572,000
Installation of principal aquifer monitoring wells <sup>d</sup>	1,846,000
Savings from production of FFA deliverables <sup>e</sup>	(500,000)
Subtotal, capital costs	<b>14,787,000</b>
<b>Operation, Maintenance, and Monitoring Costs</b>	
SGU VOC service contract to OCWD <sup>f</sup>	2,121,000
Shallow groundwater unit monitoring costs <sup>g</sup>	1,159,000
SGU maintenance of wells and extraction system <sup>h</sup>	959,700
DON contribution to O&M costs of modified IDP <sup>i</sup>	7,339,000
Maintenance and monitoring of principal aquifer monitoring wells <sup>j</sup>	4,272,000
Subtotal, operation, maintenance, and monitoring costs	<b>15,850,700</b>
<b>Total Net Present Worth Costs</b>	<b>\$30,637,700</b>

## Notes:

- <sup>a</sup> for comparative purposes, indemnification costs are not included in any of the IDP alternatives  
<sup>b</sup> includes capital costs to install 38 new monitoring wells and 49 new groundwater extraction wells and associated piping (taken from Site 24 Groundwater FS Report, Table C5-7)  
<sup>c</sup> taken from Settlement Agreement  
<sup>d</sup> includes capital costs to install 12 new monitoring wells (taken from OU-1 Interim Action Feasibility Study Report, Volume IX, Table E-8)  
<sup>e</sup> estimated value based on FFA deliverables identified in Section III.C of Settlement Agreement  
<sup>f</sup> taken from service contract; assumes that groundwater extraction system in shallow groundwater unit is operated 20 years  
<sup>g</sup> assumes that groundwater in SGU is monitored for 20 years (taken from the Site 24 Groundwater FS Report, Table C5-9)  
<sup>h</sup> assumes that groundwater extraction system in SGU is operated 20 years (taken from the Site 24 Groundwater FS Report, Table C5-8)  
<sup>i</sup> taken from Settlement Agreement  
<sup>j</sup> assumes that groundwater extraction and treatment system in principal aquifer is operated 40 years (taken from OU-1 Interim Action Feasibility Study Report, Volume IX, Table E-8)

## Acronyms/Abbreviations:

DON – Department of the Navy  
 FFA – federal facilities agreement  
 IDP – Irvine Desalter Project  
 O&M – operation and maintenance  
 OCWD – Orange County Water District  
 OU – operable unit  
 SGU – shallow groundwater unit  
 VOC – volatile organic compound

## Section 11

# 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 additional statutory requirements and preferences specifying that, when complete, the selected remedial action must comply with ARARs established under federal and state laws unless a statutory waiver is justified. The selected remedy also must be cost-effective and use permanent solutions and alternative treatment technologies to the maximum extent practicable. Finally, the statute includes a preference for remedies that, as their principal element, permanently and significantly reduce the volume, toxicity, or mobility of hazardous waste. The following sections discuss how the selected remedy meets these statutory requirements and preferences. Complete discussions are found in the IAFS report for groundwater at Site 18 (JEG 1996b, d, f, g) and the FS report for groundwater at Site 24 (BNI 1997b).

## 11.1 PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT

Remedial action objectives for Sites 18 and 24 are concerned with limiting future contaminant migration and exposures to contaminated media and restoring the beneficial use of the groundwater at Sites 18 and 24. The selected remedy protects human health and the environment by preventing use of contaminated groundwater for domestic purposes until remediation is complete. Although groundwater is currently not used for potable purposes, contaminated groundwater is a potential future threat to human health if it is used for domestic purposes. Remediation of groundwater will eliminate this threat in time; in the interim, institutional controls at Sites 18 and 24 will prevent inadvertent exposure to VOCs at levels above MCLs by controlling new well drilling and prohibiting the domestic use of untreated groundwater. Deed restrictions will also be used at Site 24 during remediation to prevent disturbance of extraction, injection, and monitoring wells and equipment for treatment of groundwater.

There are no short-term threats associated with the selected remedy that cannot be readily controlled. In addition, no adverse cross-media impacts are expected from the remedy.

## 11.2 COMPLIANCE WITH ARARs

The selected remedy will comply with the substantive portions of all ARARs. Section 121(e) of CERCLA, U.S.C. § 9621(e), states that no federal, state, or local permit is required for remedial actions conducted entirely on-site. Therefore, 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. The non-VOC treatment aspects of the modified IDP are considered off-site actions. The chemical-, location-, and action-specific ARARs for the selected remedy for Site 18 and Site 24 are listed in Tables 11-1, 11-2, and 11-3, respectively, and discussed below.

**Table 11-1  
Chemical-Specific ARARs for Selected Remedy**

Action/Requirement	Citation	ARAR <sup>a</sup> Determination	Comments
<b>FEDERAL</b>			
<b>Safe Drinking Water Act, 42 U.S.C. § 300<sup>b</sup></b>			
National primary drinking water standards are health-based standards for public water systems (MCLs).	40 C.F.R. § 141.61	Relevant and appropriate	<p>The NCP defines MCLs as relevant and appropriate for groundwater determined to be a current or potential source of drinking water, in cases where MCLGs are not ARARs. MCLs are relevant and appropriate for Class II aquifers such as the Irvine Forebay I aquifer. The Santa Ana RWQCB has designated the Irvine Forebay I aquifer for municipal/domestic use (potential drinking water) in addition to other uses.</p> <p>Only the primary standards for organic chemicals (40 C.F.R. § 141.61), specifically VOCs, are ARARs for this action. MCLs for inorganics specified in 40 C.F.R. § 141.11 and 40 C.F.R. § 141.62 are not identified as ARARs because inorganics are outside the scope of this action. Furthermore, it has been determined that Former MCAS El Toro has not contributed to regional groundwater inorganics contamination.</p>
<b>Resource Conservation and Recovery Act<sup>b</sup></b>			
TCLP regulatory levels; persistent and bioaccumulative toxic substances TTLCs and STLCs.	Cal. Code Regs. tit. 22, § 66261.24(a)(1)	Applicable	<p>Using the RCRA definition of hazardous waste, groundwater extracted from Site 24 extraction wells would not be a listed waste or contain a listed waste. However, there is the potential for groundwater from some of the on-Station extraction wells to exceed TCLP limits for TCE, making it a characteristic hazardous waste. None of the off-Station extraction wells could exceed TCLP limits. Also, the maximum estimated influent concentrations for both the on-Station and off-Station treatment systems are below TCLP limits.</p> <p>In addition, there is the potential for some of the spent carbon to exceed TCLP limits for TCE, making it a characteristic hazardous waste.</p>

(table continues)

Table 11-1 (continued)

Action/Requirement	Citation	ARAR <sup>a</sup> Determination	Comments
<b>FEDERAL</b>			
<b>Resource Conservation and Recovery Act<sup>b</sup> (continued)</b>			
Groundwater and vadose zone protection standards: owners/operators of RCRA treatment, storage, or disposal facilities must comply with conditions in this section designed to assure that hazardous constituents entering the groundwater from a regulated unit do not exceed the concentration limits for contaminants of concern set forth under § 66264.94 in the uppermost aquifer underlying the waste management area.	Cal. Code Regs. tit. 22, § 66264.94, except § 66264.94(a)(2) and 94(b)	Relevant and appropriate	Applicable for hazardous waste TSD facilities; potentially relevant and appropriate in site-specific circumstances, such as when the source of the waste is unknown but the waste is similar in composition to listed waste or when waste constituents have released or have the potential to release to groundwater. Sites 18 and 24 are not TSD facilities. However, because the waste in groundwater, in particular TCE, is similar in composition to listed waste, this requirement is determined to be relevant and appropriate.
<b>STATE</b>			
<b>Cal/EPA Department of Toxic Substances Control</b>			
Definition of "non-RCRA hazardous waste."	Cal. Code Regs. tit. 22, §§ 66261.22(a)(3) and (4), 66261.24(a)(2) to (a)(8), 66261.101, 66261.3(a)(2)(C), or 66261.3(a)(2)(F)	Applicable	Using the state definition for hazardous waste, groundwater extracted from Site 24 wells and soil removed during well construction are determined not to be listed non-RCRA hazardous waste but will be tested to determine if they meet the criteria for characteristic non-RCRA hazardous waste. If the waste is found to be characteristic non-RCRA hazardous waste, generator requirements are applicable.

(table continues)

Table 11-1 (continued)

Action/Requirement	Citation	ARAR <sup>a</sup> Determination	Comments
<b>STATE</b>			
<b>Cal/EPA Department of Toxic Substances Control (continued)</b>			
State MCL list for drinking water.	Cal. Code Regs. tit. 22, § 64444	Relevant and appropriate	Like federal MCLs, state MCLs are tap water standards that are relevant and appropriate for Class II aquifers like the Irvine Forebay I. Only the primary standards for organic chemicals (Cal. Code Regs. tit. 22, § 64444), specifically VOCs, which are more stringent than primary federal standards, are ARARs for this action. MCLs for inorganics specified in Cal. Code Regs. tit. 22, § 64431 are not identified as ARARs because Former MCAS El Toro has not contributed to the regional groundwater inorganics contamination.
<b>State and Regional Water Quality Control Board</b>			
Authorizes SWRCB and RWQCB to establish, in water quality control plans, beneficial uses and numerical and narrative standards to protect both surface 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 Act)	Applicable	The DON accepts the substantive provisions of §§ 13241, 13243, 13263(a), 13269, and 13360 of the Porter-Cologne Water Quality Act enabling legislation, as implemented through the beneficial uses, WQOs, and promulgated policies of the Basin Plan for the Santa Ana Region as ARARs.

(table continues)

Table 11-1 (continued)

Action/Requirement	Citation	ARAR <sup>a</sup> Determination	Comments
<b>STATE</b>			
<b>State and Regional Water Quality Control Board (continued)</b>			
Describes water basins in the Santa Ana region; establishes beneficial uses of ground and surface waters; establishes water quality objectives; including narrative and numerical standards; establishes implementation plans to meet water quality objectives and protect beneficial uses; and incorporates statewide water quality control plans and policies.	Comprehensive Water Quality Control Plan for the Santa Ana Basin (Cal. Water Code § 13240)	Applicable	Substantive provisions of Chapters 2 through 4 (Plans and Policies, Beneficial Uses, Water Quality Objectives) are applicable. The beneficial uses for the Irvine Forebay I aquifer designated in the Water Quality Control Plan are municipal/domestic use (potential drinking water), agricultural supply, industrial service supply, and industrial process supply.
Incorporated into all regional board basin plans. Designates all ground and surface waters of the state as drinking water except where the TDS is greater than 3,000 ppm, the well yield is less than 200 gpd from a single well, the water is a geothermal resource or in a water-conveyance facility, or the water cannot reasonably be treated for domestic use by either best management practices or best economically achievable treatment practices.	SWRCB Res. No. 88-63 (Sources of Drinking Water Policy)	Applicable	Substantive provisions are ARARs. The Irvine Forebay I aquifer has been identified as a source of drinking water.

**Notes:**

<sup>a</sup> where MCLs were not available, chemical-specific concentrations used to establish cleanup levels may be based upon the following:

Human health risk-based concentrations (40 C.F.R. § 300.430[e][A][1] and [2])

Ecological risk-based concentrations (40 C.F.R. § 300.430 [e][G])

Practical quantitation limits of contaminants (40 C.F.R. § 300.430[e][A][3]);

many potential action-specific ARARs contain chemical-specific limitations and are addressed in the action-specific ARAR tables

<sup>b</sup> statutes and policies, and their citations, are provided as headings to identify general categories of potential ARARs for the convenience of the reader; listing the statutes and policies does not indicate that the DON accepts the entire statute or policy as a potential ARAR; specific potential ARARs are addressed in the table below each general heading; only substantive requirements of the specific citations are considered potential ARARs

(table continues)

**Table 11-1 (continued)****Acronyms/Abbreviations:**

§ – section  
 ARAR – applicable or relevant and appropriate requirement  
 Cal/EPA – California Environmental Protection Agency  
 Cal. Code Regs. – *California Code of Regulations*  
 Cal. Water Code – *California Water Code*  
 C.F.R. – *Code of Federal Regulations*  
 DON – Department of the Navy  
 gpd – gallons per day  
 MCAS – Marine Corps Air Station  
 MCL – maximum contaminant level  
 MCLG – maximum contaminant level goal  
 NCP – National (Oil and Hazardous Substances Pollution) Contingency Plan  
 NPDES – National Pollutant Discharge Elimination System  
 ppm – parts per million  
 RCRA – Resource Conservation and Recovery Act  
 RWQCB – (California) Regional Water Quality Control Board  
 STLC – soluble threshold limit concentration  
 SWRCB – (California) State Water Resources Control Board  
 TCE – trichloroethene  
 TCLP – toxicity characteristic leaching procedure  
 TDS – total dissolved solids  
 tit. – title  
 TSD – treatment, storage, and disposal  
 TTLC – total threshold limit concentration  
 U.S.C. – *United States Code*  
 VOC – volatile organic compound  
 WQO – water quality objective

**11.2.1 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. If a chemical has more than one cleanup level, the most stringent level will be identified as an ARAR for this remedial action. The selected remedial action can be implemented to comply with chemical-specific ARARs.

The substantive provisions of the following requirements were identified as the most stringent of the potential federal and state groundwater ARARs for remedial actions at Sites 18 and 24:

- WQCP for the Santa Ana Region, 1995 (specifying water quality objectives and beneficial use)
- federal MCLs listed in the Safe Drinking Water Act (SDWA)
- state primary MCLs in Title 22 *California Code of Regulations* (Cal. Code Regs.)
- RCRA groundwater protection standards in Cal. Code Regs. tit. 22, § 66264.94(a)(1), (a)(3), ©), (d), and (e)

The most stringent of these requirements are the RCRA groundwater protection standards and Cal. Code Regs. tit. 22, § 66264.94 requirements to restore affected groundwater to background conditions, if possible, or else attain the best water quality that is technically and economically feasible. The DON has determined that the substantive provisions of Cal. Code Regs. tit. 22, § 66264.94(a)(1), (a)(3), ©), (d), and (e) constitute relevant and appropriate federal ARARs for groundwater at Sites 18 and 24. These provisions are considered a federal ARAR

## Section 11 Statutory Determinations

**Table 11-2  
Location-Specific ARARs for Selected Remedy**

Location/Requirement	Citation	ARAR Determination	Comments
<b>FEDERAL</b>			
<b>Hazardous Waste Control Act*</b>			
Facility within 100-year floodplain must be designed, constructed, operated, and maintained to avoid washout.	Cal. Code Regs. tit. 22, § 66264.18(b)	Applicable	This requirement is applicable because some groundwater extraction and monitoring wells may be located within the 100-year floodplain.
<b>Executive Order No. 11988, Protection of Floodplains*</b>			
Actions taken within a floodplain should avoid adverse effects, minimize potential harm, and restore and preserve natural and beneficial values.	40 C.F.R. § 6, Appendix A; excluding §§ 6(a)(2), 6(a)(4), 6(a)(6); 40 C.F.R. § 6.302(b)	Applicable	As indicated previously, this requirement is applicable because some of the proposed groundwater extraction and monitoring wells may be located within the floodplain.
<b>National Archaeological and Historical Preservation Act*</b>			
Construction within area where action may cause irreparable harm, loss, or destruction of significant artifacts.	Substantive requirements of 36 C.F.R. § 65, 40 C.F.R. § 6.301(c), 16 U.S.C. § 469	Applicable	Construction on previously undisturbed land would require records searches for cultural resources information or an archaeological survey of the area. Further evaluations of compliance with these requirements will be conducted when exact locations of wells are identified during engineering design work.

## Note:

- \* statutes and policies, and their citations, are provided as headings to identify general categories of potential ARARs for the convenience of the reader; listing the statutes and policies does not indicate that the DON accepts the entire statute or policy as a potential ARAR; specific potential ARARs are addressed in the table below each general heading; only substantive requirements of the specific citations are considered potential ARARs

## Acronyms/Abbreviations:

- § – section  
 ARAR – applicable or relevant and appropriate requirement  
 Cal. Code Regs. – *California Code of Regulations*  
 C.F.R. – *Code of Federal Regulations*  
 DON – Department of the Navy  
 tit. – title  
 U.S.C. – *United States Code*

**Table 11-3  
Action-Specific ARARs for Selected Remedy**

Action/Requirement	Citation	ARAR Determination	Comments
<b>FEDERAL</b>			
<b>Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq.*</b>			
Person who generates waste shall determine whether waste is a hazardous waste.	Cal. Code Regs. tit. 22, § 66262.10(a), 66262.11	Applicable	Applicable for any operation where waste is generated. The determination of whether wastes generated during remedial activities, such as soil cuttings from well installation and treatment residues, are hazardous will be made when the wastes are generated.
<b>Monitoring Requirements</b>			
Requires that constituents of concern be identified.	Cal. Code Regs. tit. 22, § 66264.93	Relevant and appropriate	Relevant and appropriate for Sites 18 and 24. Not applicable because these sites are not regulated units. Table 8-1 identifies constituents of concern at Sites 18 and 24.
Requires that a groundwater monitoring system be established and provides requirements the system must meet.	Cal. Code Regs. tit. 22, § 66264.97(b) and (e)(1)-(5)	Relevant and appropriate	Relevant and appropriate for Sites 18 and 24. Not applicable because these sites are not regulated units. A groundwater monitoring plan will be developed during the remedial design phase.
Requires that the owner or operator of a regulated unit develop a detection monitoring program that will provide reliable indication of a release.	Cal. Code Regs. tit. 22, § 66264.98	Relevant and appropriate	Relevant and appropriate for Sites 18 and 24. Not applicable because these sites are not regulated units. A groundwater monitoring plan will be developed during the remedial design phase.
Requires that the owner or operator of a regulated unit develop an evaluation monitoring program that can be used to assess the nature and extent of a release from the unit.	Cal. Code Regs. tit. 22, § 66264.99	Relevant and appropriate	Relevant and appropriate for Sites 18 and 24. Not applicable because these sites are not regulated units. A groundwater monitoring plan will be developed during the remedial design phase.
Provides requirements for a corrective action program for a regulated unit.	Cal. Code Regs. tit. 22, § 66264.100(a), (b), (c), (d), (f), and (g)(1) and (3)	Relevant and appropriate	Relevant and appropriate for Sites 18 and 24. Not applicable because these sites are not regulated units. A groundwater monitoring plan will be developed during the remedial design phase.

(table continues)

## Section 11 Statutory Determinations

Table 11-3 (continued)

Action/Requirement	Citation	ARAR Determination	Comments
<b>FEDERAL</b>			
<b>Pretransport Requirements</b>			
Hazardous waste must be packaged in accordance with DOT regulations before transport.	Cal. Code Regs. tit. 22, § 66262.30	Applicable	Applicable for any operation where hazardous waste is generated and transported. The determination of whether wastes generated during remedial activities, such as soil cuttings from well installation at treatment residues, are hazardous will be made when the wastes are generated.
Hazardous waste must be labeled in accordance with DOT regulations before transport.	Cal. Code Regs. tit. 22, § 66262.31	Applicable	Applicable for any operation where hazardous waste is generated and transported. The determination of whether wastes generated during remedial activities, such as soil cutting from well installation at treatment residues, are hazardous will be made when the wastes are generated.
Provides requirements for marking hazardous waste before transport.	Cal. Code Regs. tit. 22, § 66262.32	Applicable	Applicable for any operation where hazardous waste is generated and transported. The determination of whether wastes generated during remedial activities, such as soil cutting from well installation at treatment residues, are hazardous will be made when the wastes are generated.
A generator must assure that the transport vehicle is correctly placarded before transport of hazardous waste.	Cal. Code Regs. tit. 22, § 66262.33	Applicable	Applicable for any operation where hazardous waste is generated and transported. The determination of whether wastes generated during remedial activities, such as soil cutting from well installation at treatment residues, are hazardous will be made when the wastes are generated.

(table continues)

Table 11-3 (continued)

Action/Requirement	Citation	ARAR Determination	Comments
<b>FEDERAL</b>			
<b>Pretransport Requirements (continued)</b>			
Establishes requirements for a generator to accumulate hazardous waste on-site for 90 days or less without a permit or grant of interim status.	Cal. Code Regs. tit. 22, § 66262.34	Applicable	Applicable for any operation where hazardous waste is generated and transported. The determination of whether wastes generated during remedial activities, such as soil cutting from well installation at treatment residues, are hazardous will be made when the wastes are generated.
<b>Clean Air Act, 40 U.S.C. § 7401 et seq.*</b>			
All new sources of air pollution that may result in a net emission increase of any nonattainment air contaminant or any halogenated hydrocarbons are to employ BACT.	SCAQMD Rule 1303	Applicable	Applicable to emissions from the air stripper system. Current SCAQMD policy requires BACT only when the net emissions increase exceeds 1 pound per day of any nonattainment air contaminant for a given unit. The SCAQMD BACT guidelines generally require the use of a carbon absorber as BACT to control off-gas. Treatment facilities will be equipped with carbon absorbers.
<b>STATE</b>			
<b>State Water Resources Control Board and Regional Water Quality Control Board</b>			
The sampling method and frequency of sampling shall be appropriate for the medium from which the samples are taken.	Cal. Code Regs. tit. 27, § 20415(e)(12)(b)	Relevant and appropriate	A groundwater monitoring plan will be developed during the remedial design phase.
<b>South Coast Air Quality Management District</b>			
Applies to stationary source, constructed or modified after effective date of requirement, that emits carcinogenic air contaminants.	SCAQMD Rule 1401	Applicable	Requires that applicant demonstrate that the cumulative impact of emissions from new or modified source and all other permitted units owned or operated by the applicant within 100 meters of the source are below a maximum individual cancer risk of $10^{-6}$ .

(table continues)

## Section 11 Statutory Determinations

Table 11-3 (continued)

Action/Requirement	Citation	ARAR Determination	Comments
<b>STATE</b>			
<b>South Coast Air Quality Management District (continued)</b>			
Requires that T-BACT be employed for new stationary equipment when the operation of that equipment results in a higher-than-allowable maximum individual cancer risk.			T-BACT is required if maximum individual cancer risk exceeds this limit. Off-gas control for air stripper discharge is to be below the $10^{-6}$ threshold.
<b>California Civil Code</b>			
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.
<b>California Health and Safety Code</b>			
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.	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 continues)



because this requirement was approved by U.S. EPA in its 23 July 1992 authorization of the state of California's RCRA program and is federally enforceable. The state of California disagrees with the DON; this regulation is a part of the state's authorized hazardous waste control program, so the state contends that the regulation is a state ARAR and not a federal ARAR. See 55 Fed. Reg. 8765, 08 March 1990, and *United States v. State of Colorado*, 990 F. 2d 1565 (1993).

### **11.2.1.1 WATER QUALITY CONTROL PLAN**

Under SDWA and RCRA, a significant issue in identifying ARARs for groundwater is whether the groundwater can be classified as a source of drinking water. The U.S. EPA groundwater policy set forth in the NCP preamble uses the system in the U.S. EPA Guidelines for Groundwater Classification under the U.S. EPA Groundwater Protection Strategy (NCP, 55 Fed. Reg. 8752-8756). Under this policy, groundwater is classified in one of three categories (Class I, II, or III) based on ecological importance, its ability to be replaced, and vulnerability. Class I is irreplaceable groundwater currently used by a substantial population, or groundwater that supports a vital habitat. Class II consists of groundwater currently used or that might be used as a source of drinking water in the future. Class III is groundwater that cannot be used for drinking water because of its unacceptable quality (e.g., high salinity or widespread naturally occurring contamination) or insufficient quantity. The U.S. EPA guidelines define Class DI as groundwater with TDS concentrations over 10,000 mg/L. The aquifer underlying Former MCAS El Toro is classified as a Class II aquifer and is designated by RWQCB Santa Ana Region as a potential source of drinking water, along with other beneficial uses such as agricultural and industrial.

### **11.2.1.2 SAFE DRINKING WATER ACT**

MCLs under the SDWA are potential relevant and appropriate requirements for aquifers with Class I and II characteristics and, therefore, are potential federal ARARs. The point of compliance for MCLs under the SDWA is at the tap. The non-CERCLA components of the modified IDP comply with the SDWA by achieving MCLs at the tap. For CERCLA remedies, however, U.S. EPA indicates that MCLs should be attained throughout the contaminated plume, or at and beyond the edge of the waste management area when the waste is left in place (55 Fed. Reg. 8753). In this case, MCLs are cleanup goals throughout the VOC plume.

### **11.2.1.3 RCRA GROUNDWATER PROTECTION STANDARDS**

Cal. Code Regs. tit. 22, § 66264.94 states that concentration limits for RCRA groundwater protection standards are set for RCRA-regulated units. These regulations provide that compounds must not exceed their background levels in groundwater or some higher concentration limit set as part of the corrective action program. A limit greater than background may be approved if the owner can demonstrate that it is not technologically or economically feasible to achieve the background value and that the constituent at levels below the concentration limit will not pose a hazard to human health or the environment. A concentration limit greater than background must never exceed MCLs established under the federal SDWA (Cal. Code Regs. tit. 22, § 66264.94[e]).

A discussion of the technical and economic infeasibility of remediating groundwater to background is presented in Appendix H of the OU-1 IAFS report (JEG 1996f). This document was reviewed and accepted by U.S. EPA, DTSC, and RWQCB. Therefore, as provided for in Cal. Code Regs. tit. 22, § 66264.94, concentration limits based on MCLs and health-based criteria are considered remedial goals for Site 18 and Site 24.

The RCRA groundwater protection standards are applicable only to RCRA-regulated units, and Sites 18 and 24 are not considered RCRA-regulated units. However, the DON has concluded that substantive provisions of Cal. Code Regs. tit. 22, § 66264.94(a)(1), (a)(3), (c), (d), and (e) are relevant and appropriate federal ARARs for groundwater potentially affected by releases from these sites because the constituents being addressed are similar or identical to those found in RCRA hazardous wastes.

#### **11.2.1.4 PRIMARY AND SECONDARY MCLs**

Primary and secondary state MCLs are set forth in Cal. Code Regs. tit. 22, § 64431 (Maximum Contaminant Levels— Inorganic Chemicals), 64444 (Maximum Contaminant Levels— Organic Chemicals), and 64449 (Secondary Maximum Contaminant Levels and Compliance). MCLs for inorganics are not ARARs for Site 18 and Site 24 because there is evidence that exceedances for these chemicals result from naturally occurring subsurface conditions and past and current land uses not associated with the Former MCAS El Toro and the exceedances are being addressed separately by OCWD/IRWD.

#### **11.2.1.5 THE DON'S POSITION REGARDING SWRCB RESOLUTIONS 92-49 AND 68-16**

The DON and the state of California have not agreed whether SWRCB Res. 92-49 and Res. 68-16 are ARARs for the remedial action at Site 18 and Site 24. Therefore, this ROD documents each party's position but does not attempt to resolve the issue.

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

The DON has also determined that SWRCB Res. 68-16 is not a chemical-specific ARAR for determining remedial action goals, but it is an action-specific ARAR for regulating discharged treated groundwater back into the aquifer should OCWD/IRWD elect to inject treated groundwater into the principal aquifer via well IDP-1. OCWD/IRWD would comply with 68-16 by injecting the treated groundwater into areas of the aquifer where TDS and nitrate levels are not markedly different. The DON has determined that further migration of VOCs through groundwater is not a discharge governed by the language in Res. 68-16. More specifically, the language of SWRCB Res. 68-16 indicates that it is prospective in intent, applying to new discharges in order to maintain existing high-quality waters. It is not intended to apply to restoration of waters that are already degraded.

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

The substantive technical standard in the equivalent state requirements (i.e., Cal. Code Regs. tit. 23, div. 3, ch. 15 and SWRCB Res. 92-49 and Res. 68-16) is identical to the substantive technical standard in Cal. Code Regs. tit. 22, § 66264.94. This section of Cal. Code Regs. tit. 22 will likely be applied in a manner consistent with equivalent provisions of other regulations, including SWRCB Res. 92-49 and Res. 68-16.

#### **11.2.1.6 STATE OF CALIFORNIA'S POSITION REGARDING SWRCB RESOLUTIONS 68-16 AND 92-49**

The state does not agree with the DON determination that SWRCB Res. 92-49 and Res. 68-16 and certain provisions Cal. Code Regs. tit. 23, div. 3, ch. 15 are not ARARs for this response action. SWRCB has interpreted the term "discharges" in the California Water Code to include the movement of waste from soils to groundwater and from contaminated to uncontaminated water (SWRCB 1994). However, the state agrees that

the proposed action would comply with SWRCB Res. 92-49 and Res. 68-16, and compliance with Cal. Code Regs. tit. 22 provisions should result in compliance with Cal. Code Regs. tit. 23 provisions. The state does not intend to dispute the ROD, but reserves its rights if implementation of the Cal. Code Regs. tit. 22 provisions is not as stringent as state implementation of Cal. Code Regs. tit. 23 provisions. Because Cal. Code Regs. tit. 22 regulation is part of the state's authorized hazardous waste control program, it is also the state's position that Cal. Code Regs. tit. 22, § 66264.94 is a state ARAR and not a federal ARAR (*United States v. State of Colorado*, 990 F.2d 1565 [1993]).

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

### **11.2.1.7 CLEANUP LEVELS**

Cleanup levels for groundwater are set at health-based levels, reflecting current and potential use and exposure. Chemicals of concern in groundwater at Sites 18 and 24 are VOCs, several of which exceed federal or state MCLs. The remediation goals for these chemicals are based on federal and state MCLs and risk-based concentrations. Table 8-1 shows the remediation goals for chemicals of concern in groundwater.

### **11.2.2 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. The selected remedial action will be implemented to comply with location-specific ARARs.

Because some of the proposed groundwater extraction or monitoring wells may be located within a 100-year floodplain, Cal. Code Regs. tit. 22, § 66264.18(b) and substantive provisions of Executive Order (Exec. Order No.) 11988 are applicable as shown in Table 11-2. Exec. Order No. 11988 (Protection of Floodplains) (40 C.F.R. § 6, Appendix A, excluding § 6[a][2], [4], and [6]; 40 C.F.R. § 6.302) requires that actions within floodplains should avoid adverse effects, minimize potential harm, and restore and preserve natural and beneficial values. None of the planned activities should have adverse effects on the floodplain.

The National Archaeological and Historical Preservation Act requires federally funded projects to identify and mitigate the effects of project activities on significant scientific, prehistoric, historic, or archaeological data. No prehistoric or historic sites were identified in existing data for the area that could be affected by the remedial action. Sites 18 and 24 are heavily disturbed, and it is unlikely that archeological surveys will be required for the groundwater extraction wells and monitoring wells. However, evaluation of this need will be made when the wells are located.

### **11.2.3 Action-Specific ARARs**

Action-specific ARARs are technology- or activity-based requirements or limitations for remedial activities and apply to particular remediation activities. The selected remedial action can be implemented to comply with action-specific ARARs.

#### **11.2.3.1 FEDERAL**

Federal laws that give rise to potential ARARs for actions to be undertaken as part of the selected alternative include RCRA and the Clean Air Act. These regulations are discussed in the following paragraphs.

## ***RCRA***

Waste streams created during remedial action are subject to RCRA requirements for determining whether the wastes are hazardous.

Hazardous waste determinations for the soil cuttings from monitoring well installation and the spent carbon from the off-gas treatment would be made when the waste is generated. If these wastes are determined to be hazardous, then the appropriate requirements outlined in Table 11-3 for packaging, labeling, marking, placarding, and accumulating these materials for final disposal need to be followed.

Characterization of groundwater extracted from the shallow groundwater unit will be performed during the remedial design phase to evaluate whether RCRA design standards apply.

A groundwater monitoring program will be developed during the remedial design phase. The monitoring program will comply with the substantive requirements of Cal. Code Regs. tit. 22, § § 66264.93 and 66264.97 through 66264.100. These requirements are considered relevant and appropriate for Sites 18 and 24. They are not applicable because the sites are not RCRA-regulated units.

## ***Clean Air Act***

Off-gas from the air stripper must comply with substantive air emissions requirements of the SCAQMD. Requirements that have been incorporated in the State Implementation Plan (SIP) and are therefore considered to be potential federal ARARs include Rule 212 (the Standard for Approving Permits) and Rule 1303. These requirements and their applicability to the selected alternative are discussed below.

- Equipment should be designed, controlled, or equipped with air pollution control equipment that enables it to operate without emitting air contaminants in violation of Division 26 of the State of California Health and Safety Code or the SCAQMD rules.
- Public notification is required for significant projects, defined as having any of the following conditions:
  - units are located within 1,000 feet of the outer boundary of a school
  - the increase in on-site emissions exceeds any of the daily maximums specified in subdivision (g) of Rule 212
  - the resulting individual cancer risk equals or exceeds 1 in 1,000,000

Based on preliminary conceptual design estimates, the air stripper, which uses VGAC filters to remove VOCs and control TCE emissions, would not qualify as a significant project; therefore, public notification would not be required and Rule 212 is not an ARAR. In addition, public notification requirements are not ARARs because they are not environmental standards of control.

SCAQMD Rule 1303 requires that all new sources of air pollution that result in a net increase of any nonattainment air contamination or any halogenated hydrocarbons employ the BACT. Current SCAQMD policy (SCAQMD 1990) sets the threshold of net emissions increase at 1 pound per day of any nonattainment air contaminant, including reactive organic gases such as TCE, for any permitted unit when BACT is required. Current SCAQMD guidelines list carbon adsorption as the BACT for air strippers for groundwater treatment (SCAQMD 1990). Because carbon adsorption will be used to treat VOCs from the air stripper, the remediation will comply with BACT guidelines. Therefore, SCAQMD Rule 1303 is applicable for the remedial action at Sites 18 and 24.

### 11.2.3.2 STATE

California state requirements that are potential ARARs for actions to be undertaken as part of the selected alternative are described in the following subsections.

#### *California Civil Code Section 1471 and California Health and Safety Code Sections 25202.5, 25222.1, and 25238(c)*

State statutes that have been accepted by the DON as ARARs for implementing institutional controls and entering into an Environmental Restriction Covenant and Agreement with DTSC include substantive provisions of the Cal. Civ. Code § 1471 and the Cal. Health & Safety Code § § 25202.5, 25222.1, and 25233(c).

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 § 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.

The substantive provision of Cal. Health & Safety Code § 25202.5 is the general narrative standard to restrict "present and future uses of all or part of the land on which the . . . facility . . . is located . . ." This substantive provision will be implemented by incorporation of restrictive environmental covenants in the 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 provides the authority for the state to enter into voluntary agreements to establish land use covenants with the owner of property. The Cal. Health & Safety Code § 25222.1 Land Use Covenant Agreement, itself, is in the form of an agreement, and this procedural form does not qualify as a legally binding "applicable or relevant and appropriate" requirement under CERCLA because it is administrative (procedural) in nature. The substantive provision of Cal. Health & Safety Code § 25222.1 is the general narrative standard: "restricting specified uses of the property." Cal. Health & Safety Code § 25233(c) sets forth substantive criteria for granting variances from prohibited uses. The DON will comply with the substantive requirements of Cal. Health & Safety Code § 25222.1 by incorporating the CERCLA use restrictions described in Section 8.2.2.2 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 may be interpreted in a manner that is consistent with the substantive provisions of Cal. Civ. Code § 1471. The covenants would be recorded with the deed and run with the land.

In addition to being implemented through the Environmental Restriction Covenant and Agreement between the DON and DTSC, the appropriate and relevant portions of the Cal. Health & Safety Code § § 25202.5, 25221.1, and 25233(c) and Cal. Civ. Code § 1471 shall also be implemented through the deed between the DON and the transferee.

The 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. These state regulations 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, while U.S. EPA does not agree that these state regulations require the DON to enter into a land-use covenant with DTSC, U.S. EPA believes that, if necessary for the protection of

human health and the environment, it may be appropriate for the DON to elect to enter into an enforceable written agreement with DTSC to enforce land-use restrictions at a site.

### *South Coast Air Quality Management District*

The off-gas from the air stripper needs to comply with substantive SCAQMD requirements for air emissions. Requirements that have not been incorporated into the SIP and are therefore considered to be state ARARs include Rules 402 and 1401.

**Rule 402.** Rule 402 prohibits the discharge of any air emissions in quantities that may cause injury, detriment, nuisance, or annoyance to the public. The DON has determined that a "nuisance" condition does not exist at Site 18 or Site 24 and is not posed by the selected alternatives. In addition, other federal and state ARARs addressing actual and potential air emissions will assure adequate protection of human health and the environment.

**Rule 1401.** Rule 1401 involves new source review of carcinogenic air contaminants. It requires applicants to substantiate that the cumulative impacts of emissions from new, relocated, or modified permit units and from all other permit units within 100 meters that are owned or operated by the applicant, and for which applications were submitted on or after 01 June 1990, will not result in any of the following:

- a. a maximum individual cancer risk (MICR) of greater than 1 in 1,000,000 ( $1 \times 10^{-6}$ ) at any receptor location, if the permit unit is constructed without toxics using best available control technology-toxics (T-BACT);
- b. an increased MICR of greater than 10 in 1,000,000 ( $1 \times 10^{-5}$ ) at any receptor location, if the permit unit is constructed with T-BACT; and
- c. more than 0.5 excess cancer cases in the population that is subject to a risk of greater than 1 in 1,000,000 ( $1 \times 10^{-6}$ ).

Furthermore, the MICR may not exceed 1/70 of the maximum allowable risk specified in item a or b above in any 1 year at receptor locations within residential areas.

Rule 1401 applies to the remedial action at Site 18 and Site 24 because the air stripper units represent new stationary sources of emission. Rule 1401 specifies the risk assessment and emission calculation procedures to be used in determining compliance with the requirements. An evaluation of whether the air emissions from the air stripper comply with Rule 1401 would be made during design of the IDP.

## **11.3 COST-EFFECTIVENESS**

The selected remedy has been determined to provide overall effectiveness proportional to its costs; it is therefore considered cost-effective. The estimated net present-worth cost for this remedial action is approximately \$30.6 million. This total includes capital costs of approximately \$14.8 million, and O&M and monitoring costs of approximately \$15.9 million. Capital and O&M costs include costs associated with construction and operation of monitoring wells, shallow groundwater unit extraction wells and conveyance pipelines, and costs associated with the VOC-related portion of the IDP nonpotable system (i.e., the CERCLA portion of the EDP delineated in Section 10.2). Technologies included in Alternative 8A and Alternative 10B' are readily implementable and have been widely used and demonstrated to be effective. The cost of the selected alternative, although higher than the cost of the no action alternative, represents a low-cost, effective, permanent solution for groundwater remediation.

The preferred remedy and the proposed settlement agreement together benefit the DON, OCWD/IRWD, and the public. The DON benefits through avoidance of costs for groundwater injection or disposal. OCWD/IRWD benefits because the United States pays for a portion of the costs associated with the modified DDP. The public benefits from being able to reclaim a valuable water resource.

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

The DON and the state of California have determined that the selected remedy represents the maximum extent practicable to which permanent solutions and alternative treatment technologies can be used cost-effectively at Sites 18 and 24. This alternative is protective of human health and the environment and complies with the ARARs for both sites. VOC contaminants within groundwater will be extracted and permanently destroyed. Although some residual contamination may remain in groundwater, the concentration should not be high enough to present a risk to human health. The selected alternative is readily implementable using standard equipment and methods. Remediation of groundwater is expected to take several decades.

The most decisive factors in the selection of Alternative 8 A and Alternative 10B' are that these alternatives will permanently reduce the toxicity and volume of VOC contaminants and will assist in restoration of the groundwater to its designated beneficial uses.

#### **11.5 PREFERENCE FOR TREATMENT AS A PRINCIPAL ELEMENT**

CERCLA Section 121(b) identifies a statutory preference for alternatives that use treatment to reduce the toxicity, mobility, or volume of contamination. The selected alternative complies with this requirement.

**Section 12**

**DOCUMENTATION OF SIGNIFICANT CHANGES**

---

The Proposed Plan for Sites 18 and 24 was released for public comment in November 2001. The Proposed Plan identified enhanced Alternative 8A as the preferred alternative for remediation of groundwater at Site 18 and Alternative 10B' as the preferred alternative for remediation of groundwater at Site 24. The DON has reviewed all written and verbal comments submitted during the comment period and determined that no changes to the proposed remedy are required.

## REFERENCES

---

- Banks, H. O. 1984. Orange County Water District Groundwater Management, Irvine Area, Orange County, California. September.
- Bechtel National, Inc. 1995. Final Work Plan Phase I Remedial Investigation/Feasibility Study. Marine Corps Air Station El Toro, California. July.
- \_\_\_\_\_. 1996a. Final Technical Memorandum Background and Reference Levels, Remedial Investigation, Marine Corps Air Station El Toro, California. October.
- \_\_\_\_\_. 1996b. Final Updated Community Relations Plan, Marine Corps Air Station El Toro, California. March.
- \_\_\_\_\_. 1996c. Aquifer Test Report. Marine Corps Air Station El Toro, California. November.
- \_\_\_\_\_. 1997a. Draft Final Phase II Remedial Investigation Report, Operable Unit 2A - Site 24. Marine Corps Air Station El Toro, California. June.
- \_\_\_\_\_. 1997b. Draft Final Phase II Groundwater Feasibility Study Report, Operable Unit 2A - Site 24. Marine Corps Air Station El Toro, California. December.
- \_\_\_\_\_. 1997c. Draft Final Phase II Vadose Zone Feasibility Study Report, Operable Unit 2 A - Site 24. Marine Corps Air Station El Toro, California. March.
- \_\_\_\_\_. 1997d. Draft Soil Vapor Extraction Pilot Test Summary Report, Site 24 - VOC Source Area, Marine Corps Air Station El Toro, California. November.
- \_\_\_\_\_. 1998a. Draft Final Engineering Design Report, Vadose Zone Remediation, Site 24. Marine Corps Air Station El Toro, California. December.
- \_\_\_\_\_. 1998b. Draft Groundwater Remediation Pilot Test Report, Site 24. Marine Corps Air Station El Toro, California. December.
- \_\_\_\_\_. 1998c. Draft Technical Memorandum U.S. Air Force Technical Protocol for Natural Attenuation at Site 2 Magazine Road Landfill. Marine Corps Air Station El Toro, California. December.
- \_\_\_\_\_. 1999a. Draft Final CERCLA Groundwater Monitoring Plan. Marine Corps Air Station El Toro, California. June.
- \_\_\_\_\_. 1999b. Draft Final Evaluation of Perchlorate in Groundwater, Marine Corps Air Station El Toro, California. July.
- \_\_\_\_\_. 2001. Final Technical Memorandum. Evaluation of OU-1 Alternative 8 A with Respect to NCP Criteria, Marine Corps Air Station El Toro, California. October.
- \_\_\_\_\_. 2002a. Draft Technical Memorandum, - Risk Evaluation For an Off-Station Agricultural Worker. June.
- \_\_\_\_\_. 2002b. Final Risk Assessment for North Lake. May.

- BNI. See Bechtel National, Inc.
- Brown and Caldwell. 1986. Initial Assessment Study of Marine Corps Air Station El Toro, California. CLE-C01-01F018-A2-016. May.
- California Division of Mines and Geology. 1981. Geologic Map of Orange County, California, showing mines and mineral deposits. Bulletin 204,1:48,000.
- California Regional Water Quality Control Board Santa Ana Region. 1995. Water Quality Control Plan Santa Ana River Basin (8).
- Camp, Dresser, and McGee Federal Programs Corporation. 2002. Groundwater Monitoring Report, September 2001 Monitoring Round 14, Marine Corps Air Station, El Toro, California. June.
- CDM. See Camp, Dresser, and McGee Federal Programs Corporation.
- CDMG. See California Division of Mines and Geology.
- DON. See United States Department of the Navy.
- Earth Tech. 2001a. Technical Memorandum, Verification of Perchlorate at IRP Site 1, Explosive Ordnance Disposal Range, Marine Corps Air Station El Toro, California. July.
- \_\_\_\_\_. 2001b. Phase II Evaluation of Radionuclides in Groundwater at Former Landfill Sites and the EOD Range, Marine Corps Air Station El Toro, California.
- \_\_\_\_\_. 2001c. Draft Technical Memorandum Preliminary Assessment Building 307 Marine Corps Air Station El Toro, California. October.
- \_\_\_\_\_. 2001d. Draft Site Closure Report Vadose Zone Remediation IRP Site 24, Volatile Organic Compounds Source Area, Marine Corps Air Station El Toro, California. June.
- Federal Facility Agreement. 1990. Federal Facility Agreements Between the U.S. Marine Corps, EPA Region IX, California Department of Health Services, and State Water Resources Control Board. October.
- FFA. See Federal Facilities Agreement.
- Fife, D. L. 1974. Geology of the South Half of the El Toro Quadrangle, Orange County, California Division of Mines and Geology.
- Herndon, R. L., and J. F. Reilly. 1989. Phase I Report - Investigation of Trichloroethylene Contamination in the Vicinity of the Marine Corps Air Station El Toro. Prepared for Orange County Water District. March.
- Jacobs Engineering Group Inc. 1993a. Marine Corps Air Station El Toro: Installation Restoration Program Phase I Remedial Investigation Draft Technical Memorandum. May.
- \_\_\_\_\_. 1993b. Marine Corps Air Station El Toro: Installation Restoration Program Final RCRA Facility Assessment Report. July.

- \_\_\_\_\_. 1994a. Marine Corps Air Station El Toro: Installation Restoration Program Draft Remedial Investigation Report for Operable Unit 1. Irvine, California. July.
- \_\_\_\_\_. 1994b. Marine Corps Air Station El Toro: Installation Restoration Program Remedial Investigation/Feasibility Study Final Soil Gas Survey Technical Memorandum, Sites 24 and 25. Irvine, California. October.
- \_\_\_\_\_. 1994c. Interviews with active and retired personnel from MCAS El Toro, conducted by Jacobs Engineering Group Inc., CTO-284. Irvine, California. June.
- \_\_\_\_\_. 1995. Marine Corps Air Station El Toro, California. Installation Restoration Program Remedial Investigation/Feasibility Study Final Groundwater Monitoring Plan. April.
- \_\_\_\_\_. 1996a. Marine Corps Air Station El Toro, California. Installation Restoration Program Draft Final Operable Unit 1 Interim Action Remedial Investigation/Feasibility Study. Volume II of IX, Remedial Investigation Report. August.
- \_\_\_\_\_. 1996b. Marine Corps Air Station El Toro, California. Installation Restoration Program Draft Final Operable Unit 1 Interim Action Remedial Investigation/Feasibility Study. Volume IV of IX, Interim Action Feasibility Study Report. August.
- \_\_\_\_\_. 1996c. Marine Corps Air Station El Toro, California. Installation Restoration Program Draft Final Operable Unit 1 Interim Action Remedial Investigation/Feasibility Study. Volume III of IX, Human-Health Risk Assessment Report. August.
- \_\_\_\_\_. 1996d. Marine Corps Air Station El Toro, California. Installation Restoration Program Draft Final Operable Unit 1 Interim Action Remedial Investigation/Feasibility Study. Volume V of IX, Remedial Investigation Report Appendices. August.
- \_\_\_\_\_. 1996e. Marine Corps Air Station El Toro, California. Installation Restoration Program Draft Final Operable Unit 1 Interim Action Remedial Investigation/Feasibility Study. Volume VI of IX, Interim Action Feasibility Study Appendix A (Groundwater Modeling Report). August.
- \_\_\_\_\_. 1996f. Marine Corps Air Station El Toro, California. Installation Restoration Program Draft Final Operable Unit 1 Interim Action Remedial Investigation/Feasibility Study. Volume VII of IX, Interim Action Feasibility Study Appendices B Through J. August.
- \_\_\_\_\_. 1996g. Marine Corps Air Station El Toro, California. Installation Restoration Program Draft Final Operable Unit 1 Interim Action Remedial Investigation/Feasibility Study. Volume IX of IX, Interim Action Feasibility Study Addendum. August.
- \_\_\_\_\_. 1996h. Marine Corps Air Station El Toro, California. Installation Restoration Program Draft Final Operable Unit 1 Interim Action Remedial Investigation/Feasibility Study. Volume VIII of IX, Remedial Investigation Report Addendum. August.
- James M. Montgomery Engineers, Inc. 1988. MCAS El Toro and Tustin Site Inspection Plan of Action. August.
- \_\_\_\_\_. 1990. Marine Corps Air Station El Toro Off-Station Remedial Investigation Final Work Plan. March.

- JEG. See Jacobs Engineering Group Inc.
- JMM. See James M. Montgomery Engineers, Inc.
- P&D Consultants Team. 1996. Final MC AS El Toro Community Reuse Plan. Prepared for Marine Corps Air Station El Toro Local Redevelopment Authority. December.
- Roy F. Weston. 2000. Final Historical Radiological Assessment (HRA), Marine Corps Air Station El Toro. May.
- \_\_\_\_\_. 2002. Draft Radiological Release Report, Marine Corps Air Station El Toro, California. In progress.
- RWQCB. See California Regional Water Quality Control Board.
- SCAQMD. See South Coast Air Quality Management District.
- Singer, J. A. 1973. Geohydrology and Artificial-Recharge Potential of the Irvine Area, Orange County, California. U.S. Department of the Interior Geological Survey, Water Resources Division. South Coast Air Quality Management District. 1990. Best Available Control Technology Guidance.
- Southwest Division Naval Facilities Engineering Command. 1997a. Draft Final Record of Decision, Operable Units 2A and 3 A - No Action Sites. Marine Corps Air Station El Toro, California. September.
- \_\_\_\_\_. 1997b. Draft Final Interim Record of Decision, Operable Unit 2A - Site 24, VOC Source Area Vadose Zone. Marine Corps Air Station El Toro, California. September.
- \_\_\_\_\_. 1999. Draft Final Record of Decision, Operable Unit 3 A Site 11, Marine Corps Air Station El Toro, California. September.
- \_\_\_\_\_. 2000. Final Interim Record of Decision, Operable Unit 2B Landfill Sites 2 and 17, Marine Corps Air Station El Toro, California. April.
2001. Final Record of Decision, Operable Unit 3B No Action Sites 7 and 14, Marine Corps Air Station EL Toro, California. June.
- State Water Resources Control Board. 1994. Application of State Water Board Resolution No. 68-16 to Cleanup of Contaminated Groundwater. February.
- SWDTV. See Southwest Division Naval Facilities Engineering Command.
- SWRCB. See State Water Resources Control Board.
- United States Department of the Navy. 1997. Navy/Marine Corps Installation Restoration Manual. February.
- \_\_\_\_\_. 1999. Base Realignment and Closure Cleanup Plan for Marine Corps Air Station El Toro, California. March.
- \_\_\_\_\_. 2000. Draft Environmental Impact Statement for the Reuse and Disposal of Marine Corps Air Station El Toro. February.

\_\_\_\_\_. 2001. Policy for Conducting Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Statutory Five-Year Revisions. November.

# **RESPONSIVENESS SUMMARY**

**RESPONSE TO COMMENTS  
RECEIVED DURING THE PUBLIC MEETING**

**RESPONSIVENESS SUMMARY**  
**MARINE CORPS AIR STATION EL TORO, CALIFORNIA**  
**PROPOSED PLAN, OPERABLE UNITS 1 AND 2A, SITES 18 AND 24**

Comments Received During Public Meeting Held on 13 November 2001

Comments by: *Mark Miller, Mission Viejo Resident*

Number	Comment	Response
1A	<p>My name is Mark Miller, and I live in Mission Viejo. I got the notice in the paper and came to the meeting tonight.</p> <p>And I was just looking at the proposed plan groundwater cleanup folder. And I notice on the bottom of page 16 where it says "Preferred Remedy Conceptual Design Alternatives 8A and 10B," on the bottom, it says "During low periods" – or "During periods of low recycled water demand, only shallow groundwater will be treated and either injected into an Irvine Desalter Project (IDP) injection well or stored in the IDP reservoir."</p> <p>And I was wondering if the greatest contamination is in the – the deep aquifers, why they wouldn't take the more contaminated water and treat it instead of the water out of the shallow well.</p>	<p><b>Response:</b> Actually, the highest concentrations of volatile organic compound (VOC) contamination (up to 4,850 parts per billion of trichloroethene [TCE]) are in the shallow groundwater unit. The highest reported concentration of TCE in the deeper principal aquifer is approximately 62 parts per billion, almost 80 times less than in the shallow groundwater unit. Because the shallow groundwater is more contaminated and acts as a source of contamination to the deeper, principal aquifer, the Department of the Navy (DON) and Orange County Water District (OCWD)/Irvine Ranch Water District (IRWD) plan to extract and treat shallow groundwater on a year-round basis. Groundwater in the less contaminated principal aquifer would be extracted and treated only during periods when reclaimed water is in demand.</p>
1B	<p>And one other question I had – the plume is mapped out. And they – they state there will be three deep extraction wells and then one shallow groundwater unit on-Station, I guess, on the marine base. And I was curious with the scrubber [air stripper] that is being designed to be in place, will there be any design parameter if the plume should expand where other wells could be added on and the scrubber [air stripper] would work to a larger capacity or will it be designed if – on that contingency?</p>	<p><b>Response:</b> The conceptual design for the extraction wells at Site 24 calls for 31 wells to be located in the shallow groundwater unit beneath Site 24. These wells will be located in the "hot spot," the area of highest groundwater contamination. The wells will extract groundwater at a rate of 440 to 550 gallons per minute. This extraction rate has been evaluated and found to be a rate that will clean up the shallow groundwater unit in approximately 20 years. The air stripper will be designed to accommodate not only a flow of 550 gallons per minute (gpm) from the shallow groundwater unit but also the flow from the three principal aquifer extraction wells (approximately 2,500 gpm). The air stripper will also be able to be modified to handle additional capacity.</p>

RESPONSIVENESS SUMMARY MARINE CORPS AIR STATION EL TORO, CALIFORNIA PROPOSED PLAN, OPERABLE UNITS 1 AND 2A, SITES 18 AND 24		
Comments Received During Public Meeting Held on 13 November 2001		
Comments by: <i>Blake Storie, Laguna Niguel Resident</i>		
Number	Comment	Response
2	<p>My name is Blake Storie. I'm a resident of Laguna Niguel, and I'm sure my wife is as well in favor of any type of cleanup effort. Just looking at table 3 on page 14 [of the proposed plan] – you have to understand that we're very new to this evening – the estimated remedial time in shallow groundwater is the quickest of the options you have there, which is good news, I would think.</p> <p>But the reverse on the estimated remediation time of the principal aquifer, much – is the longest of all the options. I'm just curious as to why that would be, why you would select that.</p>	<p><b>Response:</b> Alternative 8A was selected because it optimizes the amount of mass removed from the principal aquifer consistent with the recycled water needs. Based on modeling performed to date, this alternative requires more time than most of the other alternatives because the two extraction wells that are located in the area with the highest concentrations of TCE in the principal aquifer (wells ET-1 and ET-2) draw the groundwater back toward the wells, slowing down the natural flow of the groundwater. This process controls the groundwater plume, preventing the contamination from moving farther through the aquifer. During remedial design, the water districts will look at whether it is possible to slightly change the locations of the extraction wells to reduce the cleanup time while still maximizing the amount of contamination that is removed and preventing the plume from moving into areas that are not currently contaminated.</p>

**RESPONSIVENESS SUMMARY  
MARINE CORPS AIR STATION EL TORO, CALIFORNIA  
PROPOSED PLAN, OPERABLE UNITS 1 AND 2A, SITES 18 AND 24**

**Comments Received During Public Meeting Held on 13 November 2001**

*Comments by: Carol Boot-Storie, Laguna Niguel Resident*

Number	Comment	Response
3A	<p>My name is Carol Boot-Storie. I'm a resident. I want to make a statement. First of all, I just want to say thank you all for being here. Sometimes you don't realize how much people appreciate your efforts given the turnout here. But thank you all for all your hard work, many, many years of hard work put together here.</p> <p>A couple of questions. On the 93 years, I know that there was a mention of greater than 4,800 parts per billion at one point. But in some of these cases, you mentioned greater than 500 parts per billion. Is there a time estimated that would say in 20 years, you would have the source down to 250 parts per billion or down to 10 parts per billion? Is there a time line, and how does that time line play out so that 90 - 90 percent is salt in 20 years, and the remainder goes down from there?</p>	<p><b>Response:</b> The highest concentrations of TCE, including the 4,800 parts per billion that you mentioned, were found in the shallow groundwater unit. The DON plans to use approximately 31 wells (the actual number and locations of the wells will be determined during remedial design) to extract contaminated groundwater from the areas of highest TCE concentration in the shallow groundwater unit so that this area will be able to be cleaned up to drinking water standards (a concentration of 5 parts per billion of TCE or less) in approximately 20 years. Cleanup of the deeper, principal aquifer is expected to take longer because of several factors, including characteristics of the aquifer, use of fewer extraction wells, and the larger area of the plume.</p>
3B	<p>And is there a location where the cost associated with each of these alternatives is presented?</p>	<p><b>Response:</b> The estimated cost for each of the Site 18 and Site 24 alternatives is presented on page 17 of the Proposed Plan. The cost of Alternative 8A for the principal aquifer and Alternative 10B' for the shallow groundwater unit is also shown on page 17 and is approximately \$30.6 million.</p>

**RESPONSIVENESS SUMMARY  
MARINE CORPS AIR STATION EL TORO, CALIFORNIA  
PROPOSED PLAN, OPERABLE UNITS 1 AND 2A, SITES 18 AND 24**

**Comments Received During Public Meeting Held on 13 November 2001**

**Comments by:** *Carol Boot-Storie, Laguna Niguel Resident*

Number	Comment	Response
3C	<p>And then just a general question. Is there something that precipitated – I know five years is a long time for the negotiations. Is there something that precipitated a final date for that, whether it be political or whether it be a regulatory agency that made that determination? Could that have happened sooner? I know there are some smiles going on there. Is there something that said, "Here's the date, and here's why there's the date?" I'm interested in knowing that.</p>	<p><b>Response:</b> The smiles that you saw were probably because all the parties in the negotiation of the Settlement Agreement know how long it took to reach an agreement and also wish that it could have happened earlier. The smiles also show, however, that even with an issue as large, sensitive, and complicated as this, all parties can still feel that a fair and reasonable agreement has been reached.</p> <p>Several complex issues arose in the course of the negotiations and resolving these particular issues and reaching consensus on the exact language in the agreement itself took several years. However, taking the time to work these issues out prior to finalization ensured that the agreement meets the needs of all parties (including the general public) and that the Irvine Desalter Project (IDP) is both technically and economically sound for both the water districts and the DON.</p> <p>There was no one event that provided the impetus for agreement to be reached. It is notable, however, that the affected sites are overseen by the regulatory agencies as part of the Federal Facilities Agreement. This agreement has due dates for key documents such as the Proposed Plan. For each delay in the delivery of these documents, a request for an extension must be submitted to the regulatory agencies.</p>

**RESPONSE TO LETTERS  
RECEIVED DURING THE PUBLIC COMMENT PERIOD**

**RESPONSIVENESS SUMMARY  
MARINE CORPS AIR STATION EL TORO, CALIFORNIA  
PROPOSED PLAN, OPERABLE UNITS 1 AND 2A, SITES 18 AND 24**

**Letters Received During Public Comment Period**

**Comments by:** *Rick Wilson, P.E., Resident of Aliso Viejo per Letter Dated 26 November 2001*

Number	Comment	Response
1A	<p>I attended the public meeting on November 13, 2001 where the Proposed Plan for Groundwater Cleanup of Operable Units 1 and 2A was presented. After listening to the presentation and reviewing the hand-outs, I have the following comments and questions:</p> <p>As you are no doubt aware, groundwater cleanups of chlorinated solvent plumes in the San Gabriel and San Fernando Valley Groundwater Basins have been delayed due to the discovery of additional chemicals in the groundwater which require the use of different treatment technologies than are typically used for chlorinated volatile organic compounds (VOCs). These compounds include perchlorate, NDMA, 1,4-dioxane, and hexavalent chromium. Have the shallow and deep groundwater plumes at MCAS El Toro been assessed for the potential presence of these compounds?</p>	<p><b>Response:</b> Groundwater at Marine Corps Air Station (MCAS) El Toro has been assessed for the compounds that you mention—perchlorate, nitrodiphenylamine (NDMA), 1,4-dioxane, and hexavalent chromium. NDMA and 1,4-dioxane were not reported at concentrations exceeding their respective detection limits. Perchlorate within the VOC plume was reported at a maximum concentration of 13 micrograms per liter (µg/L). Hexavalent chromium was reported at a maximum concentration of 17 µg/L, a concentration that does not exceed the state or federal maximum contaminant level for chromium. It is anticipated that none of these compounds is expected to reach the Irvine Desalter Project (IDP) at concentrations requiring specific treatment.</p> <p>Since the 1980s, groundwater at MCAS El Toro has been monitored extensively for a wide variety of chemicals, and the Department of the Navy (DON) and Orange County Water District (OCWD)/Irvine Ranch Water District (IRWD) are confident that they know which chemicals are present in the groundwater. However, in the unlikely event that a new chemical should be detected in the future that cannot be readily remediated using IDP equipment, there is a clause in the Settlement Agreement that covers temporary shutdown of the IDP, evaluation of the new chemical, and creation of an action plan to address remediation.</p>

**RESPONSIVENESS SUMMARY**  
**MARINE CORPS AIR STATION EL TORO, CALIFORNIA**  
**PROPOSED PLAN, OPERABLE UNITS 1 AND 2A, SITES 18 AND 24**

**Letters Received During Public Comment Period**

**Comments by:** *Rick Wilson, P.E., Resident of Aliso Viejo per Letter Dated 26 November 2001*

Number	Comment	Response
1B	<p>Reverse Osmosis (RO) is proposed for the removal of nitrate and total dissolved solids (TDS) from groundwater prior to the removal of VOCs. Will the RO process remove any of the VOCs? If there will be any VOCs in the RO reject stream, the fate of these VOCs should be assessed, since I assume the RO reject stream will ultimately be discharged to the ocean. Also, since I understand that at least part of the RO reject pipeline will make use of an existing pipeline, this line should be leak checked and evaluated for compatibility with the RO reject.</p>	<p><b>Response:</b> The reverse osmosis (RO) process is expected to remove a small amount of the volatile organic compounds (VOCs). The RO reject stream, which will contain low concentrations of VOCs, will be blended with wastewater and discharged to the brine line, which will eventually discharge to the ocean. OCWD/IRWD has performed a preliminary evaluation of the amount of expected VOC discharge and has determined that the concentrations will be low enough to meet discharge requirements. Further evaluations will be made during the remedial design phase of the project.</p> <p>The existing pipeline that will be used to transport the RO reject stream is pressurized and is continually checked for leaks. As noted above, a preliminary evaluation of the use of this line for the RO reject stream has taken place. Further evaluations will be made during the remedial design phase of the project.</p>
1C	<p>The flow diagram for the preferred remedy indicates RO treatment of the VOC-contaminated groundwater, followed by VOC removal, disinfection, and then discharge to the non-CERCLA Irvine Desalter Project for recycled water use. The flow diagram seems to imply that the CERCLA groundwater will be desalted twice—once as part of the CERCLA remedy and again as part of the Irvine Desalter Project. I believe that the TDS/nitrate removal for the Irvine Desalter is for non-VOC-contaminated groundwater, and that the CERCLA remedy groundwater will be blended with this groundwater before being distributed by IRWD for non-potable use. Perhaps the flow diagram could be revised to clarify this point.</p>	<p><b>Response:</b> The flow diagram has been revised to clarify that groundwater will only be desalted once. The revised diagram is included in the Record of Decision (ROD) as Figure 10-3. The RO treatment step has been left in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) portion of the flow diagram as explained in the following paragraph.</p> <p>Some groundwater in the nonpotable system will be routed through the RO treatment process prior to flowing to the air stripper. Other groundwater in the nonpotable system (i.e., groundwater with relatively low total dissolved solids [TDS] and nitrate concentrations) will be allowed to bypass the RO treatment process and flow directly to the air stripper.</p>

**RESPONSIVENESS SUMMARY  
MARINE CORPS AIR STATION EL TORO, CALIFORNIA  
PROPOSED PLAN, OPERABLE UNITS 1 AND 2A, SITES 18 AND 24**

**Letters Received During Public Comment Period**

**Comments by:** *Rick Wilson, P.E., Resident of Aliso Viejo per Letter Dated 26 November 2001*

Number	Comment	Response
1C (cont.)		Reduced TDS and nitrate concentrations will be achieved by routing a portion of the nonpotable groundwater through the RO treatment process. Nonpotable and potable groundwater will not be blended at any time.

**RESPONSIVENESS SUMMARY  
MARINE CORPS AIR STATION EL TORO, CALIFORNIA  
PROPOSED PLAN, OPERABLE UNITS 1 AND 2A, SITES 18 AND 24**

**Letters Received During Public Comment Period**

*Comments by: Bertrand S. Palmer, Ph.D., P.E., GeoSyntec Consultants per Memorandum to Polin Modaulou, El Toro Local Redevelopment Authority, Dated 07 December 2001*

Number	Comment	Response
2A	<p>In the Proposed Plan, the Department of the Navy/United States Marine Corps (DON/USMC) uses various terminology such as "water quality standards," "clean-up goals," "maximum contaminant levels," and "criteria and standards for VOCs" to describe the concentration of chemicals in groundwater or the concentration of chemicals in treated water delivered for domestic use. This varied terminology is confusing. In the Proposed Plan the DON/USMC should clearly define:</p> <ul style="list-style-type: none"> <li>• The acceptable concentration of chemicals in groundwater (i.e., the concentration of chemicals in groundwater at which no remedy is needed and/or at which operation of the remediation systems will be terminated); and</li> <li>• The acceptable concentration of chemicals in treated water used for (i) domestic use and (ii) recycled water use.</li> </ul> <p>These acceptable concentrations should be defined numerically for each chemical in groundwater. In addition, the risk to human health and safety during and upon completion of the remedial activities should be discussed in the Proposed Plan.</p> <p>Finally, this terminology should be used consistently throughout the Proposed Plan to eliminate any potential confusion.</p>	<p><b>Response:</b> Response to specific issues raised in the Local Redevelopment Authority's (LRA's) comments follow. As a general comment, it should be noted that many of the issues raised by the LRA relate to the level of detail provided in the Proposed Plan. Proposed Plans, following U.S. Environmental Protection Agency (U.S. EPA) guidance, are prepared in a fact sheet format for MCAS El Toro. These Plans are intended for the general public and, by design, do not include technical details that would unnecessarily lengthen the Plans or make it difficult for members of the public to understand the information being presented.</p> <p>Details of the investigations that have been performed at MCAS El Toro, alternatives that have been developed for Sites 18 and 24, and rationale for the preferred alternative are presented in the remedial investigation (RI) and feasibility study (FS) reports, which are made available for public review at the Information Repository at Heritage Park Library during the public comment period. Details of the investigations and alternatives are also presented in the ROD, which documents the selection of the remedy in greater detail than the Proposed Plan. The Responses that follow respond to the LRA's comments and explain how they are addressed in the ROD.</p> <p>Cleanup levels for chemicals of concern in groundwater are provided in Table 8-1 of the ROD. The concentrations represent the lower of the state and federal drinking water standards, or maximum contaminant levels (MCLs). Where MCLs do not exist for a particular chemical, risk-based concentrations have been developed and will be used as cleanup levels.</p>

**RESPONSIVENESS SUMMARY  
MARINE CORPS AIR STATION EL TORO, CALIFORNIA  
PROPOSED PLAN, OPERABLE UNITS 1 AND 2A, SITES 18 AND 24**

**Letters Received During Public Comment Period**

*Comments by: Bertrand S. Palmer, Ph.D., P.E., GeoSyntec Consultants per Memorandum to Polin Modaulou, El Toro Local Redevelopment Authority, Dated 07 December 2001*

Number	Comment	Response
2A (cont.)		<p>Extracted groundwater treated by the CERCLA component of the IDP nonpotable system will be used for irrigation. The groundwater will be treated to concentrations represented by MCLs. Groundwater extracted by the IDP nonpotable system will be treated to achieve a TDS concentration of 720 parts per million. (Removal of TDS is not part of the CERCLA remedy.)</p> <p>The risk to human health and safety during implementation of the remedy are discussed in Section 9.1.2.3 of the ROD using the "Short-Term Effectiveness" criteria established in the National Contingency Plan (NCP). Risk to construction workers and personnel monitoring the groundwater will be controlled by safety and health plans and by sampling procedures. Risks to the general public during construction and monitoring are expected to be negligible.</p> <p>The primary risk posed at Site 24 is from consumption of contaminated groundwater. However, groundwater at this site is not currently being used for domestic purposes. Under the preferred alternative, drilling or use of contaminated groundwater would be prohibited by institutional controls. Following remediation, residual risk would be governed by drinking water standards. The only risk to residents, workers, or visitors would then be from soil. Risk due to soil was evaluated during the RI and found to be within the range considered allowable by U.S. EPA.</p> <p>The use of varied terminology to describe the concentration of chemicals in groundwater/treated water has been reviewed for clarity throughout the ROD.</p>

**RESPONSIVENESS SUMMARY  
MARINE CORPS AIR STATION EL TORO, CALIFORNIA  
PROPOSED PLAN, OPERABLE UNITS 1 AND 2A, SITES 18 AND 24**

**Letters Received During Public Comment Period**

**Comments by:** *Bertrand S. Palmer, Ph.D., P.E., GeoSyntec Consultants per Memorandum to Polin Modaulou, El Toro Local Redevelopment Authority, Dated 07 December 2001*

Number	Comment	Response
2B	<p>The Preferred Remedy proposed by DON/USMC will require installation of additional extraction and monitoring wells and a conveyance pipeline, both on and off the base property. In addition, it includes operating, maintaining, and decommissioning the system. Has DON/USMC evaluated the impact of constructing, operating, maintaining, and decommissioning the remediation and monitoring equipment on the reuse [of] property for MCAS El Toro? Has the DON/USMC developed a list of institutional controls that will be imposed as part of the Preferred Remedy associated with operation, maintenance, and decommissioning of the remediation system? Both of these things should be done before DON/USMC selects a remedy for these IRP sites.</p>	<p><b>Response:</b> The DON has considered the impact of remediation and monitoring equipment on the reuse of property for MCAS El Toro and will evaluate this issue further during the remedial design phase. During that phase, the DON intends to work closely with the LRA to accommodate the proposed reuse of Site 24 as long as such accommodation is consistent with protection of public health and the environment and timely implementation of the remedy. For example, the DON will use underground piping when it makes sense to do so to optimize use of the surface area of Site 24. The DON will also consider modifying the locations of proposed extraction or monitoring wells during the remedial design phase to accommodate reuse as long as this does not compromise the effectiveness of the remedy. OCWD/IRWD plans to route off-Station piping underground to avoid interference with existing land uses.</p> <p>Institutional controls have been discussed in Sections 8.1.2.3 and 8.2.2.2 of the ROD. These controls are required at Site 24 to protect the extraction and monitoring wells and associated equipment; prevent drilling or use of groundwater; and allow access for the DON, water districts, and regulatory agencies to install, operate, maintain, and decommission the remediation system. Institutional controls at Site 18 are required to prevent inadvertent use of contaminated groundwater for domestic purposes.</p>

<p align="center"><b>RESPONSIVENESS SUMMARY</b>  <b>MARINE CORPS AIR STATION EL TORO, CALIFORNIA</b>  <b>PROPOSED PLAN, OPERABLE UNITS 1 AND 2A, SITES 18 AND 24</b></p>		
<p align="center"><b>Letters Received During Public Comment Period</b></p>		
<p><i>Comments by: Bertrand S. Palmer, Ph.D., P.E., GeoSyntec Consultants per Memorandum to Polin Modaulou, El Toro Local Redevelopment Authority, Dated 07 December 2001</i></p>		
<b>Number</b>	<b>Comment</b>	<b>Response</b>
<p><b>2B</b> <b>(cont.)</b></p>		<p>Institutional controls at Site 24 are expected to be implemented by means of lease conditions if the property is leased or by deed restrictions and environmental covenants imposed at the time of property transfer if the property is transferred by deed. Institutional controls at Site 18 are expected to be implemented by means of permit conditions. The DON is currently working with the OCWD/IRWD, Orange County Health Care Agency, California Department of Toxic Substances Control (DTSC), Regional Water Quality Control Board (RWQCB), California Department of Health Services, and U.S. EPA to develop appropriate means to implement institutional controls for the off-Station portion of the plume.</p>
<p><b>2C</b></p>	<p>The description of the Preferred Remedy (in the Proposed Plan) is unclear. The Proposed Plan should present a more detailed description of the remedy, including a description of the CERCLA and non-CERCLA elements of the remedy.</p> <p>For example, the flow diagram shown on Page 16 of the Proposed Plan seems to indicate that the extracted groundwater will be conveyed to the Desalter Project after it has been treated by reverse osmosis, air stripping, and clearwell disinfection (See blue background box with the following note: "CERCLA (VOC) and non-CERCLA (TDS/Nitrate) Treatment for recycled water use"). Is this correct? If this is correct, what is the purpose of the reverse osmosis and air stripper systems?</p> <p>Does the liquid phase treatment in the Preferred Remedy include a granular activated carbon (GAC) treatment unit as a polishing stage for groundwater treatment? For example, such a GAC unit is included in Remedial Alternative 11. If not, DON/USMC should include a polishing GAC unit as part of the Preferred Remedy to insure that the extracted groundwater is treated to standards acceptable for re-injection and/or reuse, regardless of the performance of the air stripper.</p>	<p><b>Response:</b> A more detailed description of the preferred remedy has been provided in Sections 8 and 10 of the ROD. As noted in the response to Comment 2A, the purpose of the Proposed Plan is to provide a discussion of the proposed remedy in terms that will be clear for members of the general public. Since these Plans are intended for the general public, by design they do not include technical details that would unnecessarily lengthen them or make it difficult for members of the general public to understand them.</p> <p>The flow diagram included on page 16 of the Proposed Plan is reproduced as Figure 10-3 in the ROD. The figure has been revised to correct the impression that groundwater will be treated twice.</p> <p>No, the liquid phase treatment in the Preferred Remedy does not include a GAC treatment unit as a polishing stage because such treatment is not necessary to meet groundwater treatment standards acceptable for re-injection or for reuse.</p> <p>These types of details will be addressed further during the remedial design phase of the project.</p>

**RESPONSIVENESS SUMMARY  
MARINE CORPS AIR STATION EL TORO, CALIFORNIA  
PROPOSED PLAN, OPERABLE UNITS 1 AND 2A, SITES 18 AND 24**

**Letters Received During Public Comment Period**

*Comments by: Bertrand S. Palmer, Ph.D., P.E., GeoSyntec Consultants per Memorandum to Polin Modaulou, El Toro Local Redevelopment Authority, Dated 07 December 2001*

Number	Comment	Response
2D	<p>The Preferred Remedy relies on the Desalter Project for treatment of groundwater. However, the DON/USMC indicates that while the Desalter Project is not in operation, or if the Desalter Project is terminated for any reason, DON/USMC will rely on natural attenuation as a back-up remedy (see Proposed Plan at Page 16). DON/USMC also states that monitored natural attenuation will be further evaluated as part of the Record of Decision (ROD). Thus, it appears that DON/USMC has not yet established that natural attenuation is an effective remedy for IRP Sites 18 and 24. Given this, DON/USMC needs to verify, rather than simply assume, that natural attenuation is an effective back-up remedy that will provide complete attenuation of the VOCs present in groundwater, including TCE and its degradation compounds. If natural attenuation is found to be ineffective at the site, some other back-up remedy will need to be included as part of the Preferred Remedy.</p>	<p><b>Response:</b> At this time, it is not necessary to rely on natural attenuation because the IDP project being planned by OCWD/IRWD represents an alternative that will effectively clean up the aquifer and restore use of a precious water resource to the public. However, if OCWD/IRWD discontinues the IDP in the future, the DON reserves the right to reconsider use of natural attenuation for remediation of groundwater at Site 18.</p> <p>The DON has performed a preliminary assessment of natural attenuation and believes that this evaluation demonstrated that natural attenuation is a viable alternative (see Alternative 7A discussion in the ROD). The Settlement Agreement contains a clause stating that, based upon currently available information, it is anticipated that the contingency remedial action for VOC contamination in the principal aquifer will consist of monitored natural attenuation in the event the CERCLA component of the IDP is terminated for any reason. This clause is reproduced on page 10-10 of the ROD. There is no such clause for groundwater at Site 24 because a separate shallow groundwater unit contract between OCWD/IRWD and the DON assures that OCWD/IRWD will be responsible for accepting and properly treating and disposing of groundwater from this site regardless of whether the IDP is being operated or not.</p> <p>The DON and regulators agree that further evaluation of natural attenuation is needed before it is selected as a remedial action in the event the IDP is terminated as indicated on page 16 of the Proposed Plan.</p>

**RESPONSIVENESS SUMMARY  
MARINE CORPS AIR STATION EL TORO, CALIFORNIA  
PROPOSED PLAN, OPERABLE UNITS 1 AND 2A, SITES 18 AND 24**

**Letters Received During Public Comment Period**

**Comments by:** *Bertrand S. Palmer, Ph.D., P.E., GeoSyntec Consultants per Memorandum to Polin Modaulou, El Toro Local Redevelopment Authority, Dated 07 December 2001*

Number	Comment	Response
2D (cont.)		Further studies are not necessary at this time, however, because the DON has a signed agreement for the IDP and it is anticipated that this project will be implemented.
2E	<p>The Proposed Plan is focused on groundwater remediation pertaining to the investigations and remedial actions for Operable Unit 1 Site 18 and Operable Unit 2A Site 24, pursuant to DON/USMC's Installation Restoration Program. The Proposed Plan does not consider groundwater remediation associated with other compliance programs mandated under the Resource Conservation and Recovery Act (e.g., closure, removal, and remediation associated with underground storage tanks, aboveground storage tanks, and fuel supply pipelines, and hazardous materials/waste management and solid waste management) and other laws. We recommend DON/USMC revise the Proposed Plan to address the following concerns:</p> <ul style="list-style-type: none"> <li>• How does DON/USMC's Preferred Remedy (Alternatives 8A and 10B' Combined) address existing groundwater impacts from other potential sources, e.g., leaking underground storage tanks (LUSTs) and fuel supply lines?</li> <li>• What are the potential additional risks to human health and the environment from these other potential sources and how will they be addressed by DON/USMC?</li> </ul>	<p><b>Response:</b> Groundwater impacts from potential non-CERCLA sources such as leaking underground storage tanks (LUSTs) and fuel supply lines are addressed under the Petroleum Corrective Action Program. These impacts are not addressed in the Proposed Plan or ROD because these documents, by definition, only address CERCLA contaminants and remedial actions conducted under the CERCLA program.</p> <p>Potential risks to human health and the environment from these other potential sources are being addressed under the Resource Conservation and Recovery Act (RCRA) program.</p>

<b>RESPONSIVENESS SUMMARY</b> <b>MARINE CORPS AIR STATION EL TORO, CALIFORNIA</b> <b>PROPOSED PLAN, OPERABLE UNITS 1 AND 2A, SITES 18 AND 24</b>		
<b>Letters Received During Public Comment Period</b>		
<b>Comments by: <i>Bertrand S. Palmer, Ph.D., P.E., GeoSyntec Consultants per Memorandum to Polin Modaulou, El Toro Local Redevelopment Authority, Dated 07 December 2001</i></b>		
<b>Number</b>	<b>Comment</b>	<b>Response</b>
<b>2F</b>	<p>On Page 1 of the Proposed Plan, DON/USMC states "this groundwater is currently not used as a drinking water source." DON/USMC needs to specify if this statement refers to the shallow groundwater or to the principal aquifer, and should indicate what the actual use of the groundwater is.</p>	<p><b>Response:</b> Current groundwater use is discussed in Section 6.3 of the ROD. As discussed in Section 6.3, neither groundwater in the shallow groundwater unit at Site 24 nor groundwater in the principal aquifer at Site 18 is used for drinking water purposes at this time. It is also unlikely that groundwater in the shallow groundwater unit would be used for drinking water purposes in the future due to high concentrations of TDS and nitrates and relatively low flow rates. Groundwater in the principal aquifer is also currently not used for drinking water purposes due to high concentrations of TDS and nitrates (the IDP was initially proposed to address this issue), but groundwater from areas outside the VOC plume will be treated and used for potable purposes in the future once the IDP is constructed and operable. Groundwater from areas inside the VOC plume will be treated and used for nonpotable (irrigation) purposes in the future once the IDP is constructed and operable.</p> <p>Groundwater in the vicinity of MCAS El Toro is currently used only for irrigation purposes and as a source of water for two artificial lakes (North Lake and South Lake). Active irrigation wells in the vicinity of MCAS El Toro are discussed in Section 6.3 of the ROD and are shown on Figure 6-1.</p>
<b>2G</b>	<p>On Page 1 of the Proposed Plan, DON/USMC states that the source of contamination of groundwater is TCE and other solvents that were believed to have been used for degreasing parts, paint stripping, and other maintenance activities performed within the IRP Site 24 boundary. GeoSyntec understands that DON/USMC now believes that the source of TCE also could be other areas, including the sewer system at MCAS El Toro. GeoSyntec understands that DON/USMC is currently investigating such sources. DON/USMC needs to provide additional information regarding the status of and results for this investigation of other potential TCE and other VOC sources.</p>	<p><b>Response:</b> The DON, DTSC, RWQCB, and U.S. EPA do not believe (as stated by GeoSyntec) that the source of TCE is from areas other than Site 24. The Station has been subjected to extensive investigation since 1985 when TCE was first discovered in groundwater west of MCAS El Toro, and the source of VOC contamination has been well defined by these investigations.</p>

**RESPONSIVENESS SUMMARY  
MARINE CORPS AIR STATION EL TORO, CALIFORNIA  
PROPOSED PLAN, OPERABLE UNITS 1 AND 2A, SITES 18 AND 24**

**Letters Received During Public Comment Period**

**Comments by:** *Bertrand S. Palmer, Ph.D., P.E., GeoSyntec Consultants per Memorandum to Polin Modaulou, El Toro Local Redevelopment Authority, Dated 07 December 2001*

Number	Comment	Response
2G (cont.)		A preliminary assessment of Building 307, a former dry cleaning facility, and its associated sewer lines was conducted in September and October 2001. The preliminary assessment included extensive sampling of soil, soil gas, and groundwater. As discussed in Section 5.2.3.5 of the ROD, the preliminary assessment reported minimal VOC contamination in all media investigated and concluded that there has not been a significant release to the environment at this location.
2H	<p>DON/USMC indicates that the North Lake, that currently is used for recreational purposes, is fed by groundwater pumped at a well located in or next to the VOC plume originating from IRP Site 24 (see Proposed Plan at Page 6). DON/USMC further states that a risk assessment shows that the groundwater pumped into North Lake does not pose an unacceptable risk to human health (see Proposed Plan at Page 6). In the Proposed Plan, DON/USMC should specify the value of the excess cancer risk and hazard index for the groundwater pumped in the North Lake.</p> <p>As a separate issue, it seems that wildlife, including birds and fish, may be exposed to water in North Lake. Thus, it would be prudent to perform an ecological risk assessment to evaluate risks to plants and animal life that are or will be exposed to groundwater pumped into North Lake.</p>	<p><b>Response:</b> The cancer and noncancer risks from groundwater used as a source of water for North Lake were evaluated during the Phase I RI and again in 2001, subsequent to the Phase II RI of Site 24. The quantitative results are presented in Section 7.1.5.4 of the ROD and confirm that cancer and noncancer risks due to groundwater feeding North Lake are within the range considered allowable by U.S. EPA.</p> <p>The primary VOC contaminant in the groundwater used to feed North Lake is TCE. An ecological risk assessment at North Lake is not considered necessary because of the known chemical and physical properties of this contaminant.</p> <p>TCE is volatile and is expected to quickly evaporate when released to surface water. The large surface area of the lake would enhance the evaporation process. In addition, the bioaccumulation factors for TCE, including the bioaccumulation factor for TCE in fish (39 liters per kilogram), are low. Therefore, TCE is not expected to significantly bioaccumulate in plants or animals even if they were to be exposed to this chemical.</p>

**RESPONSIVENESS SUMMARY  
MARINE CORPS AIR STATION EL TORO, CALIFORNIA  
PROPOSED PLAN, OPERABLE UNITS 1 AND 2A, SITES 18 AND 24**

**Letters Received During Public Comment Period**

*Comments by: Bertrand S. Palmer, Ph.D., P.E., GeoSyntec Consultants per Memorandum to Polin Modaulou, El Toro Local Redevelopment Authority, Dated 07 December 2001*

Number	Comment	Response
2I	<p>DON/USMC seems to indicate that the groundwater at IRP Sites 18 and 24 will be remediated until concentrations of chemicals in groundwater are below the most stringent of the Federal or State Maximum Contaminant Levels (MCLs). However, the State of California has a anti-degradation policy for groundwater that may require remediation of chemicals to background concentrations. For anthropogenic chemical compounds, background concentrations correspond to a "non-detect" concentration (typically 0.5 ppb). Thus, DON/USMC needs to remediate the groundwater until the concentrations are below non-detect concentrations to comply with the State of California anti-degradation policy.</p>	<p><b>Response:</b> The State of California anti-degradation policy for groundwater is presented in State Water Resources Control Board (SWRCB) Resolution (Res.) 68-16. SWRCB Res. 68-16, Statement of Policy With Respect to Maintaining High Quality of Waters in California, 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 the required 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 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 necessary to assure that a) pollution or a nuisance will not occur and b) the highest water quality consistent with maximum benefit to people of the state will be maintained.</p> <p>The DON has determined that SWRCB Res. 68-16 is not a chemical-specific applicable or relevant and appropriate requirement (ARAR) for determining response action goals. However, SWRCB Res. 68-16 is an action-specific ARAR for regulating discharged treated groundwater back into the aquifer. The DON has determined that further migration of already-contaminated groundwater is not a discharge governed by the language in Res. 68-16. More specifically, the language of SWRCB Res. 68-16 indicates that it is prospective in intent, applying to new discharges in order to maintain existing high-quality waters. It is not intended to apply to restoration of waters that are already degraded.</p>

**RESPONSIVENESS SUMMARY  
MARINE CORPS AIR STATION EL TORO, CALIFORNIA  
PROPOSED PLAN, OPERABLE UNITS 1 AND 2A, SITES 18 AND 24**

**Letters Received During Public Comment Period**

**Comments by:** *Bertrand S. Palmer, Ph.D., P.E., GeoSyntec Consultants per Memorandum to Polin Modaulou, El Toro Local Redevelopment Authority, Dated 07 December 2001*

Number	Comment	Response
<p align="center"><b>2I (cont.)</b></p>		<p>As stated in the Proposed Plan and ROD, the DON has identified <i>California Code of Regulations</i> (Cal. Code Regs.) tit. 22, §66264.94 as an ARAR for groundwater cleanup levels. This regulation provides that compounds must not exceed their background levels in groundwater or some higher concentration limit set as part of the corrective action program. A limit greater than background may be approved if the owner (of the regulated unit) can demonstrate that it is not technologically or economically feasible to achieve the background value and that the constituent at levels below the concentration limit will not pose a hazard to human health or the environment. However, a concentration limit greater than background must never exceed MCLs established under the federal Safe Drinking Water Act.</p> <p>A discussion of the technical and economic infeasibility of remediating groundwater to background is presented in Appendix H of the Operable Unit-1 Interim Action Feasibility Study report. This document was reviewed and accepted by U.S. EPA, DTSC, and RWQCB. Therefore, as provided for in Cal. Code Regs. tit. 22, § 66264.94, concentration limits based on MCLs and risk-based criteria are considered remedial goals for Sites 18 and 24.</p> <p>A discussion of this issue is found in Section 11.2.1.3 of the ROD along with a discussion of the ARAR status of SWRCB Res. 68-16 and Cal. Code Regs. tit. 22, §66264.94 .</p>

**RESPONSIVENESS SUMMARY  
MARINE CORPS AIR STATION EL TORO, CALIFORNIA  
PROPOSED PLAN, OPERABLE UNITS 1 AND 2A, SITES 18 AND 24**

**Letters Received During Public Comment Period**

**Comments by:** *Bertrand S. Palmer, Ph.D., P.E., GeoSyntec Consultants per Memorandum to Polin Modaulou, El Toro Local Redevelopment Authority, Dated 07 December 2001*

Number	Comment	Response
2J	<p>A significant number of important parameters, such as location and number of extraction wells, pumping rate, performance monitoring evaluation criteria, and contingency remediation plans, do not appear to have been finalized at this stage of the remediation planning process (see Proposed Plan at Page 16). These parameters typically have a significant impact on a remedy's feasibility, cost, and completion time. Does DON/USMC believe that its final decisions concerning these parameters could affect the feasibility study and/or the remedy selected for Installation Restoration Program (IRP) Sites 18 and 24?</p>	<p><b>Response:</b> No, DON/USMC does not believe that the final decisions concerning parameters such as location and number of extraction wells, pumping rate, performance monitoring evaluation criteria, and contingency remediation will affect the FS or the remedy selected for Sites 18 and 24. The DON believes that parameters such as extraction well location and pumping rate have been fairly well established through extensive modeling conducted during the feasibility study stage and are likely to change only slightly (being optimized) during remedial design. Performance monitoring will assist in evaluating the selected remedy or judging when remediation is complete, but should not impact the selection of the remedy itself. The contingency remediation plan (e.g., consideration of natural attenuation as a backup remedy) would only come into effect in the event that the IDP is terminated. IDP termination is considered very unlikely given the extensive planning that has already gone into the preliminary design of the plant.</p> <p>With respect to cost, the groundwater remedy is very refined considering that it is only at the conceptual phase (which is what a ROD typically presents). Details of the Settlement Agreement have been finalized and many costs associated with remediation of the principal aquifer and shallow groundwater unit are already fixed by contract. The remaining costs (e.g., costs of extraction wells in the shallow groundwater unit, monitoring costs) are expected to be within the +50/-30 percent range that is required for an estimate made at the feasibility study stage.</p>

**RESPONSIVENESS SUMMARY  
MARINE CORPS AIR STATION EL TORO, CALIFORNIA  
PROPOSED PLAN, OPERABLE UNITS 1 AND 2A, SITES 18 AND 24**

**Letters Received During Public Comment Period**

**Comments by:** *Bertrand S. Palmer, Ph.D., P.E., GeoSyntec Consultants per Memorandum to Polin Modaulou, El Toro Local Redevelopment Authority, Dated 07 December 2001*

Number	Comment	Response
2K	<p>Based on Table 3 on Page 14 of the Proposed plan, DON/USMC states that the remediation time for Alternative 8A (the Preferred Remedy) is estimated to be 95 years. This remediation duration is extremely long and can be shortened as evidenced by the remediation duration of other alternatives. The design parameters for this remedy need to be revised to shorten remediation time of Alternative 8A.</p> <p>Also, the remediation time for Alternative 7A, which is solely natural attenuation (i.e., no active contaminant removal), is 60 years. DON/USMC needs to explain why Alternative 8A, which includes active contaminant removal, has a longer remediation time (95 years).</p>	<p><b>Response:</b> Design parameters such as well placement, pumping rate, etc. are factors, however, which will be reevaluated and optimized during the remedial design phase of the project. With respect to Alternative 8A, the conceptual design uses two extraction wells (ET-1 and ET-2) within the hot spot in the principal aquifer to extract contaminated groundwater. The extraction of groundwater will reduce and flatten the hydraulic gradient in the principal aquifer. Reduction of the hydraulic gradient between the center and toe of the plume slows the flow of contaminated groundwater and extends the cleanup time for the principal aquifer, thus explaining the estimated 95 years under Alternative 8A.</p> <p>An explanation of this issue is found in Section 9.1.2.3 of the ROD.</p>
2L	<p>Alternative 8A, as described by DON/USMC (see Proposed Plan at Pages 12 and 16), seems to include cycling of the extraction system (i.e., the extraction system will be turned off when recycled water is not needed). This operational approach will significantly lengthen the remediation time and reduce the extraction system's contaminant removal and containment ability. As part of the Preferred Remedy, DON/USMC needs to include an alternative disposal or reuse method for treated water to increase and maximize the speed and efficiency of the remediation system.</p>	<p><b>Response:</b> Alternative 8A includes cycling of the extraction system because OCWD/IRWD plans to extract groundwater from the principal aquifer seasonally, as needed for irrigation purposes. Groundwater from the shallow groundwater unit at Site 24, which is much more contaminated than groundwater from the principal aquifer at Site 18, will be extracted on a year-round basis, treated, and used for recycled water purposes or injected back into the principal aquifer when the need for recycled water is low.</p> <p>During the design phase, OCWD/IRWD will look at a number of ways that remediation time can be reduced, including placement of extraction wells, pumping rates, and cycling of the extraction system in the principal aquifer. If it makes sense to do so, OCWD/IRWD will also look at an alternative disposal or reuse method at that time.</p>

**RESPONSIVENESS SUMMARY  
MARINE CORPS AIR STATION EL TORO, CALIFORNIA  
PROPOSED PLAN, OPERABLE UNITS 1 AND 2A, SITES 18 AND 24**

**Letters Received During Public Comment Period**

**Comments by:** *Bertrand S. Palmer, Ph.D., P.E., GeoSyntec Consultants per Memorandum to Polin Modaulou, El Toro Local Redevelopment Authority, Dated 07 December 2001*

Number	Comment	Response
2M	It appears that DON/USMC will not control all of the wells that will be in operation around MCAS El Toro. DON/USMC needs to consider the influence these wells may have on the aquifer behavior and the potential impacts on the final design of the extraction system while remediation of IRP Sites 18 and 24 is on-going.	<b>Response:</b> Computer modeling was performed during the RI to evaluate the effectiveness of the original alternatives for Sites 18 and 24. Additional computer modeling was performed after the completion of the RI to evaluate the effectiveness of Alternative 8A, the preferred alternative for Site 18. The results of the modeling are presented in the RI reports for Sites 18 and 24 and in a technical memorandum titled Evaluation of OU-1 Alternative 8A with Respect to NCP Criteria. Modeling results are also summarized in Sections 8 and 9 of the ROD. The modeling performed for these alternatives has factored in and considered the impact of all of the major extraction wells in the vicinity of MCAS El Toro. Additional modeling performed during the remedial design phase will also consider the impact of these wells on the extraction system.

# **ATTACHMENT A**

---

## **ADMINISTRATIVE RECORD FOR SITES 18 AND 24**

# **TECHNICAL DOCUMENTS**

EL TORO MCAS

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

TECHNICAL DOCUMENTS

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000187		11-01-1993	MCAS EL TORO										INITIAL ASSESSMENT STUDY	ADMIN RECORD	GUID	001	SOUTHWEST
		09-11-1985	J. LEAP											INFO	IAS	002	DIVISION
LTR		NONE	NAV PORT											REPOSITORY	NFA	003	37041127*
NONE		01.1	HUENEME												PA	004	IMAGED
0000			COMMANDING OFFICER													005	
																006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																018	
																019	
																020	
																021	
																022	
																OU 1	
																OU 2	
																OU 2A	
																OU 2B	
																OU 2C	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location Box No.		
Approx. # Pages	EPA Cat. #									
M60050 / 001153	12-22-1995 11-14-1985	OCWD FOUNTAIN VA	TRICHLOROETHYLENE TETRACHLOROETHYLENE IN THE GROUNDWATER BASIN IN THE IRVINE AREA	ADMIN RECORD	GW TCE	OU 1	BECHTEL NATIONAL 80462349 IMAGED			
LTR NONE 0002	NONE 01.6	N.L. RICHARDSON CRWQCB RIVERSIDE J.R. BENNETT								
M60050 / 001151	12-22-1995 04-18-1986	MCAS EL TORO W.L. HOEY	RESPONSE TO APRIL 4, 1986 LETTER REGARDING TCE CONTAMINATION OF GROUND WATER	ADMIN RECORD	GW TCE	OU 1	BECHTEL NATIONAL 80462349 IMAGED			
LTR NONE 0001	NONE 01.6	CRWQCB RIVERSIDE J.R. BENNETT								
M60050 / 000684	04-05-1995 05-01-1986	NEESA PORT HUENEME	INITIAL ASSESSMENT STUDY	ADMIN RECORD	EE/CA GUID IAS NFA	OU 1 OU 2 OU 3	BECHTEL NATIONAL 37041238 IMAGED			
NEESA 13-074 MISC NONE 0200	NONE 01.1	E.B. LUECKER NAVFAC - SOUTHWEST DIVISION								
M60050 / 000784	07-07-1995 08-05-1986	DHS LOS ANGELES	COMMENTS ON THE INSTALLATION ASSESSMENT STUDY	ADMIN RECORD	COMMENTS GUID NFA	018 OU 1	BECHTEL NATIONAL 37041256 IMAGED			
LTR NONE 0002	NONE 01.2	S. SIMPSON MCAS EL TORO W.L. HOEY								
M60050 / 000789	07-07-1995 09-01-1986	JAMES M. MONTGOMERY, INC.	PERIMETER INVESTIGATION PLAN OF ACTION VERIFICATION STEP CONFIRMATION STUDY MCAS TUSTIN AND EL TORO	ADMIN RECORD	GUID	OU 1	BECHTEL NATIONAL 37041256 IMAGED			
PLAN N62474-85-C-5592 0175	NONE 01.2	NAVFAC - SOUTHWEST DIVISION								
M60050 / 001152	12-22-1995 10-29-1986	EPA SAN FRANCISC	COMMENTS ON THE REVIEW OF INSTALLATION ASSESSMENT STUDY OF MCAS EL TO	ADMIN RECORD	COMMENTS IAS NFA TECH/GUID DOC.	OU 1	BECHTEL NATIONAL 80462349 IMAGED			
LTR NONE 0005	NONE 01.6	L. MARTIN MCAS EL TORO								

UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001171 LTR NONE 0005	12-26-1995 04-10-1987 NONE 01.1	SOUTHWEST DIVISI W.J. DOUGHERTY VARIOUS AGENCIES	NAVY'S PLAN OF ACTION SENT FOR REVIEW AND COMMENTS (SEE DOC. NO. M60050.000788 & 000789)	ADMIN RECORD	TCE	OU 1	SOUTHWEST DIVISION SW02051702 IMAGED
M60050 / 001148 LTR NONE 0002	12-22-1995 05-01-1987 NONE 01.6	MCAS EL TORO	EL TORO MARINE COPRS AIR STATION EL TORO, CA NATIONAL PRIORITIES LIST	ADMIN RECORD	NPL	OU 1	BECHTEL NATIONAL 80462349 IMAGED
M60050 / 000805 LTR NONE 0004	07-07-1995 05-11-1987 00018 01.2	OCWD J.F. REILLY SOUTHWEST DIVISION E. CERINI	PRELIMINARY DRAFT VERIFICATION STEP CONFIRMATION STUDYCOMMENTS	ADMIN RECORD	COMMENTS	018 OU 1	BECHTEL NATIONAL 37041256 IMAGED
M60050 / 001146 LTR NONE 0005	12-22-1995 05-12-1987 NONE 01.6	CRWQCB SANTA ANA K.V. BERCHTOLD WESTERN DIVISION E.R. CERINI	COMMENTS ON THE PERIMETER INVESTIGATION PLAN OF ACTION PRELIMINARY DRAFT REPORT OF APRIL 1987	ADMIN RECORD	COMMENTS	OU 1	BECHTEL NATIONAL 80462349 IMAGED
M60050 / 000795 LTR NONE 0008	07-07-1995 05-13-1987 NONE 01.2	DHS LOS ANGELES J.E. MCNALLY NAVFAC - SOUTHWEST DIVISION E. CERINI	COMMENTS ON PERIMETER INVESTIGATION PLAN OF ACTION (SEE AR #789 - PLAN OF ACTION)	ADMIN RECORD	COMMENTS	018 OU 1	BECHTEL NATIONAL 37041256 IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001051		12-11-1995	SCAQMD EL MONTE		05-13-1987	A. WILSON			MCAS EL TORO			B. VAN CLEEF	DEFINITION OF "FACILITY" FOR RULE 1107 FOR DISTRICT PURPOSES	ADMIN RECORD	TECH/GUID DOC.	001	BECHTEL NATIONAL
LTR		NONE														002	80462364
NONE		01.6														003	IMAGED
0017																004	
																005	
																006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																018	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 1	
																OU 2	
																OU 2A	
																OU 2B	
																OU 2C	
																OU 3	
M60050 / 000804		07-07-1995	CRWQCB RIVERSIDE		07-08-1987	J.R. BENNETT			MCAS EL TORO			S.R. HOLM	CLEANUP AND ABATEMENT ORDER NO. 87- 97 TCE INVESTIGATION	ADMIN RECORD	C/A ORDER	018	BECHTEL NATIONAL
LTR		NONE														OU 1	37041256
NONE		01.2															IMAGED
0006																	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001147		12-22-1995 07-31-1987	MCAS EL TORO S.R. HOLM	LTR NONE 0001		CMC WASHINGTON DC CODE LFL					01.6		CLEANUP AND ABATEMENT ORDER NO. 87-97 TCE INVESTIGATION	ADMIN RECORD	CIA ORDER TCE	OU 1	BECHTEL NATIONAL 80462349 IMAGED
M60050 / 001149		12-22-1995 08-18-1987	WESTERN DIVISION S. SUNDERLAND	LTR NONE 0003		REGULATORY AGENC					01.6		COMMENTS FROM THE 20 MAY 1987 MEETING INCORPORATED INTO THE PERIMETER INVESTIGATION REPORT PLAN OF ACTION (SEE M60050.000789 TO SEE THE POA)	ADMIN RECORD	COMMENTS	OU 1	BECHTEL NATIONAL 80462349 IMAGED
M60050 / 001133		12-22-1995 01-11-1988	SCAQMD EL MONTE, M. NAZEMI	LTR NONE 0002		MCAS EL TORO M.W. REHOR					01.6		RESPONSE TO REQUEST FOR A SIX MONTH EXTENSION TO THE REPORT DEADLINE REQUIRED BY SECTION 41805.5 OF THE CAL H&SP CODE FOR THE SWAT REPORT	ADMIN RECORD CONFIDENTIAL DOC	SWAT	OU 1	BECHTEL NATIONAL 80462349 IMAGED
M60050 / 001137		12-22-1995 04-21-1988	NAVFAC - WESTERN DIVISION S.S. SUNDERLAND	LTR NONE 0002		EPA SAN FRANCISCO N. MORGAN					01.6		TRANSMITTAL OF PRELIMINARY ASSESSMENT AND HAZARDOUS RANKING SCORES FOR FEDERAL FACILITIES	ADMIN RECORD	FFA GUID PA	OU 1	BECHTEL NATIONAL 80462349 IMAGED
M60050 / 001141		12-22-1995 05-25-1988	OCWD FOUNTAIN VALLEY W.R. MILLS	LTR NONE 0003		MCAS EL TORO D.V. SHUTER					01.6		MEMORANDUM OF UNDERSTANDING REGARDING APPORTIONMENT OF COSTS OF TCE GROUNDWATER CONTAMINATION INVESTIGATION	ADMIN RECORD	GW MOU TCE	OU 1	BECHTEL NATIONAL 80462349 IMAGED
M60050 / 001142		12-22-1995 07-12-1988	MCAS EL TORO S.R. HOLM	LTR NONE 0001		CRWQCB RIVERSIDE J. BENNETT					01.6		COMMENTS FROM CRWQCB WERE NOT RECEIVED ON THE CONFIRMATION STUDY WORK PLAN AS OF THIS DATE	ADMIN RECORD	COMMENTS	OU 1	BECHTEL NATIONAL 80462349 IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001131	12-22-1995	CRWQCB	VENTURA	LTR	07-16-1988					COMMENTS ON THE VERIFICATION STEP PLAN OF ACTION CONFIRMATION STUDY FOR MCAS EL TORO AND TUSTIN	ADMIN RECORD	COMMENTS	OU 1	BECHTEL NATIONAL 80462349 IMAGED
NONE	NONE	NAVFAC -	SOUTHWEST											
0005	01.6	DIVISION	E. CERINI											
M60050 / 000697	04-05-1995	J.M.	MONTGOMERY	PLAN	08-01-1988					SITE INSPECTION PLAN OF ACTION DATED AUGUST 1988 - INCLUDES ADDENDUM TO THE SITE INSPECTION PLAN OF ACTION DATED DECEMBER 1989	ADMIN RECORD	SI	OU 1	BECHTEL NATIONAL 37041247 IMAGED
N62474-85-C-5592	NONE	NAVFAC -	SOUTHWEST											
0200	01.2	DIVISION												
M60050 / 000788	07-07-1995	JAMES M.	MONTGOMERY,	PLAN	08-01-1988					SITE INSPECTION PLAN OF ACTION IRP MCAS TUSTIN AND EL TORO	ADMIN RECORD	EE/CA	001	BECHTEL NATIONAL 37041256 IMAGED
N62474-85-C-5592	NONE	INC.	J. GOODELL									GUID	002	
0250	01.2	MCAS EL TORO										NFA	003	
												SI	004	
													005	
													006	
													007	
													008	
													009	
													010	
													011	
													013	
													014	
													016	
													017	
													019	
													OU 2	
													OU 2A	
													OU 2B	
													OU 2C	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001143	12-22-1995 08-23-1988	MCAS EL TORO D.V. SHUTER	COMMENTS ON THE HAZARD RANKING SYSTEM (W/O ENCLOSURE)	ADMIN RECORD	COMMENTS	OU 1	BECHTEL NATIONAL 80462349 IMAGED							
LTR NONE 0001	NONE 01.6	EPA WASHINGTON D S. LINGLE												
M60050 / 001144	12-22-1995 09-19-1988	EPA WASHINGTON D S. LINGLE	EPA RESPONSE TO GENERAL COMMENTS REGARDING THE NPL IN THE PREAMBLE TO THE FINAL RULE	ADMIN RECORD	COMMENTS	OU 1	BECHTEL NATIONAL 80462349 IMAGED							
LTR NONE 0001	NONE 01.6	MCAS EL TORO D.V. SHUTER												
M60050 / 001179	12-26-1995 02-01-1989	OCWD FOUNTAIN VA	GROUNDWATER MANAGEMENT PLAN OF FEBRUARY 1989	ADMIN RECORD	GW	OU 1	BECHTEL NATIONAL 80462350 IMAGED							
PLAN NONE 0032	NONE 01.1	MCAS EL TORO												
M60050 / 000001	10-29-1993 04-01-1989	JAMES M. MONTGOMERY, INC.	PERIMETER INVESTIGATION INTERIM REPORT	ADMIN RECORD	TCE VOC	OU 1	BECHTEL NATIONAL 37041126 IMAGED							
NONE RPT N68711-85-C-5592 0200	NONE 01.4	NAVFAC - SOUTHWEST DIVISION		INFO REPOSITORY										
M60050 / 001126	12-22-1995 04-06-1989	OCWD FOUNTAIN VA	COST TO OCWD OF APPROXIMATEL \$750,000 IS SUBMITTED FOR REVIEW OT THE INVESTIGATION OF TCE CONTAMINATION IN THE VICINITY OF EL TORO	ADMIN RECORD	TCE	OU 1	BECHTEL NATIONAL 80462349 IMAGED							
LTR NONE 0002	NONE 01.6	L.P. KRAEMER CRWQCB RIVERSIDE A. SMITH		CONFIDENTIAL DOC										
M60050 / 001127	12-22-1995 04-06-1989	OCWD FOUNTAIN VA	OCWD URGING THE USMC TO PURSUE IMMEDIATE FOLLOW-UP ACTION BASED ON THE FINDINGS AND CONCLUSIONS OF THE REPORT AND REIMBURSE OCWD FOR COST OF INVESTIGATION	ADMIN RECORD	TCE	OU 1	BECHTEL NATIONAL 80462349 IMAGED							
LTR NONE 0006	NONE 01.6	W.R. MILLS MCAS EL TORO D.V. SHUTER												

UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001075 EL TORO SER 1AA/3000C LTR NONE 0002	12-15-1995 04-07-1989 NONE 01.6	MCAS EL TORO D.V. SHUTER OCWD FOUNTAIN VALLEY W.P. MILLS	BREACH OF MEMORANDUM OF UNDERSTANDING WITHOUT REGARD TO PROFESSIONAL ANALYSIS AND FINAL RECOMMENDATIONS OF AN EXTENSIVE INVESTIGATION OF TCE CONTAMINATION	ADMIN RECORD	GW MOU TCE	018 OU 1	BECHTEL NATIONAL 80462364 IMAGED
M60050 / 000781 LTR NONE 0002	07-07-1995 05-30-1989 NONE 01.2	MCAS EL TORO OCWD FOUNTAIN VA J.F. REILLY	CORRESPONDENCE RE: REVIEW & COMMENTS ON THE NOTICE OF PREP. NEGATIVE DECLARATION & INITIAL STUDY	ADMIN RECORD	COMMENTS	018 OU 1	BECHTEL NATIONAL 37041256 IMAGED
M60050 / 001128 LTR N62474-85-C-5592 0002	12-22-1995 06-05-1989 NONE 01.6	JAMES M. MONTGOMERY, INC. R. WILSON IRVINE WATER DISTRICT - IRVINE C. BALLARD	GROUNDWATER TREATMENT PROJECT DEMONSTRATION	ADMIN RECORD	GW	OU 1	BECHTEL NATIONAL 80462349 IMAGED
M60050 / 001129 LTR NONE 0001	12-22-1995 06-09-1989 NONE 01.6	MCAS EL TORO J.R. APPELEGATE DHS SANTA ANA F.T. HAMAMURA	REQUEST FOR DEPARTMENT OF HEALTH SERVICE APPROVAL FOR THE WATER CONNECTION INVOLVED WITH INTERIM TCE REMOVAL PROJECT	ADMIN RECORD	REMOVAL TCE WATER	OU 1	BECHTEL NATIONAL 80462349 IMAGED
M60050 / 001130 LTR NONE 0002	12-22-1995 06-23-1989 NONE 01.6	CRWQCB SANTA ANA K.V. BERCHTOLD MCAS EL TORO M. REHOR	RECOMMENDATIONS FOR ADDITIONAL SITES AT THE EL TORO MCAS WHICH WE BELIEVE SHOULD BE INCLUDED IN THE SITE INSPECTION PLAN OF ACTION	ADMIN RECORD	SI	OU 1	SOUTHWEST DIVISION SW02051702 IMAGED
M60050 / 001132 LTR NONE 0001	12-22-1995 10-19-1989 NONE 01.6	OCWD FOUNTAIN VA Y. SHEN MCAS EL TORO M.W. REHOR	REQUEST FOR INFORMATION REGARDING THE COST PRICE LIST OF WATER QUALITY SAMPLE ANALYSES OF GENERAL MINERAL, METALS AND VOLATILE ORGANIC COMPOUNDS OF WATER SAMPLES	ADMIN RECORD	COST VOC WATER	OU 1	BECHTEL NATIONAL 80462349 IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000008	10-29-1993	JAMES M.	DRAFT WORK PLAN INSTALLATION	ADMIN RECORD	DCE	OU 2	BECHTEL							
	11-01-1989	MONTGOMERY, INC.	RESTORATION PROGRAM - OFF-STATION		GW	OU 2A	NATIONAL							
RPT	NONE		REMEDIAL INVESTIGATION		MW	OU 2B	37041126							
N68711-85-C-5592	03.3	NAVFAC - SOUTHWEST DIVISION			PCE	OU 2C	IMAGED							
0250					RI									
					SEDIMENTS									
					SOIL									
					SOIL BORING									
					TCE									
					TECH MEMO									
					VOC									
					WATER									
					WELLS									
					WORK PLAN									
M60050 / 000009	10-29-1993	JACOBS ENGINEERING	IMPLEMENTATION PLAN - WORK PLAN FOR	ADMIN RECORD	FS	001	BECHTEL							
	01-01-1990		A REMEDIAL INVESTIGATION /FEASIBILITY		GUID	002	NATIONAL							
RPT	00018		STUDY		NFA	003	37041126							
N68711-89-D-9296	03.3	NAVFAC - SOUTHWEST DIVISION			RI	004	IMAGED							
0200						005								
						006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						018								
						019								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location
Approx. # Pages	Contr./Guid. No.	CTO No.	Recipient Affil.	EPA Cat. #	Recipient	Subject				Box No.
M60050 / 000767		07-07-1995	ORANGE COUNTY WATER DISTRICT		R.L. HERNDON	COMMENTS ON OFF-STATION DRAFT REMEDIAL INVESTIGATION WORK PLAN (NOVEMBER 1989)	ADMIN RECORD	COMMENTS	OU 1	BECHTEL NATIONAL
LTR		01-11-1990						NFA	OU 2	37041256
NONE		NONE						RI	OU 3	IMAGED
0008		01.2	MCAS EL TORO		M.W. REHOR			WORK PLAN		
M60050 / 000011		10-29-1993	JACOBS ENGINEERING			REVISED IMPLEMENTATION PLAN - WORK PLAN FOR A REMEDIAL INVESTIGATION/FEASIBILITY STUDY	ADMIN RECORD	FS	001	BECHTEL NATIONAL
RPT		02-01-1990						GUID	002	37041126
N68711-89-D-9296		00018	NAVFAC - SOUTHWEST DIVISION					RI	003	IMAGED
0200		03.3							004	
									005	
									006	
									007	
									008	
									009	
									010	
									011	
									012	
									013	
									014	
									015	
									016	
									017	
									018	
									019	
M60050 / 000013		10-29-1993	JAMES M. MONTGOMERY, INC.			FINAL WORK PLAN OFF-SITE REMEDIAL INVESTIGATION	ADMIN RECORD	DCE	OU 1	BECHTEL NATIONAL
RPT		03-01-1990						GUID	OU 2	37041126
N68711-85-C-5592		NONE	NAVFAC - SOUTHWEST DIVISION					NFA	OU 3	IMAGED
0200		03.3						PCE		
								RI		
								TCE		

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000791	07-07-1995	JAMES M. MONTGOMERY, INC.	JAMES M. MONTGOMERY, INC. RESPONSE TO COMMENTS FROM ORANGE COUNTY WATER DISTRICT	ADMIN RECORD	03-31-1990						COMMENTS	NFA	OU 1 OU 2 OU 3 OU 4	BECHTEL NATIONAL 37041256 IMAGED
LTR N62474-85-C-5592 0001	NONE 01.2	NAVFAC - SOUTHWEST DIVISION												
M60050 / 000016	10-29-1993	JACOBS ENGINEERING	DRAFT SUMMARY REPORT - COMPREHENSIVE WORK PLAN FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY	ADMIN RECORD	04-09-1990						FS GUID NFA RI		001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022	BECHTEL NATIONAL 37041126 IMAGED
RPT N68711-89-D-9296 0200	00018 03.3	NAVFAC - SOUTHWEST DIVISION												
M60050 / 001120	12-22-1995	ES ENGINEERING	IRVINE DESALTER FACILITY PLAN PROJECT REPORT	ADMIN RECORD	05-01-1990						DESALTER		OU 1	BECHTEL NATIONAL 80462349 IMAGED
RPT NONE 0450	NONE 01.1	OCWD FOUNTAIN VA												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001010	10-23-1995	JACOBS	DRAFT SITE MANAGEMENT PLAN R/FS	ADMIN RECORD	SMP	OU 1	BECHTEL							
	06-21-1990	ENGINEERING					NATIONAL							
PLAN	00018						80462348							
N6871189D939600	01.1	SOUTHWEST					IMAGED							
0050		DIVISION												
M60050 / 000022	10-29-1993	JACOBS	DRAFT SITE HEALTH AND SAFETY PLAN -	ADMIN RECORD	FS	001	BECHTEL							
	09-10-1990	ENGINEERING	CTO #0018 COMPREHENSIVE WORK PLAN		GUID	002	NATIONAL							
RPT	00018	GROUP	FOR REMEDIAL		H&SP	003	37041126							
N68711-89-D-9296	03.5	NAVFAC -	INVESTIGATION/FEASIBILITY STUDY		RI	004	IMAGED							
0200		SOUTHWEST			WORK PLAN	005								
		DIVISION				006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						018								
						019								
						020								
						021								
						022								

UIC No. / Rec. No.	Doc. Control No.	Pr. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000023	10-29-1993	JACOBS	DRAFT SITE SAMPLING AND ANALYSIS	ADMIN RECORD	AAL	001	BECHTEL							
	09-10-1990	ENGINEERING	PLAN - CTO #0018 COMPREHENSIVE		FS	002	NATIONAL							
RPT	00018	GROUP	WORK PLAN FOR REMEDIAL		GUID	003	37041126							
N68711-89-D-9296	03.1	NAVFAC -	INVESTIGATION/ FEASIBILITY STUDY		NFA	004	IMAGED							
0000		SOUTHWEST			RI	005								
		DIVISION			SAP	006								
					TCE	007								
					VOC	008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						018								
						019								
						020								
						021								

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000024	10-29-1993	JACOBS	DRAFT REMEDIAL	ADMIN RECORD	FS	001	BECHTEL							
	09-10-1990	ENGINEERING	INVESTIGATION/FEASIBILITY STUDY		GW	002	NATIONAL							
PLAN	00018		WORK PLAN		NFA	003	37041126							
N68711-89-D-9296	03.3	NAVFAC -			PCB	004	IMAGED							
0000		SOUTHWEST			RI	005								
		DIVISION			SOIL	006								
					VOC	007								
					WORK PLAN	008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						018								
						019								
						020								
						021								
						022								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002203	05-31-2001	JACOBS	AGENDA OF THE TECHNICAL REVIEW	ADMIN RECORD	ARAR	001	CHOICE							
CLE-C01-01F018-13-0002	09-26-1990	ENGINEERING GROUP	COMMITTEE PRESENTATION FOR THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY		DMP	002	MICROGRAPHICS							
MISC	00018				DQO	003	SW01080901							
N68711-89-D-9296		NAVFAC - SOUTHWEST DIVISION			FS	004								
0017					GW	005								
					METALS	006								
					MW	007								
					PESTICIDES	008								
					RAB	009								
					RI	010								
					RISK	011								
					SEDIMENTS	012								
					SOIL	013								
					SOIL BORING	014								
					SVOC	015								
					TCE	016								
					TPH	017								
					TRC	018								
					VOC	019								
					WATER	020								
					WELLS	021								
						022								
						OU 1								
						OU 2								
						OU 3								
M60050 / 001012	12-08-1995	JACOBS	MEETING MINUTES ON THE DRAFT RI/FS	ADMIN RECORD	FS	OU 1	BECHTEL							
	10-12-1990	ENGINEERING	WORK PLAN PRESENTATION GIVEN TO		MTG MINS		NATIONAL							
MM	00018	E. ROGAN	THE REGULATORY AGENCIES (EPA, DHS,		RI		80462348							
N6871189D929600	01.6	SOUTHWEST DIVISION	& WATER BOARD)		TECH/GUID DOC.		IMAGED							
0003														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guld. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000190	03-03-1994	NAVFAC -	INSTALLATION RESTORATION PROGRAM	ADMIN RECORD	FS	001	SOUTHWEST							
	11-01-1990	SOUTHWEST	STATUS REPORT AND SITE HISTORY		GUID	002	DIVISION							
RPT	NONE	DIVISION			IRP	003	37041127*							
NONE	07.1	ENVIRONMENTAL			NFA	004	IMAGED							
0000		NAVFAC -			RI	005								
		SOUTHWEST			SI	006								
		DIVISION			TCE	007								
		FILE				008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						018								
						019								
						020								
						021								
						022								
						023								
						OU 1								
						OU 2								
						OU 3								
						OU 4								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002489	09-04-2001	JACOBS	SUMMARY OF MEETING WITH	ADMIN RECORD	BACKGROUND	003	BECHTEL							
CLE-C01-01F018-I3-0017	11-27-1990	ENGINEERING GROUP	REGULATORY AGENCIES TO DISCUSS SAMPLING STRATEGIES	BASE	DISPOSAL	004	NATIONAL							
MM	00018	B. HAGH			FS	008	SW02052003							
N68711-89-D-9296		NAVFAC -			GW	009								
0003		SOUTHWEST			LF	010								
		DIVISION			MTG MINS	015								
					MW	018								
					RI	022								
					SEDIMENTS	OU 2								
					SOIL	OU 3								
					SOIL BORING									
					VOC									
					WELLS									
M60050 / 000029	10-29-1993	JACOBS	DRAFT FINAL SITE SAFETY AND HEALTH	ADMIN RECORD	SSHP	001	SOUTHWEST							
	02-27-1991	ENGINEERING	PLAN		TECH/GUID DOC.	002	DIVISION							
RPT	00018					003	37041128*							
N68711-89-D-9296	03.4	NAVFAC -				004	IMAGED							
0000		SOUTHWEST				005								
		DIVISION				006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						018								
						019								
						020								
						021								
						022								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient	Subject										
M60050 / 000672	04-05-1995	JACOBS	DRAFT FINAL REMEDIAL							ADMIN RECORD	FS	001	BECHTEL
	02-28-1991	ENGINEERING	INVESTIGATION/FEASIBILITY STUDY								GUID	002	NATIONAL
PLAN	00018	E. ROGER	(R/FS) WORK PLAN								NFA	003	37041238
N68711-89-D-9296	03.3	NAVFAC -									RI	004	IMAGED
0350		SOUTHWEST									WORK PLAN	005	
		DIVISION										006	
												007	
												008	
												009	
												010	
												011	
												012	
												013	
												014	
												015	
												016	
												018	
												019	
												020	
												021	
												022	
												OU 1	
												OU 2	
												OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000977	08-30-1995	JACOBS	DRAFT FINAL SAMPLING AND ANALYSIS	ADMIN RECORD	NFA	001	BECHTEL							
	02-28-1991	ENGINEERING	PLAN		SAP	002	NATIONAL							
PLAN	00018	J. DOLEGOWSKI			TECH/GUID DOC.	003	80462347							
N6871189D929600	03.1	SOUTHWEST				004	IMAGED							
0950		DIVISION				005								
						006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						018								
						019								
						020								
						021								
						022								
						OU 1								
						OU 2								
						OU 3								
M60050 / 001170	12-26-1995	MWD	PROPOSED GROUNDWATER RECOVERY	ADMIN RECORD	GW	OU 1	BECHTEL							
	03-26-1991	M.H. SELLHEIM	PROGRAM IRVINE DESALTER PROJECT				NATIONAL							
LTR	NONE	BOARD OF					80462350							
NONE	01.1	DIRECTO					IMAGED							
0020														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guld. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001092		12-22-1995	OCWD FOUNTAIN VA	LTR	09-20-1991	C.F. IDE			MCAS EL TORO		01.6	R.G. RESS	AGREEMENT FOR STUDY AND REMEDIATION OF EL TORO MCAS SUPERFUND SITE (COUNSEL COMMENTS WRITTEN ON DOCUMENT)	ADMIN RECORD CONFIDENTIAL DOC	WELLS	OU 1	SOUTHWEST DIVISION 37041203* IMAGED
M60050 / 000892		07-19-1995	SOUTHWEST DIVISI	MISC	11-01-1991						NONE		FACT SHEET "DESCRIBING INVESTIGATION OF POSSIBLE HAZARDOUS WASTE CONTAMINATION"	ADMIN RECORD	HAZ WASTE PUB. PARTICIPAT	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022	BECHTEL NATIONAL 37041252 IMAGED
M60050 / 001091		12-22-1995	OCWD FOUNTAIN VALLEY	LTR	11-07-1991	J.A. GOODRICH			EPA SAN FRANCISCO		01.6	J. HAMILL	MULTI-POINT MONITORING WELLS TCE INVESTIGATION	ADMIN RECORD	MW TCE WELLS	OU 1	SOUTHWEST DIVISION 37041203* IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Recipient						
M60050 / 000900		07-19-1995	JACOBS			JACOBS		MEETING MINUTES WITH REGULATORY	ADMIN RECORD	MTG MINS	OU 1	BECHTEL
		01-23-1992	ENGINEERING			ENGINEERING		AGENCIES R/WFS PHASE I		TECH/GUID DOC.	OU 2	NATIONAL
XMTL		00145	J. DOLEGOWSKI			J. DOLEGOWSKI					OU 3	37041252
N6871189D929600		01.5	SOUTHWEST			SOUTHWEST						IMAGED
0032			DIVISION			DIVISION						
			A. PISZKIN			A. PISZKIN						
M60050 / 001090		12-22-1995	OCWD FOUNTAIN			OCWD FOUNTAIN		FEBRUARY 10, 1992 MEETING MINUTES ON	ADMIN RECORD	MTG MINS	OU 1	SOUTHWEST
		02-14-1992	VA			VA		DISCUSSION OF THE PROCEDURES FOR		WELLS		DIVISION
MEMO		NONE	R.L. HERDON			R.L. HERDON		OCWD TO OBTAIN PROPERTY RIGHTS-OF-				37041203*
NONE		01.6	MCAS EL TORO			MCAS EL TORO		WAY TO CONSTRUCT THREE IRVINE				IMAGED
0002			J. REILLY			J. REILLY		DESALTER WELLS				
M60050 / 001089		12-22-1995	OCWD FOUNTAIN			OCWD FOUNTAIN		PROPOSED HANDLING DISPOSAL OF	ADMIN RECORD	DISPOSAL	OU 1	SOUTHWEST
		02-28-1992	VA			VA		DRILL CUTTINGS FROM IDP WELLS		WELLS		DIVISION
LTR		NONE	R.L. HERDON			R.L. HERDON		CONSTRUCTED ON BASE PROPERTY				37041203*
NONE		01.6	MCAS EL TORO			MCAS EL TORO						IMAGED
0003			W. LEE			W. LEE						
M60050 / 000091		11-01-1993	JACOBS			JACOBS		FINAL SAMPLING VISIT WORK PLAN	ADMIN RECORD	EE/CA	OU 1	BECHTEL
CLE-C01-01F099-		03-10-1992	ENGINEERING			ENGINEERING			INFO	GUID	OU 2	NATIONAL
S4-0001		00099							REPOSITORY	NFA	OU 3	37041258
RPT		01.1	NAVFAC -			NAVFAC -				RCRA		IMAGED
N68711-89-D-9296			SOUTHWEST			SOUTHWEST				RFA		
0400			DIVISION			DIVISION				SAP		
										UST		
										WORK PLAN		
M60050 / 001016		12-08-1995	SOUTHWEST			SOUTHWEST		MEETING MINUTES WITH REGULATORY	ADMIN RECORD	MTG MINS	018	BECHTEL
		03-16-1992	DIVISI			DIVISI		AGENCIES ON PRELIMINARY RESULTS OF		NFA	OU 1	NATIONAL
LTR		00145	J. DOLEGOWSKI			J. DOLEGOWSKI		SOIL SAMPLES FROM AGUA CHINON				80462348
N6871189D929600		01.6	SOUTHWEST			SOUTHWEST		WWASH, AND OWCD DESALTER PROJECT				IMAGED
0012			DIVISION			DIVISION						

UIC No. / Rec. No.	Doc. Control No.	Pr. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001019		12-08-1995	JACOBS		05-14-1992	ENGINEERING							MEETING MINUTES WITH REGULATORY AGENCIES ON THE R/FS PHASE I	ADMIN RECORD	MTG MINS	001	BECHTEL
															TECH/GUID DOC.	002	NATIONAL
LTR		00145														003	80462348
N6871189D929600		01.6	SOUTHWEST			DIVISION										004	IMAGED
0010																005	
																006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																018	
																019	
																020	
																021	
																022	
																OU 1	
																OU 2	
																OU 2A	
																OU 2B	
																OU 2C	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prd. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	Recipient	Subject	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001020	12-08-1995	JACOBS	JUNE 2, 1992 TRC MEETING MINUTES ON					ADMIN RECORD	MTG MINS	002	BECHTEL
	06-02-1992	ENGINEERING	THE R/FS PHASE I						PUB. PARTICIPAT	003	NATIONAL
LTR	00145								TRC	005	80462348
N6871189D929600	01.6	SOUTHWEST								017	IMAGED
0004		DIVISION								018	
										024	
										025	
										OU 1	
										OU 2	
										OU 2A	
										OU 2B	
										OU 2C	
M60050 / 001088	12-22-1995	OCWD FOUNTAIN	COORDINATION OF IRVINE DESALTER					ADMIN RECORD	WELLS	OU 1	SOUTHWEST
	08-06-1992	VA	WELL CONSTRUCTION ACTIVITIES								DIVISION
LTR	NONE	R.L. HERDON									37041203*
NONE	01.6	MCAS EL TORO									IMAGED
0004		W. LEE									
M60050 / 001076	12-22-1995	MCAS EL TORO	COMMENTS ON THE WELL					ADMIN RECORD	COMMENTS	OU 1	BECHTEL
	08-25-1992	W.D. LEE	CONSTRUCTION PLANS						WELLS		NATIONAL
LTR	NONE	OCWD FOUNTAIN									80462364
NONE	01.6	VAL									IMAGED
0002		R. HERNDON									
M60050 / 000108	11-01-1993	HADLEY	GROUNDWATER REMEDIATION PROJECT					ADMIN RECORD	DATA	OU 1	SOUTHWEST
	09-16-1992	INDUSTRY	MONITORING REPORT MONTH OF JULY						GW		DIVISION
RPT	NONE	J. BARNETT	1992						MONITORING		37041127*
NONE	00.0	NAVFAC -									IMAGED
0000		SOUTHWEST									
		DIVISION									
		A. PISZKIN									
M60050 / 001087	12-22-1995	OCWD FOUNTAIN	RECOMMENDED DEPTH OF MULTIPOINT					ADMIN RECORD	WELLS	OU 1	SOUTHWEST
	10-16-1992	VA	MONITORING WELL NO. 10								DIVISION
LTR	NONE	R.L. HERDON									37041203*
NONE	01.6	SOUTHWEST									IMAGED
0003		DIVISION									
		A. PISZKIN									

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001021		12-08-1995	JACOBS		10-30-1992	ENGINEERING			MANAGERS' MEETING WITH REGULATORY AGENCIES ON THE RI/FS PHASE I					ADMIN RECORD	MTG MINS TECH/GUID DOC.	018 OU 1	BECHTEL NATIONAL 80462348 IMAGED
LTR		00145										SOUTHWEST DIVISION					
N6871189D929600 0004		01.6															
M60050 / 001483		05-21-1996	JACOBS		12-10-1992	ENGINEERING			MINUTES FROM REMEDIAL PROJECT MANAGER'S MEETING TO DISCUSS REMEDIAL INVESTIGATION/FEASIBILITY STUDY AND RCRA FACILITY ASSESSMENT					ADMIN RECORD	FS MTG MINS NFA RCRA RFA RI TECH/GUID DOC.	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 019 020 021 022 024 025 OU 2 OU 3	BECHTEL NATIONAL 80462357 IMAGED
MISC		00145	C. FLAGG									NAVFAC - SOUTHWEST DIVISION					
N68711-89-D-9296 0005		03.0	A. PISZKIN														

UIC No. / Rec. No.	Doc. Control No.	Pr. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Subject	Classification	Keywords	Sites	Keywords	Sites	Location Box No.	
Approx. # Pages	EPA Cat. #	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Keywords	Sites	Location Box No.	
M60050 / 001119	12-22-1995	12-30-1992	BLACK & VEATCH	IRVINE DESALTER FACILITY PLAN PROJECT REPORT AND COST SHARING ANALYSIS	ADMIN RECORD	COST	OU 1			BECHTEL NATIONAL 80462349 IMAGED	
RPT NONE 0850	NONE 01.1		OCWD FOUNTAIN VA								
M60050 / 001022	12-08-1995	01-06-1993	JACOBS ENGINEERING	DQO WORKSHOP 18-20 NOVEMBER 1992 SUMMARY OF EVENTS, DECISIONS, AND ACTION ITEMS OF THE PHASE I RI/FS COORDINATED WITH REGULATORY AGENCIES	ADMIN RECORD	MTG MINS TECH/GUID DOC.	018 OU 1			BECHTEL NATIONAL 80462348 IMAGED	
LTR N6871189D929600 0006	00145 01.6		SOUTHWEST DIVISION								
M60050 / 001096	12-22-1995	01-11-1993	OCWD FOUNTAIN VA	REQUEST FOR REIMBURSEMENT FOR TCE INVESTIGATION CLEANUP COSTS	ADMIN RECORD CONFIDENTIAL DOC	TCE	OU 1			SOUTHWEST DIVISION 37041203* IMAGED	
LTR NONE 0003	NONE 01.6		W.R. MILLS MCAS EL TORO P.D. WILLIAMS								
M60050 / 001180	12-26-1995	01-22-1993	JACOBS ENGINEERING	REPLY TO REQUEST OF 19 JANUARY 1993 FOR ELECTRONIC MONITORING DATA COLLECTED IN PIEZOMETER MW103 (LTR W/O DATA)	ADMIN RECORD	MONITORING	OU 1			BECHTEL NATIONAL 80462350 IMAGED	
LTR N6871189D929600 0001	00145 02.2		J. DOLEGOWSKI OWCD FOUNTAIN VA R.L. HERNDON								
M60050 / 000584	07-07-1994	01-29-1993	MCAS EL TORO P.D. WILLIAMS	RESPONSE AND SUPPORT OF THE IRVINE DESALTER PROJECT.	ADMIN RECORD	DESALTER RS	018 OU 1			BECHTEL NATIONAL 37041130 IMAGED	
LTR NONE 0002	NONE 01.1		OCWD W.R. MILLS, JR.								
M60050 / 000913	07-19-1995	02-10-1993	JACOBS ENGINEERING	RPM MEETING MINUTES RI/FS AND CTO 193 RCRA FACILITIESASSESSMENT	ADMIN RECORD	MTG MINS TECH/GUID DOC.	002 017			BECHTEL NATIONAL 80462346 IMAGED	
XMTL N6871189D929600 0040	00145 11.5		C. ELLIOT SOUTHWEST DIVISION				OU 1 OU 2 OU 3				

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000824	07-07-1995	JACOBS	DRAFT POSITION PAPER ON THE	ADMIN RECORD	NFA	OU 1	BECHTEL							
	02-15-1993	ENGINEERING	PRELIMINARY RISK ASSESSMENT FOR OU		RA	OU 2	NATIONAL							
MEMO	00145	J. DOLEGOWSKI	1, 2, 3 AND THE PROPOSED EL TORO		TECH/GUID DOC.	OU 3	80462345							
N6871189D929600	01.6	SOUTHWEST	BASELINE HUMAN HEALTH RISK				IMAGED							
0018		DIVISION	ASSESSMENT FOR OU 1											
		A. PISZKIN												
M60050 / 000825	07-07-1995	JACOBS	SEQUENCE LOGIC, AND APPROXIMATE	ADMIN RECORD	FS	OU 1	BECHTEL							
	02-15-1993	ENGINEERING	TIMING FOR COMPLETION OF THE		RI		NATIONAL							
MEMO	00145	J. DOLEGOWSKI	REMEDIAL INVESTIGATION/FEASIBILITY				80462345							
N68711-89-D-9296	01.6	NAVFAC -	STUDY (RI/FS)				IMAGED							
0004		SOUTHWEST												
		DIVISION												
		A. PISZKIN												
M60050 / 000125	11-01-1993	DTSC	DRAFT POSITION PAPER ON THE	ADMIN RECORD	NFA	OU 1	SOUTHWEST							
	02-26-1993	G. HOLMES	PRELIMINARY RISK ASSESS. FOR		OU	OU 2	DIVISION							
LTR	NONE	SOUTHWEST	OPERABLE UNITS (OUS)-1, 2 AND 3 AND		RISK	OU 3	37041127*							
NONE	08.1	DIVISION	THE PROPOSED EL TORO BASELINE		TECH/GUID DOC.		IMAGED							
0000		A. PISZKIN	HUMAN HEALTH RISK ASSESS. FOR OU-1											
M60050 / 000126	11-01-1993	ORANGE	REIMBURSEMENT OF COSTS INCURRED	ADMIN RECORD	COST	018	SOUTHWEST							
	03-11-1993	COUNTY WATER	TO INVESTIGATE AND REMOVE TCE FROM		GW	OU 1	DIVISION							
LTR	NONE	DISTRICT	GROUNDWATER NEAR FACILITY		TCE		37041127*							
NONE	01.1	W. MILLS					IMAGED							
0002		NAVFAC -												
		SOUTHWEST												
		DIVISION												
		T. C. CRANE												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001024	12-08-1995	JACOBS	REMEDIAL PROJECT MANAGER MEETING	ADMIN RECORD	DQOP	001	BECHTEL							
	03-12-1993	ENGINEERING	MINUTES WITH REGULATORY AGENCIES		MTG MINS	002	NATIONAL							
LTR	00145		ON THE RI/FS		TECH/GUID DOC.	003	80462348							
N6871189D929600	01.6	SOUTHWEST				004	IMAGED							
0067		DIVISION				005								
						006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						018								
						020								
						021								
						022								
						OU 1								
						OU 2								
						OU 2A								
						OU 2B								
						OU 2C								
						OU 3								
M60050 / 001025	12-08-1995	JACOBS	REMEDIAL PROJECT MANAGERS MEETING	ADMIN RECORD	MTG MINS	018	BECHTEL							
	03-24-1993	ENGINEERING	MINUTES ON THE RI/FS WITH			OU 1	NATIONAL							
MM	00145		REGULATORY AGENCIES ON THE IRVINE				80462348							
N6871189D929600	01.6	SOUTHWEST	DESALTER PROJECT				IMAGED							
0024		DIVISION												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000821	07-07-1995	JACOBS	RISK ASSESSMENT MEETING HELD ON 30	ADMIN RECORD	NFA	OU 1	BECHTEL							
	04-30-1993	ENGINEERING	APRIL 1993		RA	OU 2	NATIONAL							
MEMO	00145				TECH/GUID DOC.	OU 3	80462345							
N6871189D929600	01.6	SOUTHWEST												
0020		DIVISION												
M60050 / 001174	12-26-1995	JACOBS	APRIL 30, 1993 RISK ASSESSMENT	ADMIN RECORD	MTG MINS	OU 1	BECHTEL							
	04-30-1993	ENGINEERING	MEETING CONDUCTED FOR OU1, OU2 &		NFA	OU 2	NATIONAL							
LTR	NONE		OU3		RA	OU 3	80462350							
NONE	01.1	SOUTHWEST			TECH/GUID DOC.									
0020		DIVISION												

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000083	11-01-1993	JACOBS								PHASE I REMEDIAL INVESTIGATION (RI)	ADMIN RECORD	EE/CA	001	BECHTEL
CLE-C01-01F145-	05-07-1993	ENGINEERING								DRAFT TECHNICAL MEMORANDUM,		IRP	002	NATIONAL
B18-0001	00145									VOLUME I - TEXT (SEE AR #84 - VOLUME II,		NFA	003	37041129
RPT	01.1	NAVFAC -								#85 - VOLUME III, #86 - VOLUME IV]		RI	004	IMAGED
N68711-89-D-9296		SOUTHWEST										TECH MEMO	005	
0814		DIVISION										WELLS	006	
													007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													018	
													019	
													020	
													021	
													022	
													OU 1	
													OU 2	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000084		11-01-1993	JACOBS										PHASE I REMEDIAL INVESTIGATION (RI)	ADMIN RECORD	EE/CA	001	BECHTEL
CLE-C01-01F145-		05-07-1993	ENGINEERING										DRAFT TECHNICAL MEMORANDUM,		IRP	002	NATIONAL
B18-0001		00145											VOLUME II - APPENDICES A AND B (SEE		NFA	003	37041129
RPT		01.1	NAVFAC -										AR #83 - VOLUME I, #85 - VOLUME III, #86 -		RI	004	IMAGED
N68711-89-D-9296			SOUTHWEST										VOLUME IV)		TECH MEMO	005	
0822			DIVISION												WELLS	006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																018	
																019	
																020	
																021	
																022	
																OU 1	
																OU 2	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000085	11-01-1993	JACOBS								PHASE I REMEDIAL INVESTIGATION (RI)	ADMIN RECORD	EE/CA	001	BECHTEL
CLE-C01-01F145-	05-07-1993	ENGINEERING								DRAFT TECHNICAL MEMORANDUM,		IRP	002	NATIONAL
B18-0001	00145									VOLUME III - APPENDICES C THROUGH E		MONITORING	003	37041129
RPT	01.1	NAVFAC -								{SEE AR #83 - VOLUME I, #84 - VOLUME II,		NFA	004	IMAGED
N68711-89-D-9296		SOUTHWEST								#86 - VOLUME IV}		RI	005	
1019		DIVISION										TECH MEMO	006	
												WELLS	007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													018	
													019	
													020	
													021	
													022	
													OU 1	
													OU 2	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000086	CLE-C01-01F145-B18-0001	11-01-1993	JACOBS ENGINEERING		05-07-1993						00145	NAVFAC - SOUTHWEST DIVISION	PHASE I REMEDIAL INVESTIGATION (RI) DRAFT TECHNICAL MEMORANDUM, VOLUME IV - APPENDICES F THROUGH K (SEE AR #83 - VOLUME I, #84 - VOLUME II, #85 - VOLUME III)	ADMIN RECORD	EE/CA IRP NFA RI TECH MEMO WELLS	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 OU 1 OU 2 OU 3	BECHTEL NATIONAL 37041258 IMAGED

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000713	04-05-1995	JACOBS	PHASE I REMEDIAL INVESTIGATION DRAFT	ADMIN RECORD	NFA	001	BECHTEL							
CLE-C01-01F145-	05-07-1993	ENGINEERING	TECHNICAL MEMORANDUM VOLUMES I		RI	002	NATIONAL							
B18-0001	00145	J. DOLEGOWSKI	THROUGH IV		TECH MEMO	003	37041239							
RPT	03.4	NAVFAC -				004	IMAGED							
N68711-89-D-9296		SOUTHWEST				005								
0800		DIVISION				006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						018								
						019								
						020								
						021								
						OU 1								
						OU 2								
						OU 3								
M60050 / 001077	12-22-1995	SOUTHWEST	SETTLEMENT OF THE ORANGE COUNTY	ADMIN RECORD	GW	OU 1	BECHTEL							
	05-11-1993	DIVISI	WATER DISTRICT'S REQUESTS FOR	CONFIDENTIAL	TCE		NATIONAL							
LTR	NONE	T.C. CRANE	REIMBURSEMENT OF COSTS INCURRED	DOC			80462349							
NONE	01.6	OCWD FOUTAIN	RELATING TO INVESTIGATION AND				IMAGED							
0001		VAL	REMEDATION OF TCE IN GROUNDWATER											
		W.R. MILLS												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guld. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000132	11-01-1993	NAVFAC -	IDENTIFICATION OF STATE APPLICABLE	ADMIN RECORD	ARAR	001	SOUTHWEST							
	05-13-1993	SOUTHWEST	OR RELEVANT AND APPROPRIATE		EE/CA	002	DIVISION							
LTR	NONE	DIVISION	REQUIREMENTS (ARARS) FOR THE		FS	003	37041127*							
NONE	04.1	A. PISKIN	REMEDIAL INVESTIGATION AND		GUID	004	IMAGED							
0000		US EPA	FEASIBILITY STUDY		NFA	005								
		J. ZARNOCH			RI	006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						018								
						019								
						020								
						021								
						022								
						024								
						025								
						026								
						027								
						OU 1								
						OU 2								
						OU 3								
M60050 / 000135	11-01-1993	OCWD	AGREEMENT BETWEEN THE ORANGE	ADMIN RECORD	COST	018	SOUTHWEST							
	06-03-1993	C.T. IDE	COUNTY WATER DISTRICT AND U.S DEPT.		MONITORING	OU 1	DIVISION							
CLTR	NONE	SOUTHWEST	OF THE NAVY FOR REIMBURSEMENT OF		WELLS		37041127*							
NONE	01.1	DIVISION	OCWD COSTS INCURRED IN				IMAGED							
0010		R. CALLAWAY	CONSTRUCTING GROUNDWATER											
			MONITORING WELLS											

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001209	01-30-1996 06-04-1993	NAVFAC - SOUTHWEST DIVISION	A. PISZKIN EPA - SAN FRANCISCO J. HAMILL	LTR NONE 0001	NONE 04.5	LETTER REQUESTING US EPA APPROVAL OF EL TORO TEAM'S FOCUSED APPROACH TO OU-1 FEASIBILITY STUDY				ADMIN RECORD	FS OU	OU 1	SOUTHWEST DIVISION 37041206* IMAGED	
M60050 / 000119	11-01-1993 06-17-1993	K. GOLDBERG EPA	A. PISZKIN SOUTHWESTDIV	LTR NONE 0000	NONE 04.3	SUPERFUND SITE FOCUSED FS FOR OU 1				ADMIN RECORD	FS OU	OU 1	SOUTHWEST DIVISION 37041127* IMAGED	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001571	07-11-1996	DTSC REGION IV	DTSC COMMENTS ON REVISED FIELD	ADMIN RECORD	COMMENTS	001	BECHTEL							
	06-23-1993	J. JIMENEZ	SAMPLING PLAN PHASE II REMEDIAL		FS	002	NATIONAL							
LTR	NONE	MCAS EL TORO	INVESTIGATION/FEASIBILITY STUDY (RI/FS)		FSP	003	37041207							
NONE	10.1	J. JOYCE			RI	004	IMAGED							
0006						005								
						006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						019								
						020								
						021								
						022								
						024								
						025								
						OU 2								
						OU 3								
M60050 / 000087	11-01-1993	JACOBS	FINAL RESOURCE CONSERVATION AND	ADMIN RECORD	EE/CA	OU 1	BECHTEL							
CLE-C01-01F193-	07-16-1993	ENGINEERING	RECOVERY ACT (RCRA) FACILITY	INFO	GUID	OU 2	NATIONAL							
S2-0001	00193		ASSESSMENT REPORT VOLUME I - TEXT &	REPOSITORY	NFA	OU 3	37041258							
RPT	01.1	NAVFAC -	APPENDICES A AND B (SEE AR #88 -		RCRA		IMAGED							
N68711-89-D-9296		SOUTHWEST	VOLUME II - APPENDICES C THROUGH G)		RFA									
1000		DIVISION												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location Box No.			
Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.				
M60050 / 000088	11-01-1993	JACOBS ENGINEERING	FINAL RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) FACILITY ASSESSMENT REPORT VOLUME II - APPENDICES C THROUGH G (SEE AR #87 - VOLUME I - TEXT & APPENDICES A AND B)	ADMIN RECORD	EE/CA	OU 1	BECHTEL NATIONAL				
CLE-C01-01F193-S2-0001	07-16-1993			INFO REPOSITORY	GUID	OU 2	NATIONAL				
RPT	00193				RCRA	OU 3	37041258				
N68711-89-D-9296	01.1	NAVFAC - SOUTHWEST DIVISION			RFA		IMAGED				
0500											
M60050 / 000089	11-01-1993	JACOBS ENGINEERING	RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) FACILITY ASSESSMENT - DRAFT REVIEW/VISUAL SITE INSPECTION REPORT VOLUME I (SEE AR #90 - VOLUME II)	ADMIN RECORD	EE/CA	OU 1	BECHTEL NATIONAL				
CLE-C01-01F099-B2-0004	07-16-1993				GUID	OU 2	NATIONAL				
RPT	00099				NFA	OU 3	37041258				
N68711-89-D-9296	01.1	NAVFAC - SOUTHWEST DIVISION			PR		IMAGED				
0650					RCRA						
					RFA						
					SI						
					VSI						
M60050 / 000090	11-01-1993	JACOBS ENGINEERING	RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) FACILITY ASSESSMENT - DRAFT REVIEW/VISUAL REPORT VOLUME II - SWMU/AOC #145 THROUGH APPENDIX D (SEE AR #89 - VOLUME I)	ADMIN RECORD	EE/CA	OU 1	BECHTEL NATIONAL				
CLE-C01-01F099-B2-0004	07-16-1993			INFO REPOSITORY	GUID	OU 2	NATIONAL				
RPT	00099				NFA	OU 3	37041258				
N68711-89-D-9296	01.1	NAVFAC - SOUTHWEST DIVISION			PR		IMAGED				
0500					RCRA						
					RFA						
					SI						
					VSI						
M60050 / 001123	12-22-1995	MWD OF SOUTHERN D.L. GEORGESON	GROUNDWATER RECOVERY PROGRAM AGREEMENT FOR THE IRVINE DESALTER PROJECT	ADMIN RECORD	DESALTER	OU 1	BECHTEL NATIONAL				
LTR	07-19-1993				GW		NATIONAL				
NONE	NONE						80462349				
0064	01.6	IRWD IRVINE R.E. YOUNG					IMAGED				
M60050 / 001078	12-22-1995	SOUTHWEST DIVISI R. CALLAWAY	AGREEMENT BETWEEN ORANGE COUNTY WATER DISTRICT'S AND U.S. DON FOR REIMBURSEMENT OF OCWD COST INCURRED IN CONSTRUCTING GROUNDWATER MONITORING WELLS	ADMIN RECORD	GW	OU 1	BECHTEL NATIONAL				
LTR	07-28-1993			CONFIDENTIAL DOC			NATIONAL				
NONE	NONE						80462364				
0004	01.6	OCWD FOUNTAIN VAL C.F. IDE					IMAGED				

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	EPA Cat. #	Recipient	Approx. # Pages								
M60050 / 000118		11-01-1993 08-02-1993	OCWDR.L HERNDON OCWD SOUTHWEST DIVISION A. PISZKIN	CLTR NONE 0000				FOR REVIEW IS A DRAFT PERMIT AGREEMENT GRANTING ACCESS TO OCWD MONITORING WELLS MCAS-1 THRU MCAS-10	ADMIN RECORD	MONITORING PERMIT WELLS	018 OU 1	SOUTHWEST DIVISION 37041127* IMAGED
M60050 / 000663		04-05-1995 08-02-1993	SAIC  NAVFAC - SOUTHWEST DIVISION	RPT N68711-91-D-4658 0350	DO 02 01.1			FINAL REPORT AERIAL PHOTOGRAPH ASSESSMENT	ADMIN RECORD	GUID NFA	OU 1 OU 2 OU 3	BECHTEL NATIONAL 37041238 IMAGED
M60050 / 001099		12-22-1995 08-05-1993	OCWD FOUNTAIN VA C.F. IDE SOUTHWEST DIVISION R. CALLAWAY	LTR NONE 0009	NONE 01.6			AGREEMENT BETWEEN THE ORANGE COUNTY WATER DISTRICT AND U.S. DON FOR REIMBURSEMENT OF OCWD COSTS INCURRED IN CONSTRUCTING GROUNDWATER MONITORING WELLS	ADMIN RECORD CONFIDENTIAL DOC	GW WELLS	OU 1	SOUTHWEST DIVISION 37041203* IMAGED
M60050 / 000823		07-07-1995 08-06-1993	JACOBS ENGINEERING  NAVFAC - SOUTHWEST DIVISION	MEMO N68711-89-D-9296 0002	00145 01.6			ESTABLISHMENT OF CUT POINTS DURING THE DATA QUALITY OBJECTIVES PROCESS	ADMIN RECORD	DQO GUID	OU 1	BECHTEL NATIONAL 80462345 IMAGED
M60050 / 001529		07-10-1993 08-08-1993	JACOBS ENGINEERING GROUP J. DOLEGOWSKI NAVFAC - SOUTHWEST DIVISION A. PISZKIN	MEMO NONE 0002	NONE 03.0			MEMO REGARDING ABILITY TO PROCEED WITH REMEDIAL INVESTIGATION (RI) AT OPERABLE UNIT 1 - FEASIBILITY STUDY BASED ON PHASE I RI DATA	ADMIN RECORD	FS RI	018 OU 1	BECHTEL NATIONAL 80462364 IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001097	12-22-1995	OCWD FOUNTAIN VALLEY	COMMENTS ON DRAFT REMEDIAL INVESTIGATION TECHNICAL MEMORANDUM AND REQUEST FOR DIGITAL REMEDIAL INVESTIGATION DATA	NONE	08-09-1993	R.L. HERNDON				ADMIN RECORD	COMMENTS	OU 1	SOUTHWEST DIVISION	
LTR	NONE	NAVFAC - SOUTHWEST DIVISION									NFA		37041203*	
NONE	01.6	A. PISZKIN									RI		IMAGED	
0006											TECH MEMO			
M60050 / 001531	07-10-1993	OFF. OF SCI. AFF	STATE OF CALIFORNIA, OFFICE OF SCIENTIFIC AFFAIRS COMMENTS ON POSITION PAPERS RELATED TO DATA QUALITY OBJECTIVES FOR THE PHASE II RI/FS	MEMO	08-23-1993	J. CHRISTOPHER				ADMIN RECORD	COMMENTS	001	BECHTEL	
NONE	NONE	DTSC REGION IV									DQO	002	NATIONAL	
NONE	10.1	J. ZARNOCH									NFA	003	80462364	
0003											RI	004	IMAGED	
											TECH/GUID DOC.	005		
												006		
												007		
												008		
												009		
												010		
												011		
												012		
												013		
												014		
												015		
												016		
												017		
												019		
												020		
												021		
												022		
												024		
												025		
												OU 2		
												OU 3		

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001154	12-26-1995 08-27-1993	DTSC LONG BEACH	COMMENTS ON THE DATA QUALITY OBJECTIVES POSITION PAPER	ADMIN RECORD	COMMENTS DQOP NFA TECH/GUID DOC.	OU 1	BECHTEL NATIONAL 80462349 IMAGED							
LTR NONE 0005	NONE 01.1	J.J. ZARNOCH SOUTHWEST DIVISION A. PISZKIN												
M60050 / 001155	12-26-1995 08-27-1993	DTSC LONG BEACH	CONCURRENCE WITH NAVY'S SCHEDULE EXTENSION REQUEST OF JULY 26, 1993, COMMENTS ON GROUNDWATER SAMPLING PROCEDURES	ADMIN RECORD	COMMENTS GW	OU 1 OU 2 OU 3	BECHTEL NATIONAL 80462349 IMAGED							
LTR NONE 0005	NONE 01.1	J. SCANDURA SOUTHWEST DIVISION A. PISZKIN												
M60050 / 001098	12-22-1995 09-10-1993	OCWD FOUNTAIN VA	STATUS OF OCWD MCAS MONITORING WELL ACCESS PERMITS	ADMIN RECORD	PERMIT WELLS	OU 1	SOUTHWEST DIVISION 37041203* IMAGED							
LTR NONE 0003	NONE 01.6	R.L. HERNDON SOUTHWEST DIVISION A. PISZKIN												
M60050 / 001165	12-26-1995 09-15-1993	EPA SAN FRANCISCO	COMMENTS ON RESPONSES TO EPA TECHNICAL REVIEW OF THE DRAFT RCRA FACILITY ASSESSMENT	ADMIN RECORD	COMMENTS RCRA RESPONSE RFA	OU 1	BECHTEL NATIONAL 80462350 IMAGED							
LTR NONE 0007	NONE 01.1	J. HAMILL NAVFAC - SOUTHWEST DIVISION A. PISZKIN												
M60050 / 001482	05-21-1996 09-27-1993	ORANGE COUNTY WATER DISTRICT	LETTER REGARDING NAVY ACCESS TO MONITORING WELLS INSTALLED BY OCWD IN RELATION TO OPERABLE UNIT 1 FEASIBILITY STUDY	ADMIN RECORD	FS MW WELLS	018 OU 1	BECHTEL NATIONAL 80462357 IMAGED							
LTR NONE 0001	NONE 02.0	R. HERNDON NAVFAC - SOUTHWEST DIVISION A. PISZKIN												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.	
M60050 / 001157		12-26-1995	EPA SAN FRANCISCO		11-01-1993	J. HAMILL							REQUEST FOR REMOVAL ACTION AT AGUA CHINON WASH, AND FOR TIMELY SOIL GAS SURVEY	ADMIN RECORD	NFA REMOVAL SOIL	OU 1	BECHTEL NATIONAL 80462349 IMAGED	
LTR		NONE	NAVFAC - SOUTHWEST DIVISION		01.1	A. PISZKIN												

UIC No. / Rec. No.	Doc. Control No.	Prs. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000690		04-05-1995	JACOBS										PHASE II REMEDIAL	ADMIN RECORD	FS	001	BECHTEL
		11-09-1993	ENGINEERING										INVESTIGATION/FEASIBILITY STUDY		QA	002	NATIONAL
PLAN		00145	GROUP										DRAFT QUALITY ASSURANCE PROJECT		QAPP	003	37041238
N68711-89-D-9296		04.2	M. BITNER										PLAN (QAPP)		RI	004	IMAGED
0100			NAVFAC -													005	
			SOUTHWEST													006	
			DIVISION													007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																018	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 1	
																OU 2	
																OU 2A	
																OU 2B	
																OU 2C	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000714	04-05-1995	JACOBS	PHASE II DRAFT REMEDIAL			ADMIN RECORD					DQO	012	BECHTEL	
	11-09-1993	ENGINEERING	INVESTIGATION/FEASIBILITY STUDY								EE/CA	013	NATIONAL	
PLAN	00145	M. BITNER	(R/FS) WORK PLAN VOLUME I, II, III								FS	014	37041239	
N68711-89-D-9296	03.3	NAVFAC -	APPENDIX A DATA QUALITY OBJECTIVES								GUID	015	IMAGED	
0200		SOUTHWEST									NFA	016		
		DIVISION									RI	017		
											WORK PLAN	018		
												019		
												020		
												021		
												022		
												023		
												024		
												025		

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000955	08-18-1995	JACOBS	PHASE II REMEDIAL	ADMIN RECORD	FS	001	BECHTEL							
	11-09-1993	ENGINEERING	INVESTIGATION/FEASIBILITY STUDY		H&SP	002	NATIONAL							
PLAN	00145	J. DOLEGOWSKI	DRAFT HEALTH AND SAFETY PLAN		RI	003	80462347							
N68711-89-D-9296	03.5	NAVFAC -				004	IMAGED							
0250		SOUTHWEST				006								
		DIVISION				007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						019								
						020								
						021								
						022								
						024								
						025								
M60050 / 001027	12-08-1995	CH2M HILL	RESPONSE TO DTSC 27 AUG 93 LTR	ADMIN RECORD	COMMENTS	018	BECHTEL							
	11-22-1993	J. DOLEGOWSKI	COMMENTS ON THE		GW	OU 1	NATIONAL							
MEMO	00145	SOUTHWEST	IMPACTSSUBMERSIBLE PUMPS AND		TECH/GUID DOC.		80462348							
N6871189D929600	01.6	DIVISION	GROUNDWATER SAMPLING PROCEDURES				IMAGED							
0006		A. PISZKIN	ON SAMPLE QUALITY											
M60050 / 001178	12-26-1995	MWD	GROUNDWATER RECOVERY PROGRAM	ADMIN RECORD	GW	OU 1	BECHTEL							
	11-23-1993	J.R. WODRASKA	SECOND ANNUAL REPORT		MW		NATIONAL							
LTR	NONE	BOARD OF					80462350							
NONE	01.1	DIRECTO					IMAGED							
0003														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr/ Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001487		05-21-1996 12-07-1993	USE EPA REGION I										US EPA LETTER REQUESTING 30 DAY EXTENSION ON REVIEW PERIOD FOR THE DRAFT PHASE II RI/FS WORK PLAN; US EPA COMMENTS DATED 12/17/93 INCLUDED	ADMIN RECORD	COMMENTS FS RI	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 019 020 021 022 024 025 OU 2 OU 3	BECHTEL NATIONAL 80462357 IMAGED
LTR NONE 0022		NONE 10.1	J. HAMILL SOUTHWEST DIVISION A. PISZKIN														
M60050 / 000188		03-03-1994 12-08-1993	DTSC										DRAFT PHASE II REMEDIAL INVESTIGATION/FEASIBILITY STUDY WORK PLAN THIRTY DAY EXTENSION REQUIRED SECTION 7.7(C) OR FEDERAL FACILITIES AGREEMENT	ADMIN RECORD	FFA FS RI WORK PLAN	018 OU 1	SOUTHWEST DIVISION 37041127* IMAGED
LTR NONE 0000		NONE 07.1	NAVFAC - SOUTHWEST DIVISION A. PISZKIN														

UIC No. / Rec. No.	Doc. Control No.	Prs. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001116		12-22-1995	DTSC LONG BEACH		12-17-1993	J.J. ZARNOCH			SOUTHWEST DIVISION		01.6	A. PISZKIN	COMMENTS ON THE MCAS EL TORO IRP PHASE II RI/FS DRAFT WORK PLAN	ADMIN RECORD	COMMENTS IRP NFA	OU 1	BECHTEL NATIONAL 80462349 IMAGED
LTR NONE 0099		NONE															
M60050 / 001534		07-10-1993	US EPA REGION IX		12-17-1993	J. HAMILL			SOUTHWEST DIVISION		10.1	A. PISZKIN	US ENVIRONMENTAL PROTECTION AGENCY'S COMMENTS ON MCAS EL TORO INSTALLATION RESTORATION PROGRAM PHASE II RI/FS STUDY DRAFT WORK PLAN	ADMIN RECORD	COMMENTS FS NFA RI TECH/GUID DOC.	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 019 020 021 022 024 025 OU 2 OU 3	BECHTEL NATIONAL 80462364 IMAGED
LTR NONE 0023		NONE															

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000209	03-16-1994	NAVFAC -	REQUEST FOR 30 DAY EXTENSION FOR	ADMIN RECORD	BRAC	024	SOUTHWEST							
	01-11-1994	SOUTHWEST	RESPONSE TO COMMENTS ON THE DRAFT		FS	025	DIVISION							
LTR	NONE	DIVISION	PHASE II REMEDIAL		GW	OU 2A	37041127*							
NONE	01.1	A. PISZKIN	INVESTIGATION/FEASIBILITY STUDY		RI		IMAGED							
0002		US EPA - SAN FRANCISCO	(R/FS) WORK PLAN											
		J. HAMILL												
M60050 / 001308	03-14-1996	DTSC REGION IV	DTSC'S REVIEW COMMENTS ON THE	ADMIN RECORD	COMMENTS	001	BECHTEL							
	01-20-1994	J. JIMENEZ	DRAFT DATA MANAGEMENT PLAN		DMP	002	NATIONAL							
LTR	00059	MCAS EL TORO	PORTION OF THE PHASE II REMEDIAL		FS	003	80462353							
NONE	03.6	W. LEE	INVESTIGATION WORK PLAN		GUID	004	IMAGED							
0004					RI	005								
					WORK PLAN	006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						019								
						020								
						021								
						022								
						024								
						025								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000827	07-10-1995	JACOBS	REMEDIAL PROJECT MANAGERS MEETING	ADMIN RECORD	MTG MINS	001	BECHTEL							
	02-03-1994	ENGINEERING	RI/FS		TECH/GUID DOC.	002	NATIONAL							
XMTL	00145	R. GREEN				003	80462345							
N6871189D929600	11.5	SOUTHWEST				004	IMAGED							
0010		DIVISION				005								
						006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						018								
						019								
						020								
						021								
						022								
						024								
						025								
						OU 1								
						OU 2								
						OU 2A								
						OU 2B								
						OU 2C								
						OU 3								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001535		07-10-1993	DTSC REGION IV							MEETING MINUTES FROM REMEDIAL PROJECT MANAGERS' MEETING HELD TO DISCUSS: POTENTIAL REMOVAL ACTIONS ANDFIELD SCREENING AT RI/FS SITES; AND NON RI/FS SITES	ADMIN RECORD	FS	001	BECHTEL
		02-03-1994										MTG MINS	002	NATIONAL
MM		NONE	VARIOUS									RA	003	80462364
NONE		03.0	AGENCIES									RI	004	IMAGED
0010													005	
													006	
													007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													019	
													020	
													021	
													022	
													024	
													025	
													OU 2	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001029		12-08-1995	DTSC LONG BEACH		02-08-1994								RPM MEETING ON THE POTENTIAL REMOVALS AT RI/FS SITES	ADMIN RECORD	MTG MINS REMOVAL	003 004 005 007 008 011 013 014 017 019 020 022 025 OU 2 OU 2A OU 2B OU 2C OU 3	BECHTEL NATIONAL 80462348 IMAGED
LTR NONE 0005		NONE 01.6	SOUTHWEST DIVISION														
M60050 / 000153	CLE-C01-01F145-I2-0076	09-21-1999	JACOBS		02-18-1994	J. DOLEGOWSKI							CONFERENCE NOTES ON MEETING HELD 1/24/94 TO DISCUSS APPLICABLE OR RELEVANT AND APPROPRIATE REQUIRMENTS (ARARS) FOR THE OPERABLE UNIT 1 RI/FS	ADMIN RECORD	ARAR FS GW RI	OU 1	SOUTHWEST DIVISION SW01011002
MM N68711-89-D-9296 0025		00145 10.4	SOUTHWEST DIV R. GREEN														
M60050 / 000756		06-15-1995	SOUTHWEST DIVISI		03-04-1994	W.A. DOS SANTOS							IDENTIFICATION OF STATE ARARS FOR THE RI/FS FOR OU 1	ADMIN RECORD	ARAR EE/CA	001 OU 1	SOUTHWEST DIVISION IMAGED
LTR NONE 0008		NONE 04.1	DTSC LONG BEACH J.J. ZARNOCH														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sitas	Location Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Approx. # Pages	EPA Cat. #	Recipient				
M60050 / 000753	06-15-1995 03-10-1994	NAVFAC - SOUTHWEST DIVISION	CONFIRMATION OF POINTS OF AGREEMENTS REACHED BY THE EL TORO TEAM REGARDING FEASIBILITY STUDY	LTR NONE 0004	NONE 04.5	F.A. PISZKIN DTSC LONG BEACH J.J. ZARNOCH	ADMIN RECORD	FS	018 OU 1	BECHTEL NATIONAL 37041246 IMAGED
M60050 / 000841	07-17-1995 03-10-1994	JACOBS ENGINEERING GROUP	REMEDIAL INVESTIGATION CONCEPTUAL APPROACH AND RESPONSE TO COMMENTS SOIL GAS SURVEY FOR SITES 24 & 25	MEMO N68711-89-D-9296 0012	00145 03.4	J. DOLEGOWSKI NAVFAC - SOUTHWEST DIVISION	ADMIN RECORD	COMMENTS NFA RESPONSE RI SOIL	024 025 OU 2A	BECHTEL NATIONAL 80462345 IMAGED
M60050 / 001031	12-08-1995 03-21-1994	JACOBS ENGINEERING GROUP	REMEDIAL PROJECT MANAGERS MEETING RI/FS WITH REGULATORY AGENCIES (CAL- EPA,SRWQCB,DTSC,OCWD)	MM N6871189D929600 0024	00145 01.6	J. DOLEGOWSKI SOUTHWEST DIVISION R. GREEN	ADMIN RECORD	MTG MINS TECH/GUID DOC.	001 002 003 004 007 012 016 018 024 OU 1 OU 2 OU 2A OU 3	BECHTEL NATIONAL 80462348 IMAGED
M60050 / 000751	06-15-1995 04-11-1994	DTSC LONG BEACH	RESPONSE TO THE REQUEST FOR THE IDENTIFICATION OF STATE ARARS FOR THE RI/FS FOR OU 1	LTR NONE 0011	NONE 04.1	J.J. ZARNOCH SOUTHWEST DIVISION W.A DOS SANTOS	ADMIN RECORD INFO REPOSITORY	ARAR EE/CA	018 OU 1	BECHTEL NATIONAL 37041246 IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000750	06-15-1995	EPA SAN FRANCISCO	COMMENTS LETTER OF 10 MARCH 1994 ON THE AGREEMENTS THE EL TORO TEAM HAS REACHED FOR THE FS FOR OU 1	ADMIN RECORD	COMMENTS	OU 1	BECHTEL NATIONAL							
LTR	NONE	J. HAMILL					37041246							
NONE	04.5	SOUTHWEST DIVISION					IMAGED							
0002		A. PISZKIN												
M60050 / 000691	04-05-1995	JACOBS ENGINEERING	DRAFT SOIL GAS SURVEY WORK PLAN REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) (SEE AR #724 - DTSC COMMENTS & #726 - EPA COMMENTS)	ADMIN RECORD	FS	024	BECHTEL NATIONAL							
PLAN	04-18-1994	M. BITNER			NFA	025	37041247							
N68711-89-D-9296	00145	NAVFAC - SOUTHWEST DIVISION			RI	OU 2A	IMAGED							
0250	03.3				SOIL WORK PLAN									
M60050 / 000708	04-05-1995	JACOBS ENGINEERING	DRAFT FINAL HEALTH AND SAFETY PLAN REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) PHASE II (SEE AR #001032)	ADMIN RECORD	FS	001	BECHTEL NATIONAL							
PLAN	04-22-1994	D.R. SMITH			GUID	002	37041239							
N68711-89-D-9296	00145	NAVFAC - SOUTHWEST DIVISION			H&SP	003	IMAGED							
0200	08.0				RI	004								
						005								
						006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						019								
						020								
						021								
						022								
						024								
						025								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location
Contr./Guid. No.	CTO No.	Recipient Affil.	Recipient	Approx. # Pages	EPA Cat. #	Subject				Box No.
M60050 / 001160	12-26-1995 04-26-1994	HDQTRS WASHINGTON	R.A. TIEBOUT	LTR NONE 0004	NONE 01.1	HOUSE OF REPRESE R.K. DORNAN	ADMIN RECORD	COST	OU 1	BECHTEL NATIONAL 80462350 IMAGED
M60050 / 001032	12-08-1995 05-04-1994	JACOBS ENGINEERING GROUP	J. DOLEGOWSKI	MM N68711-89-D-9296 0002	00145 01.6	NAVFAC - SOUTHWEST DIVISION R. GREEN	ADMIN RECORD	H&SP	018 OU 1	BECHTEL NATIONAL 80462348 IMAGED
M60050 / 000782	07-07-1995 05-16-1994	JACOBS ENGINEERING	J. DOLEGOWSKI	PLAN N68711-89-D-9296 0250	00145 01.2	NAVFAC - SOUTHWEST DIVISION	ADMIN RECORD	NFA WORK PLAN	024 025	BECHTEL NATIONAL 37041256 IMAGED
M60050 / 001101	12-22-1995 05-17-1994	OWCD FOUNTAIN VA	R. HERNDON	MEMO NONE 0002	NONE 01.6	SOUTHWEST DIVISION A. PISZKIN	ADMIN RECORD	COMMENTS	OU 1	SOUTHWEST DIVISION 37041203* IMAGED
M60050 / 000709	04-05-1995 05-19-1994	JACOBS ENGINEERING	M. BITNER	RPT N68711-89-D-9296 0350	00145 03.4	NAVFAC - SOUTHWEST DIVISION	ADMIN RECORD	FS NFA RI	018 OU 1	BECHTEL NATIONAL 37041239 IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002223		05-31-2001	MCAS EL TORO	NONE	06-15-1994								STATUS OF OPERABLE UNIT 1 REMEDIAL INVESTIGATION/FEASIBILITY STUDY AND ORANGE COUNTY WATER DISTRICT DESALTER PROJECT	ADMIN RECORD	AOC ARAR BRAC FFA FS GW MW NCP OU REMEDIAL ACTIO RI ROD TCE VOC WELLS	OU 1	CHOICE MICROGRAPHICS SW01080901
M60050 / 001033		12-08-1995	JACOBS ENGINEERING	MM	06-21-1994	J. DOLEGOWSKI							MEETING MINUTES FROM THE BRAC CLEANUP TEAM MEETING TO DISCSS OU1 GROUNDWATER	ADMIN RECORD	BRAC GW MTG MINS	018 OU 1	BECHTEL NATIONAL 80462348 IMAGED
N6871189D929600		01.6	SOUTHWEST DIVISION	0005		R. GREEN											
M60050 / 000646		07-19-1994	SOUTHWEST DIVISI	RPT	07-01-1994	JACOBS ENG.							DRAFT OU-1 BASELINE HUMAN HEALTH RISK ASSESSMENT REPORT RI/FS	ADMIN RECORD	FS HA OU RI	OU 1	BECHTEL NATIONAL 37041237 IMAGED
N6871189D929600		03.0	MCAS EL TORO	0200													
M60050 / 000647		07-19-1994	JACOBS ENGINEERING GROUP	RPT	07-01-1994								REMEDIAL INVESTIGATION/FEASIBILITY STUDY DRAFT OPERABLE UNIT 1 REMEDIAL INVESTIGATION REPORT	ADMIN RECORD	FS GW NFA RI SOIL	OU 1	BECHTEL NATIONAL 37041237 IMAGED
N68711-89-D-9296		03.0	NAVFAC - SOUTHWEST DIVISION	0200													

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000648	CLE-C01-01F145-B14-0001	07-19-1994	JACOBS ENGINEERING GROUP	RPT	07-01-1994	J. DOLEGOWSKI		00145	NAVFAC - SOUTHWEST DIVISION		03.0		DRAFT RI/FS OU 1 BASELINE HUMAN HEALTH RISK ASSESSMENT REPORT, REVISION 0 (SEE AR #696, #1006, #1007 AND #1008)	ADMIN RECORD	FS HA OU RI	OU 1	BECHTEL NATIONAL 37041237 IMAGED
N68711-89-D-9296 0100																	
M60050 / 000696	CLE-C01-01F145-B7-0003	04-05-1995	JACOBS ENGINEERING GROUP	RPT	07-01-1994	J. DOLEGOWSKI		00145	NAVFAC - SOUTHWEST DIVISION		03.4		DRAFT REMEDIAL INVESTIGATION/FEASIBILITY STUDY OU 1 REMEDIAL INVESTIGATION REPORT, REVISION 0 (SEE AR #648, #1006, #1007 AND #1008)	ADMIN RECORD	FS RI	018 OU 1	BECHTEL NATIONAL 37041247 IMAGED
N68711-89-D-9296 0650																	
M60050 / 000716	LTR	06-13-1995	OCWD	NONE	07-01-1994	R.L. HERNDON		NONE	MCAS EL TORO		00.0	D. ARNETT	APPRAISAL FOR PIPELINE AND WELL SITE EASEMENT AT OCWD IRVINE DESALTER PROJECT	ADMIN RECORD	WELLS	OU 1	BECHTEL NATIONAL 37041246 IMAGED
NONE 0002																	
M60050 / 001302	LTR	03-14-1996	BECHTEL NATIONAL, INC.	NONE	07-12-1994	T. LATAS		00059	BECHTEL NATIONAL, INC.		02.7	D. COWSER	MINUTES OF THE 20 JUNE 1994 MEETING TO DISCUSS RESULTS FOR ROUND I SOIL GAS SURVEY SAMPLING AT SITES 24 AND 25	ADMIN RECORD	MTG MINS NFA SOIL	024 025 OU 2A	BECHTEL NATIONAL 80462353 IMAGED
N68711-92-D-4670 0001																	
M60050 / 001303	MISC	03-14-1996	BECHTEL NATIONAL, INC.	NONE	07-13-1994	T. LATAS		00059	BECHTEL NATIONAL, INC.		02.7	D. COWSER	MINUTES OF THE 7 JULY 1994 MEETING TO DISCUSS SOIL GAS SURVEY RESULTS FOR SITES 24 AND 25	ADMIN RECORD	MTG MINS NFA SOIL	024 025	BECHTEL NATIONAL 80462353 IMAGED
N68711-92-D-4670 0003																	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001009 CLE-C01-01F145-S1-0005 RPT N68711-89-D-9296 0030	10-23-1995 07-21-1994 00145 03.3	JACOBS ENGINEERING M. BITNER NAVFAC - SOUTHWEST DIVISION								DRAFT GROUNDWATER MONITORING STUDY PROGRAM PLAN REMEDIAL INVESTIGATION/FEASIBILITY STUDY (R/FS) (REV. 1)	ADMIN RECORD	FS GW MONITORING RI	OU 1	BECHTEL NATIONAL 80462348 IMAGED
M60050 / 001181 LTR NONE 0004	12-26-1995 07-21-1994 NONE 01.1	SOUTHWEST DIVISI A. PISZKIN REGULATORY AGNEC								DTSC REVIEW COMMENTS ON THE IRVINE DESALTER PROJECT PRELIMINAY DESIGN REPORT (DRAFT REPORT) OF MARCH 31, 1994 (SEE DOC. NO. M60050.000904)	ADMIN RECORD	COMMENTS	OU 1	BECHTEL NATIONAL 80462350 IMAGED
M60050 / 001079 LTR NONE 0007	12-22-1995 08-09-1994 NONE 01.6	MCAS EL TORO A. DOTSON ORANGE COUNTY WATER DISTRICT R. HERNDON								COMMENTS ON EASEMENT APPLICATION AND DRAFT ENVIRONMENTAL BASELINE SURVEY REPORT FOR IRVINE DESALTER PROJECT WELL SITES & PIPELINE EASEMENT	ADMIN RECORD	COMMENTS EBS PIPELINE WELLS	OU 1	BECHTEL NATIONAL 80462364 IMAGED
M60050 / 000844 MEMO N6871189D929600 0003	07-17-1995 08-15-1994 00145 03.4	CRWQCB J. BRODERICK SOUTHWEST DIVISION								AGENCY COMMENTS DRAFT OU-1 RI REPORT	ADMIN RECORD	COMMENTS	OU 1	BECHTEL NATIONAL 80462345 IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001289	03-13-1996	BECHTEL								MEETING MINUTES AND MEETING	ADMIN RECORD	FS	001	IRON MOUNTAIN
	08-19-1994	NATIONAL								PRESENTATION MATERIALS FOR THE		MTG MINS	002	80462352
MISC	00059	T. LATAS								PROGRESS MEETING OF THE PHASE II		RI	003	IMAGED
NONE	03.6	BECHTEL								R/FS WORKPLANS		TECH/GUID DOC.	004	
0030		NATIONAL											005	
		D. COWSER											006	
													007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													019	
													020	
													021	
													022	
													024	
													025	
													OU 2	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	EPA Cat. #	Recipient	Approx. # Pages								
M60050 / 001541	07-10-1996	08-19-1994	KLEINFELDER T. LATAS					MEETING MINUTES FROM THE PROGRESS MEETING TO DISCUSS OVERALL APPROACH AND SAMPLING STRATEGIES FOR THE RI/FSWORK PLANS FOR OU-2, OU- 3, AND VOC SOURCE AREA (24,25)	ADMIN RECORD	FS MTG MINS NFA OU RI TECH/GUID DOC. VOC	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 019 020 021 022 024 025 OU 2 OU 3	IRON MOUNTAIN 80462365 IMAGED
MEMO NONE 0022	00059 03.0		BECHTEL NATIONAL D. COWSER									
M60050 / 000845	07-17-1995	08-22-1994	BECHTEL NATIONAL D. TEDALDI					AGENCY COMMENTS DRAFT OU-1 RI REPORT DRAFT BASELINE HUMAN HEALTH RISK ASSESSMENT	ADMIN RECORD	COMMENTS	OU 1	BECHTEL NATIONAL 80462345 IMAGED
MEMO N68711-89-D-9296 0027	00145 03.4		SOUTHWEST DIVISION									

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Subject	Classification	Keywords	Sites	Keywords	Sites	Location Box No.	
Approx. # Pages	EPA Cat. #	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Keywords	Sites	Location Box No.	
M60050 / 001102	12-22-1995	08-22-1994	OWCD FOUNTAIN VA	CULTURAL RESOURCES ASSESSMENT FOR THE IRVINE DESALTER PORJECT IRVINE, CALIFORNIA	ADMIN RECORD	DESALTER	OU 1			SOUTHWEST DIVISION 37041203* IMAGED	
RPT NONE 0021	NONE 01.6		R. HERNDON SOUTHWEST DIVISION A. PISZKIN								
M60050 / 001829	03-24-1997	08-31-1994	MCAS EL TORO W. LEE	TRANSMITTAL OF DRAFT SOIL GAS SURVEY TECHNICAL MEMO (SEE AR #691 - TECH MEMO)	ADMIN RECORD	NFA SOIL TECH MEMO	024 025 OU 2A			SOUTHWEST DIVISION 37041259* IMAGED	
LTR NONE 0001	NONE 01.6		EPA SAN FRANCISCO B. ARTHUR								
M60050 / 000858	07-18-1995	09-01-1994	JACOBS ENGINEERING GROUP	DRAFT RI/FS OU-1 INTERIM-ACTION FS REPORT, REVISION 0 (SEE AR #869) [SUPERCEDED BY AR #1006, #1007 AND #1008]	ADMIN RECORD	FS TECH MEMO	OU 1			BECHTEL NATIONAL 80462345 IMAGED	
CLE-C01-01F145-B7-0004 RPT N68711-89-D-9296 0450	00145 04.2		J. DOLEGOWSKI NAVFAC - SOUTHWEST DIVISION								
M60050 / 000731	06-15-1995	09-06-1994	EPA SAN FRANCISCO B. ARTHUR	COMMENTS ON THE DRAFT OU 1 RI REPORT OF 1 JULY 1994	ADMIN RECORD	COMMENTS	OU 1			BECHTEL NATIONAL 37041246 IMAGED	
LTR NONE 0009	NONE 03.6		MCAS EL TORO W.D. LEE								
M60050 / 000842	07-17-1995	09-06-1994	EPA SAN FRANCISCO B. ARTHUR	AGENCY COMMENTS DRAFT OU-1 RI REPORT	ADMIN RECORD	COMMENTS	OU 1			BECHTEL NATIONAL 80462345 IMAGED	
MEMO N6871189D929600 0011	00145 03.4		SOUTHWEST DIVISION								
M60050 / 000843	07-17-1995	09-06-1994	DTSC S. BEARD	AGENCY COMMENTS DRAFT OU-1 RI REPORT	ADMIN RECORD	COMMENTS	OU 1			BECHTEL NATIONAL 80462345 IMAGED	
MEMO N6871189D929600 0004	00145 03.4		SOUTHWEST DIVISION								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	CTO No.	EPA Cat. #	Recipient	Subject							
M60050 / 000730		06-15-1995 09-07-1994	DTSC LONG BEACH A.A. ARELLANO MCAS EL TORO W.D. LEE	COMMENTS ON THE DRAFT RI REPORT FROM DTSC, RWQCB SANTA ANA AND BECHTEL NATIONAL, INC.				ADMIN RECORD	COMMENTS TECH/GUID DOC.	OU 1	BECHTEL NATIONAL 37041246 IMAGED
LTR NONE 0035		NONE 03.6									
M60050 / 000726		06-15-1995 09-26-1994	EPA SAN FRANCISCO B. ARTHUR MCAS EL TORO W.D. LEE	COMMENTS ON THE DRAFT SOIL GAS SURVEY TECHNICAL MEMORANDUM (SEE AR #691 - SURVEY)				ADMIN RECORD	COMMENTS NFA SOIL TECH MEMO	024 025	BECHTEL NATIONAL 37041246 IMAGED
LTR NONE 0006		NONE 01.6									
M60050 / 000725		06-15-1995 09-28-1994	EPA SAN FRANCISCO B. ARTHUR MCAS EL TORO W.D. LEE	COMMENTS ON THE DRAFT OU 1 BASELINE, HUMAN HEALTH RISK ASSESSMENT REPORT				ADMIN RECORD	COMMENTS HRA	OU 1	BECHTEL NATIONAL 37041246 IMAGED
LTR NONE 0003		NONE 01.6									
M60050 / 000724		06-15-1995 09-29-1994	DTSC LONG BEACH J.M. JIMENEZ MCAS EL TORO W.D. LEE	COMMENTS ON THE DRAFT SOIL GAS SURVEY TECHNICAL MEMORANDUM (SEE AR #691 - SURVEY)				ADMIN RECORD	COMMENTS NFA TECH MEMO	024 025 OU 2A	BECHTEL NATIONAL 37041246 IMAGED
LTR NONE 0014		NONE 01.6									
M60050 / 000840		07-17-1995 09-29-1994	CRWQCB SANTA ANA L. VITALE NAVFAC - SOUTHWEST DIVISION	CRWQCB COMMENTS ON THE DRAFT SOIL GAS SURVEY TECHNICAL MEMORANDUM				ADMIN RECORD	COMMENTS NFA SOIL TECH MEMO	024 025	BECHTEL NATIONAL 80462345 IMAGED
MEMO NONE 0002		00145 03.4									
M60050 / 000868		07-18-1995 09-29-1994	DTSC LONG BEACH A.A. ARELLANO MCAS EL TORO W.D. LEE	COMMENTS DRAFT OU-1 BASELINE HUMAN HEALTH RISK ASSESSMENT REPORT				ADMIN RECORD	COMMENTS HRA	OU 1	BECHTEL NATIONAL 37041252 IMAGED
MEMO N6871189D929600 0008		00145 08.1									

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	EPA Cat. #	Recipient	Approx. # Pages								
M60050 / 000869	07-18-1995	JACOBS	ADDENDUM TO THE DRAFT OU-1 INTERIM-	ADMIN RECORD	FS	OU 1	BECHTEL					
CLE-C01-01F145-	09-30-1994	ENGINEERING	ACTION FS REPORT (SEE AR #858)				NATIONAL					
B7-0005	00145	GROUP	[SUPERCEDED BY AR #1006, #1007 AND				37041252					
RPT	04.4	J. DOLEGOWSKI	#1008]				IMAGED					
N68711-89-D-9296		SOUTHWEST										
0090		DIVISION										
M60050 / 001191	01-22-1996	JACOBS	GROUNDWATER QUALITY DATA REPORT	ADMIN RECORD	DATA	001	BECHTEL					
	09-30-1994	ENGINEERING	IRP RI/FS		GW	002	NATIONAL					
DATA	00145				NFA	003	80462350					
N6871189D929600	01.1	SOUTHWEST			RI	004	IMAGED					
1200		DIVISION			TECH/GUID DOC.	005						
						006						
						007						
						008						
						009						
						010						
						011						
						012						
						013						
						014						
						015						
						016						
						017						
						018						
						019						
						020						
						021						
						022						
						OU 1						
						OU 2						
						OU 2A						
						OU 2B						
						OU 2C						
						OU 3						

UIC No. / Rec. No.	Doc. Control No.	Prd. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001291		03-13-1996	BECHTEL		10-12-1994	NATIONAL							MEETING MINUTES FOR THE 12-13 OCTOBER PROGRESS MEETINGPHASE II	ADMIN RECORD	FS	001	IRON MOUNTAIN
MISC		00059	T. LATAS										R/FS WORKPLANS DISCUSSED		MTG MINS	002	80462352
NONE		03.6	BECHTEL			NATIONAL							APPROACHES FOR R/FS ACTIVITIES,		NFA	003	IMAGED
0030			D. COWSER										FIELD SAMPLING PLAN AND QAPP,		RI	004	
															TECH/GUID DOC.	005	
																006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																019	
																020	
																021	
																022	
																024	
																025	
M60050 / 001380		03-19-1996	BECHTEL			NATIONAL, INC.							RESPONSE TO COMMENTS ON THE DRAFT OPERABLE UNIT ONE INTERIM ACTION	ADMIN RECORD	COMMENTS	018	BECHTEL
CTO-0080/0002		10-18-1994	D. TEDALDI										FEASIBILITY STUDY REPORT INCLUDING		FS	OU 1	NATIONAL
LTR		00080	US EPA REGION			IX							DRAFT GROUNDWATER MODELING		GW		80462353
N68711-92-D-4670		04.5	B. ARTHUR												OU		IMAGED
0012																	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001277	03-13-1996	BECHTEL	MINUTES OF PROGRESS MEETING FOR	ADMIN RECORD	FS	001	IRON MOUNTAIN							
CTO-0059/0030	10-24-1994	NATIONAL, INC.	PHASE II REMEDIAL INVESTIGATION/ FEASIBILITY STUDY WORK PLAN		GUID	002	80462352							
MISC	00059				MTG MINS	003	IMAGED							
N68711-92-D-4670	03.6	NAVFAC - SOUTHWEST DIVISION			NFA	004								
0011					RI	005								
					WORK PLAN	006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						019								
						020								
						021								
						022								
						024								
						025								
M60050 / 001104	12-22-1995	OWCD FOUNTAIN	CONSTRUCTION RECORDS FOR	ADMIN RECORD	MONITORING	OU 1	SOUTHWEST							
	10-28-1994	VA	MONITORING WELL NO. MCAS-5		WELLS		DIVISION							
MISC	NONE	R. HERNDON	REPLACEMENT FOR DESTROYED				37041203*							
NONE	01.6	SOUTHWEST	MONITORING WELL NO. MCAS-5				IMAGED							
0023		DIVISION												
		A. PISZKIN												

UIC No. / Rec. No.	Doc. Control No.	Prd. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001290		03-13-1996	BECHTEL										MEETING MINUTES AND MEETING	ADMIN RECORD	FS	001	IRON MOUNTAIN
		10-28-1994	NATIONAL										PRESENTATION MATERIALS FOR THE		MTG MINS	002	80462352
MISC		00059	T. LATAS										PROGRESS MEETING TO DISCUSS		RI	003	IMAGED
NONE		03.6	BECHTEL										APPROACHES AND SAMPLING ACTIVITIES,		TECH/GUID DOC.	004	
0030			NATIONAL										MEETING HELD 28 OCTOBER 1994			005	
			D. COWSER													006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																019	
																020	
																021	
																022	
																024	
																025	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002486	08-27-2001	JACOBS	INSTALLATION RESTORATION PROGRAM	ADMIN RECORD	AOC	024	BECHTEL							
CLE-C01-01F145- S2-0004	10-31-1994	ENGINEERING GROUP	REMEDIAL INVESTIGATION/FEASIBILITY STUDY; FINAL SOIL GAS SURVEY;	BASE	AST	025	NATIONAL							
MEMO	00145	J. DOLEGOWSKI	TECHNICAL MEMORANDUM AT THE		BCT	BLDG. 297	SW02052003							
N68711-89-D-9296 0300		NAVFAC - SOUTHWEST DIVISION	POTENTIAL VOC SOURCE AREA AND THE MAJOR DRAINAGES AREA		BRAC	OU 2A								
					BTEX									
					DCA									
					DCE									
					DQO									
					FS									
					GC/MS									
					GPR									
					GW									
					H&SP									
					PAH									
					PCB									
					PCE									
					QA									
					QC									
					RCRA									
					RFA									
					SAP									
					SARA									
					SOIL									
					SOIL BORING									
					SOP									
					SVOC									
					SWMU									
					TCA									
					TCE									
					TECH MEMO									
					TIC									
					TPH									
					TRPH									
					UST									
					VOA									

UIC No. / Rec. No.	Doc. Control No.	Prd. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient	Subject										
											VOC VSI WORK PLAN		
M60050 / 001105	12-22-1995 11-03-1994	OWCD FOUNTAIN VA W.R. MILLS SOUTHWEST DIVISION W.A. DOS SANTOS	INITIAL RESPONSE TO ISSUES DESCRIBED IN DRAFT OCWD/DONREPLACEMENT FOR DESTROYED MONITORING WELL NO. MCAS-5 SETTLEMENT AGREEMENT GROUNDWATER	LTR NONE 0002	NONE 01.6				ADMIN RECORD CONFIDENTIAL DOC	GW MONITORING	OU 1	SOUTHWEST DIVISION 37041203* IMAGED	
M60050 / 001264	02-09-1996 11-05-1994	BECHTEL NATIONAL J. KLEUSENER SOUTHWEST DIVISION J. ASHMAN	SUBMITTAL OF DRAFT DATA MANAGEMENT PLAN FOR PHASE II RI/FS	RPT N6871192D467000 0023	00059 03.3				ADMIN RECORD	DMP FS RI TECH/GUID DOC.	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 019 020 021 022 024 025 OU 2 OU 3	IRON MOUNTAIN 80462352 IMAGED	

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.			
M60050 / 000743	06-15-1995	DTSC LONG BEACH	COMMENTS ON THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY	ADMIN RECORD	COMMENTS	018	BECHTEL NATIONAL				
	11-09-1994	J.M. JIMENEZ	DRAFT OPERABLE UNIT 1 INTERIM ACTION FEASIBILITY STUDY		FS	OU 1	37041246				
LTR	NONE	MCAS EL TORO			RI		IMAGED				
NONE	03.6	W.D. LEE									
0039											
M60050 / 000855	07-18-1995	DTSC LONG BEACH	COMMENTS ON DRAFT OU-1 REMEDIAL INVESTIGATION/FEASIBILITY STUDY	ADMIN RECORD	COMMENTS	OU 1	BECHTEL NATIONAL				
	11-09-1994	J. JIMENEZ	INTERIM ACTION REPORT		FS		80462345				
MEMO	00145	MCAS EL TORO			RI		IMAGED				
NONE	04.2	W.D. LEE									
0040											
M60050 / 000741	06-15-1995	SOUTHWEST DIVISI	DON NOT LIABLE TO OCWD FOR REMEDIATION OF PAST RELEASES OF AGRICULTURAL AND NATURAL BACKGROUND CONTAMINANTS	ADMIN RECORD		018	BECHTEL NATIONAL				
	11-15-1994	W.A. DOS SANTOS				OU 1	37041246				
LTR	NONE	OCWD FOUNTAIN VA					IMAGED				
NONE	01.6	W.R. MILLS									
0004											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001265	02-09-1996	BECHTEL								SUBMITTAL OF DRAFT HEALTH AND	ADMIN RECORD	FS	001	IRON MOUNTAIN
CTO-0059/0036	11-15-1994	NATIONAL, INC.								SAFETY PLAN FOR PHASE II REMEDIAL		H&SP	002	80462352
RPT	00059	J. KLEUSENER								INVESTIGATION/FEASIBILITY STUDY (SEE		RI	003	IMAGED
N68711-92-D-4670	03.5	NAVFAC -								AR #955)			004	
0002		SOUTHWEST								DIVISION			005	
		J. ASHMAN											006	
													007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													019	
													020	
													021	
													022	
													024	
													025	
													OU 2	
													OU 3	
M60050 / 000860	07-18-1995	EPA SAN								COMMENTS ON DRAFT OU-1 INTERIM	ADMIN RECORD	COMMENTS	OU 1	BECHTEL
NONE	11-16-1994	FRANCISCO								ACTION FEASIBILITY STUDY REPORT		FS		NATIONAL
MISC	00145	B. ARTHUR												37041252
NONE	04.2	MCAS EL TORO												IMAGED
0017		W. LEE												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001106	12-22-1995 11-17-1994	OWCD FOUNTAIN VALLEY		LTR	NONE	W.R. MILLS				DRAFT COUNTER OFFER FOR THE SETTLEMENT AGREEMENT BETWEEN THE ORANGE COUNTY WATER DISTRICT AND THE U.S. DON FOR THE MCAS EL TORO GROUNDWATER PUMP AND TREATMENT SYSTEM	ADMIN RECORD CONFIDENTIAL	GW WATER	OU 1	SOUTHWEST DIVISION 37041203* IMAGED
NONE 0003	01.6	NAVAFAC - SOUTHWEST DIVISION W.A. DOS SANTOS												
M60050 / 001175	12-26-1995 11-28-1994	JACOBS ENGINEERING		LTR	NONE					NOVEMBER 28, 1994 MEETING MINUTES ON THE RISK ASSESSMENT FOR OU1	ADMIN RECORD	MTG MINS RA	OU 1	BECHTEL NATIONAL 80462350 IMAGED
NONE 0004	01.1	SOUTHWEST DIVISION												
M60050 / 001080	12-22-1995 12-08-1994	NAVAFAC - SOUTHWEST DIVISION		LTR	NONE	L. NUZUM				NOTIFICATION OF REVISED SCHEDULE FOR THE FEASIBILITY STUDY FOR VOLATILE ORGANIC COMPOUND GROUNDWATER CONTAMINATION	ADMIN RECORD	GW VOC	OU 1	SOUTHWEST DIVISION 37041203* IMAGED
NONE 0001	01.6	OCWD FOUNTAIN VALLEY W.R. MILLS												
M60050 / 001187	01-22-1996 12-16-1994	JACOBS ENGINEERING		RPT	00145					DRAFT RI/FS EVALUATION OF BACKGROUND CONCENTRATIONS OF INORGANIC CONSTITUENTS IN GROUNDWATER REVISION 0	ADMIN RECORD	FS GW RI TECH/GUID DOC.	OU 1	BECHTEL NATIONAL 80462350 IMAGED
N6871189D929600 0550	04.2	SOUTHWEST DIVISION												

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Subject	Classification	Keywords	Sites	Location Box No.			
Approx. # Pages	EPA Cat. #	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.			
M60050 / 001307	03-14-1996	12-20-1994	DTSC REGION IV J. JIMENEZ	DTSC'S REVIEW COMMENTS ON THE HEALTH AND SAFETY PLAN PORTION OF THE PHASE II REMEDIAL INVESTIGATION WORK PLAN	ADMIN RECORD	COMMENTS FS GUID H&SP NFA RI WORK PLAN	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 019 020 021 022 024 025	BECHTEL NATIONAL 80462353 IMAGED			
LTR NONE 0006	00059 03.6		MCAS EL TORO W. LEE								
M60050 / 000914	07-19-1995	12-22-1994	JACOBS ENGINEERING J. DOLEGOWSKI	RISK ASSESSMENT MEETING MINUTES	ADMIN RECORD	MTG MINS TECH/GUID DOC.	OU 1	BECHTEL NATIONAL 80462348 IMAGED			
XMTL N6871189D929600 0005	00145 11.5		SOUTHWEST DIVISION A. PISZKIN								
M60050 / 001108	12-22-1995	12-23-1994	OWCD FOUNTAIN VA W.R. MILLS	RESPONSE TO DON LETTER OF DECEMBER 16, 1994 REGARDING THE IRVINE DESALTER PROJECT	ADMIN RECORD CONFIDENTIAL DOC	DESALTER	OU 1	BECHTEL NATIONAL 80462349 IMAGED			
LTR NONE 0003	NONE 01.6		SOUTHWEST DIVISION W.A. DOS SANTOS								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001306	03-14-1996	BECHTEL	DRAFT INVESTIGATION-DERIVED WASTE	ADMIN RECORD	IDWMP	001	BECHTEL							
	01-01-1995	NATIONAL	MANAGEMENT PLAN		TECH/GUID DOC.	002	NATIONAL							
RPT	00059	T. LATAS				003	80462353							
N6871192D467000	03.4	SOUTHWEST				004	IMAGED							
0035		DIVISION				005								
						006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						019								
						020								
						021								
						022								
						024								
						025								

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001263		02-09-1996	BECHTEL										SUBMITTAL OF DRAFT INVESTIGATION	ADMIN RECORD	FS	001	IRON MOUNTAIN
		01-20-1995	NATIONAL										DERIVED WASTE MANAGEMENT PLAN FOR		IDWMP	002	80462352
RPT		00059	J. KLEUSENER										PHASE II RI/FS (REF. DOC# 001306)		RI	003	IMAGED
N6871192D467000		03.3	SOUTHWEST												TECH/GUID DOC.	004	
0003			DIVISION													005	
			J. ASHMAN													006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 2	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001309	03-14-1996	DTSC REGION IV	DTSC'S DRAFT HEALTH AND SAFETY								ADMIN RECORD	COMMENTS	001	BECHTEL
	01-20-1995	J. JIMENEZ	COMMENTS FOR THE PHASE II R/VFS									H&SP	002	NATIONAL
LTR	00059	MCAS EL TORO										TECH/GUID DOC.	003	80462353
NONE	03.6	W. LEE											004	IMAGED
0005													005	
													006	
													007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													019	
													020	
													021	
													022	
													024	
													025	
M60050 / 000171	09-21-1999	JACOBS	ARAR ISSUED RAISED IN EPA COMMENTS								ADMIN RECORD	ARAR	OU 1	SOUTHWEST
CLE-C01-01F145-J3-	01-26-1995	ENGINEERING	FOR OPERABLE UNIT 1 INTERIM-ACTION									COMMENTS		DIVISION
0130	00145	GROUP	FEASIBILITY STUDY									GW		SW01011002
MEMO	06.3	J. DOLEGOWSKI										HAZ WASTE		
N68711-89-D-9296		SOUTHWEST										RCRA		
0006		DIVISION										TCE		
		R. GREEN										VOC		

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Approx. # Pages	EPA Cat. #	Recipient				
M60050 / 001081	12-22-1995 01-26-1995	SOUTHWEST DIVISI	OCWD AGREES WITH DON'S PLANS TO EXPAND THE SCOPE OF THE FS FOR OU1 TO ADDRESS ADDITIONAL REMEDIAL ALTERNATIVES AND GROUNDWATER EXTRACTION	LTR NONE 0004	NONE 01.6	W.A. DOS SANTOS OCWD FOUTAIN VAL W.R. MILLS	ADMIN RECORD CONFIDENTIAL DOC	FS	OU 1	SOUTHWEST DIVISION 37041203* IMAGED
M60050 / 000166	09-21-1999 02-03-1995	JACOBS ENGINEERING GROUP	MINUTES FROM OPERABLE UNIT 1 REMEDIAL INVESTIGATION/FEASIBILITY STUDY IAFS STRATEGY MEETING HELD ON JANUARY 8, 1995	CLE-C01-01F145-I2- 0094 MM N68711-89-D-9296 0030	00145 03.6	J. DOLEGOWSKI SOUTHWEST DIVISION R. GREEN	ADMIN RECORD	FS GW MTG MINS RI	OU 1	SOUTHWEST DIVISION SW01011002
M60050 / 000167	09-21-1999 02-03-1995	JACOBS ENGINEERING GROUP	MINUTES OF MEETING HELD ON JANUARY 19, 1995 TO DISCUSS OPERABLE UNIT 1 INTERIM-ACTION FEASIBILITY STUDY DISCHARGE OPTIONS ARARS	CLE-C01-01F145-I2- 0093 MM N68711-89-D-9296 0006	00145 03.6	J. DOLEGOWSKI SOUTHWEST DIVISION R. GREEN	ADMIN RECORD	ARAR FS GW MTG MINS RI VOC	OU 1	SOUTHWEST DIVISION SW01011002
M60050 / 001082	12-22-1995 02-17-1995	SOUTHWEST DIVISI	IDENTIFICATION OF STATE ARARS FOR THE RI/FS FOR OU1	LTR NONE 0022	NONE 01.6	J.J. JOYCE EPA DTSC LONG BE J.M. JIMENEZ	ADMIN RECORD	ARAR FS	OU 1	SOUTHWEST DIVISION 37041203* IMAGED
M60050 / 001047	12-08-1995 02-20-1995	JACOBS ENGINEERING GROUP	OU1 FS GROUNDWATER MODELING MEETING OF 07 APRIL 1994 WITH REGULATORY AGENCIES	MM N6871189D929600 0008	00014 01.6	J. DOLEGOWSKI SOUTHWEST DIVISION R. GREEN	ADMIN RECORD	FS GW	018 OU 1	BECHTEL NATIONAL 80462364 IMAGED
M60050 / 000857	07-18-1995 02-21-1995	JACOBS ENGINEERING GROUP	AGENCY COMMENTS ON OU-1 IAFS GROUNDWATER MODELING TELEPHONE CONFERENCE	XMTL N6871189D929600 0010	00145 04.2	J. DOLEGOWSKI SOUTHWEST DIVISION R. GREEN	ADMIN RECORD	COMMENTS	OU 1	BECHTEL NATIONAL 80462345 IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000817		07-07-1995	JACOBS							CONFERNCE CALL TO DISCUSS	ADMIN RECORD	GW	OU 1	BECHTEL
		02-24-1995	ENGINEERING							GROUNDWATER MODELING SCENARIOS				NATIONAL
MEMO		00145	J. DOLEGOWSKI							FOR OU-1 IAFS ALTERNATIVES				80462345
N6871189D929600		01.6	SOUTHWEST											IMAGED
0009			DIVISION											
M60050 / 001184		01-22-1996	BECHTEL							FINAL DATA MANAGEMENT PLAN PHASE II	ADMIN RECORD	DMP	OU 1	BECHTEL
		03-01-1995	NATIONAL							R/FS	INFO	FS		NATIONAL
PLAN		00059	T.W. LATAS								REPOSITORY	NFA		80462350
N68711-92-D-4670		03.3	SOUTHWEST									RI		IMAGED
0034			DIVISION									TECH/GUID DOC.		

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001189	01-22-1996	BECHTEL	FINAL HEATH AND SAFETY PLAN	ADMIN RECORD	H&SP	002	BECHTEL							
	03-01-1995	NATIONAL	SUPPLEMENT PHASE II RI/FS	INFO	TECH/GUID DOC.	003	NATIONAL							
RPT	00059	T.W. LATAS		REPOSITORY		004	80462350							
N68711-92-D-4670	03.5	SOUTHWEST				005	IMAGED							
0250		DIVISION				006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						019								
						020								
						021								
						022								
						024								
						025								
						OU 1								
						OU 2								
						OU 2A								
						OU 2B								
						OU 2C								
						OU 3								
M60050 / 001190	01-22-1996	BECHTEL	REVISED DRAFT WORK PLAN PHASE II	ADMIN RECORD	FS	OU 1	BECHTEL							
	03-01-1995	NATIONAL	RI/FS		NFA	OU 2	NATIONAL							
PLAN	00059	T.W. LATAS			RI	OU 3	80462350							
N68711-92-D-4670	03.3	SOUTHWEST			TECH/GUID DOC.		IMAGED							
1200		DIVISION												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001234	01-31-1996	BECHTEL	DRAFT FIELD SAMPLING PLAN PHASE II	ADMIN RECORD	FS	001	IRON MOUNTAIN							
	03-01-1995	NATIONAL	RI/FS		NFA	002	80462352							
RPT	00059	T. LATAS			RI	003	IMAGED							
N6871192D467000	03.2	SOUTHWEST			TECH/GUID DOC.	004								
0200		DIVISION				005								
						006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						018								
						019								
						020								
						021								
						022								
						023								
						024								
						025								
						OU 1								
						OU 2								
						OU 3								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001261	02-09-1996	BECHTEL	SUBMITTAL OF DRAFT QUALITY	ADMIN RECORD	FS	001	IRON MOUNTAIN										
CTO-0059/0062	03-01-1995	NATIONAL, INC.	ASSURANCE PROJECT PLAN FOR THE	NFA	002	80462352											
RPT	00059	D. COWSER	PHASE II REMEDIAL	QAPP	003	IMAGED											
N68711-92-D-4670	02.7	NAVFAC -	INVESTIGATION/FEASIBILITY STUDY (SEE	RI	004												
0002		SOUTHWEST	AR #835 & #715 - QAPP)		005												
		DIVISION			006												
		J. ASHMAN			007												
					008												
					009												
					010												
					011												
					012												
					013												
					014												
					015												
					016												
					017												
					019												
					020												
					021												
					022												
					024												
					025												
					OU 2												
					OU 3												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000917	07-20-1995	JACOBS	BASE REALIGNMENT AND CLOSURE	ADMIN RECORD	BRAC	001	BECHTEL							
	03-03-1995	ENGINEERING	(BRAC) CLEANUP PLAN		EE/CA	002	NATIONAL							
PLAN	00284	B. ARTHUR			NFA	003	80462346							
N6871189D929600	01.1	SOUTHWEST			TECH/GUID DOC.	004	IMAGED							
0750		DIVISION				005								
		J. JOYCE				006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						019								
						020								
						021								
						022								
						024								
						025								
						OU 1								
						OU 2								
						OU 2A								
						OU 2B								
						OU 2C								
						OU 3								
						OU 3B								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001083	12-22-1995	SOUTHWEST DIVISI	INVITIATION TO THE GROUNDWATER MEETING ON 22 MARCH 1995	ADMIN RECORD	03-09-1995	A. PISZKIN					GW	OU 1	SOUTHWEST DIVISION	
MEMO	NONE	A. PISZKIN											37041203*	
NONE	01.6	VARIOUS AGNECIES											IMAGED	
0002														
M60050 / 001176	12-26-1995	JACOBS ENGINEERING-	MEETING MINUTES WITH RWQCB TO DISCUSS GROUNDWATER DISPOSAL ALTERNATIVES OF TREATED GROUNDWATER MEETING DATE: 19 JANUARY 1995	ADMIN RECORD	03-13-1995						DISPOSAL	OU 1	BECHTEL NATIONAL	
LTR	00145			CONFIDENTIAL							GW		80462350	
N6871189D929600	01.1	SOUTHWEST DIVISION		DOC							MTG MINS		IMAGED	
0006		G MCCLAIN												
M60050 / 001167	12-26-1995	OCWD FOUNTAIN VA	CHRONOLOGY AND OCWD RESOLUTIONS ON GROUNDWATER CLEAN-UP - IRVINE DESALTER PROJECT CHRONOLOGY OF EVENTS	ADMIN RECORD	03-14-1995	C.F. IDE					GW	OU 1	SOUTHWEST DIVISION	
LTR	NONE	SOUTHWEST DIVISION		CONFIDENTIAL										
NONE	01.1	R. CALLAWAY		DOC										
0017														
M60050 / 001036	12-08-1995	JACOBS ENGINEERING	ARTICLES ON COMPARATIVE EVALUATION GROUNDWATER SAMPLING PUMPS (ARTICLES FORWARDED TO REGULATORY AGENCIES)	ADMIN RECORD	03-22-1995	J. DOLEGOWSKI					GW	018	BECHTEL NATIONAL	
MM	00145	SOUTHWEST DIVISION										OU 1	80462348	
N6871189D929600	01.6	R. GREEN											IMAGED	
0051														
M60050 / 001158	12-26-1995	CRWQCB RIVERSIDE	ADDITIONAL ARARS FOR SPECIFIC REMEDIAL ALTERNATIVES FOR OU1	ADMIN RECORD	03-22-1995	L. VITALE					ARAR	OU 1	BECHTEL NATIONAL	
LTR	NONE												80462349	
NONE	01.1	DTSC LONG BEACH											IMAGED	
0003		J.M. JIMENEZ												
M60050 / 001785	03-20-1997	DTSC LONG BEACH	RESPONSE TO REQUEST FOR IDENTIFICATION OF POTENTIAL STATE ARARS FOR THE RI/FS FOR OU 1	ADMIN RECORD	03-22-1995	J. JIMENEZ					ARAR	018	SOUTHWEST DIVISION	
LTR	NONE										FS	OU 1	37041241*	
NONE	04.1	SOUTHWEST DIVISION									OU		IMAGED	
0003		J. JOYCE									REQUEST RESPONSE			
											RI			

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001038	12-08-1995 03-24-1995	EPA SAN FRANCISCO	J. ANDERSON	LTR NONE 0003	NONE 01.6	NAVFAC - SOUTHWEST DIVISION J. PAWLISCH				RESPONSE TO UNCONTAMINATED PROPERTY IDENTIFICATION	ADMIN RECORD	COMMENTS	018 OU 1	BECHTEL NATIONAL 80462348 IMAGED
M60050 / 001039	12-08-1995 03-24-1995	DTSC SACRAMENTO	D. WANG	LTR NONE 0002	NONE 01.6	EPA SAN FRANCISCO J. ANDERSON				COMMENTS ON THE DRAFT ENVIRONMENTAL BASELINE SURVEY AND SUPPLEMENTAL COMMUNITY ENVIRONMENTAL RESPONSE FACILITATION ACT OF 11 NOVEMBER 1994 (SEE AR #834 - EBS)	ADMIN RECORD	COMMENTS EBS	018 OU 1	BECHTEL NATIONAL 80462348 IMAGED
M60050 / 001156	12-26-1995 03-27-1995	EPA SAN FRANCISCO	B. ARTHUR	LTR NONE 0002	NONE 01.1	MCAS EL TORO J. JOYCE				CLARIFICATION OF EPA'S NOVEMBER 16, 1994, COMMENTS ON THE DRAFT OU1 INTERIMA ACTION FEASABILITY STUDY REPORT (IAFS)	ADMIN RECORD	COMMENTS	OU 1	BECHTEL NATIONAL 80462349 IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001280	03-13-1996	DTSC REGION IV	RWQCB REVIEW COMMENTS ON THE		03-27-1995	J. JIMENEZ			MCAS EL TORO	DRAFT INVESTIGATION DERIVED WASTE	ADMIN RECORD	COMMENTS	001	IRON MOUNTAIN
									J. JOYCE	MANAGEMENT PLAN (IDWMP)		IDWMP	002	80462352
LTR	00059											TECH/GUID DOC.	003	IMAGED
NONE	02.4												004	
0004													005	
													006	
													007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													019	
													020	
													021	
													022	
													024	
													025	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001281	03-13-1996	BECHTEL	COMPILED RESPONSE TO COMMENTS ON	ADMIN RECORD	COMMENTS	001	IRON MOUNTAIN							
CTO-0059/0084	03-27-1995	NATIONAL, INC.	THE DRAFT HEALTH AND SAFETY PLAN		FS	002	80462352							
MISC	00059	T. LATAS	SUPPLEMENT PHASE II REMEDIAL		H&SP	003	IMAGED							
N68711-92-D-4670	03.6	CRWQCB	INVESTIGATION/FEASIBILITY STUDY		RESPONSE	004								
0005		L. VITALE			RI	005								
						006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						019								
						020								
						021								
						022								
						024								
						025								
M60050 / 001107	12-22-1995	OWCD FOUNTAIN	ALTERNATIVES BEING CONSIDERED BY	ADMIN RECORD	FS	OU 1	SOUTHWEST							
	03-30-1995	VALLEY	THE DON FOR THE REMEDIAL PROGRAM	CONFIDENTIAL	REMEDIAL ACTIO		DIVISION							
LTR	NONE	W.R. MILLS	FEASIBILITY STUDY	DOC			37041203*							
NONE	01.6	NAVFAC -					IMAGED							
0003		SOUTHWEST												
		DIVISION												
		W.A. DOS SANTOS												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001257		02-09-1996	BECHTEL										DRAFT FIELD SAMPLING PLAN FOR THE	ADMIN RECORD	FS	001	IRON MOUNTAIN
		03-31-1995	NATIONAL										PHASE II RI/FS		NFA	002	80462352
LTR		00059	J. KLEUSENER												RI	003	IMAGED
N6871192D467000		02.1	SOUTHWEST												TECH/GUID DOC.	004	
0005			DIVISION													005	
			J. ASHMAN													006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 2	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001258	02-09-1996	BECHTEL								FINAL HEALTH AND SAFETY SUPPLEMENT	ADMIN RECORD	COMMENTS	001	IRON MOUNTAIN
	03-31-1995	NATIONAL								PHASE II RI/FS AND RESPONSE TO	INFO	H&SP	002	80462352
RPT	00059	J. KLEUSENER								COMMENTS ON HEALTH AND SAFETY	REPOSITORY	NFA	003	IMAGED
N6871192D467000	03.5	SOUTHWEST								SUPPLEMENT		TECH/GUID DOC.	004	
0003		DIVISION											005	
		J. ASHMAN											006	
													007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													019	
													020	
													021	
													022	
													024	
													025	
													OU 2	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.						
Record Type	Record Date	Author							
Contr./Guid. No.	CTO No.	Recipient Affil.							
Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location	Box No.	
M60050 / 001282	03-13-1996	BECHTEL	RESPONSE TO REGULATORY AGENCY	ADMIN RECORD	COMMENTS	001	IRON MOUNTAIN		
	03-31-1995	NATIONAL	(DTSC, RWQCB, USEPA) COMMENTS ON		FS	002	80462352		
MISC	00059	T. LATAS	REVISED DRAFT WORK PLAN PHASE II		NFA	003	IMAGED		
NONE	03.6	VARIOUS	RI/FS		RI	004			
0025		AGENCIES			TECH/GUID DOC.	005			
						006			
						007			
						008			
						009			
						010			
						011			
						012			
						013			
						014			
						015			
						016			
						017			
						019			
						020			
						021			
						022			
						024			
						025			

UIC No. / Rec. No.	Doc. Control No.	Prct. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001555	07-10-1996	BECHTEL	COMPILED RESPONSE TO REGULATORY	ADMIN RECORD	COMMENTS	001	BECHTEL							
CTO-0059/0090	04-05-1995	NATIONAL, INC.	AGENCY COMMENTS TO THE DRAFT DATA		DMP	002	NATIONAL							
MISC	00059	J. KLEUSENER	MANAGEMENT PLAN, PHASE II REMEDIAL		FS	003	37041207							
N68711-92-D-4670	10.1	NAVFAC -	INVESTIGATION/FEASIBILITY STUDY (R/FS)		RESPONSE	004	IMAGED							
0004		SOUTHWEST			RI	005								
		DIVISION				006								
		J. ASHMAN				007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						019								
						020								
						021								
						022								
						024								
						025								
						OU 2								
						OU 3								
M60050 / 000927	08-07-1995	DTSC LONG	RESPONSE FOR POTENTIAL STATE ARARS	ADMIN RECORD	ARAR	018	BECHTEL							
	04-10-1995	BEACH	FOR THE REVISED ITNERIM R/FS OPTIONS			OU 1	NATIONAL							
LTR	NONE	J.M. JIMENEZ	FOR OU 1				80462347							
NONE	04.1	MCAS EL TORO					IMAGED							
0004		J. JOYCE												

UIC No. / Rec. No.	Doc. Control No.	Prs. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	EPA Cat. #	Recipient	Approx. # Pages								
M60050 / 000938		08-07-1995 04-21-1995	DTSC LONG BEACH J.M. JIMENEZ NAVFAC - SOUTHWEST DIVISION J. JOYCE	LTR NONE 0008	NONE 04.5			SUPPLEMENTAL RESPONSE TO THE REQUEST FOR THE IDENTIFICATION OF POTENTIAL STATE ARARS REQUIREMENTS FOR THE RI/FS FOR OU-1	ADMIN RECORD	ARAR FS RI	018 OU 1	BECHTEL NATIONAL 80462347 IMAGED
M60050 / 000935		08-07-1995 04-27-1995	SOUTHWEST DIVISI W.A. DOS SANTOS OCWD FOUNTAIN VA W.R. MILLS	LTR NONE 0018	NONE 01.6			HISTORIC TDS MIGRATION RESULTING FROM NATURAL CONDITIONS AND CONTINUED PUMPING	ADMIN RECORD	HISTORIC	018 OU 1	BECHTEL NATIONAL 80462347 IMAGED
M60050 / 000839		07-17-1995 04-28-1995	JACOBS ENGINEERING J. DOLEGOWSKI SOUTHWEST DIVISION	PLAN N6871189D929600 0080	00145 03.1			RI/FS FINAL GROUNDWATER MONITORING PLAN REVISION 0	ADMIN RECORD	FS GW MONITORING RI TECH/GUID DOC.	OU 1	BECHTEL NATIONAL 80462345 IMAGED
M60050 / 001041		12-08-1995 04-28-1995	JACOBS ENGINEERING J. DOLEGOWSKI SOUTHWEST DIVISION G. MCCLAIN	MM N6871189D929600 0010	00145 01.6			SUMMARY OF PUBLIC WORKSHOP PRESENTED BY RWQCB FOR A REVIEW OF THE SANTA ANA RIVER BASIN WATER QUALITY CONTROL PLAN	ADMIN RECORD		018 OU 1	BECHTEL NATIONAL 80462364 IMAGED

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001365	03-19-1996	BECHTEL	FINAL ADDENDUM TO THE RCRA FACILITY	ADMIN RECORD	DMP	001	BECHTEL										
CTO-0065/0051	05-01-1995	NATIONAL	ASSESSMENT WORK PLAN		H&SP	002	NATIONAL										
RPT	00065	D. COWSER			IDWMP	003	80462353										
NG6871192D467000	01.1	SOUTHWEST			QAPP	004	IMAGED										
0075		DIVISION			RFA	005											
		G. GARELICK			SWMU	006											
						007											
						008											
						009											
						010											
						011											
						012											
						013											
						014											
						015											
						016											
						017											
						018											
						019											
						020											
						021											
						022											
						024											
						025											
						OU 1											
						OU 2											
						OU 3											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001367		03-19-1996	BECHTEL										COPY OF MEETING HANDOUT	ADMIN RECORD	FS	001	BECHTEL
		05-02-1995	NATIONAL										"RECOMMENDED NO FURTHER		NFA	002	NATIONAL
MISC		00059	P. WEIGAND										ACTIONAND REMOVAL ACTION OU-3		OU	003	80462353
NONE		02.7	VARIOUS										SITES", PHASE II R/FS		RI	004	IMAGED
0045																005	
																006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 2	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001256	02-09-1996	BECHTEL	RESPONSE TO REGULATORY AGENCY	ADMIN RECORD	COMMENTS	001	IRON MOUNTAIN							
	05-05-1995	NATIONAL	COMMENTS TO THE DRAFT DATA		FS	002	80462352							
LTR	00059	J. KLEUSENER	MANAGEMENT PLAN PHASE II RI/FS		NFA	003	IMAGED							
N6871192D467000	10.2	SOUTHWEST			RI	004								
0012		DIVISION			TECH/GUID DOC.	005								
		J. ASHMAN				006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						019								
						020								
						021								
						022								
						024								
						025								
						OU 2								
						OU 3								
M60050 / 001042	12-08-1995	JACOBS	FINAL EBS REPORT REPLACEMENT PAGES	ADMIN RECORD	EBS	018	BECHTEL							
	05-09-1995	ENGINEERING	6-1 AND 6-2		TECH/GUID DOC.	OU 1	NATIONAL							
MM	00284	M. ARENDS					80462364							
N6871189D929600	01.6	SOUTHWEST					IMAGED							
0004		DIVISION												
		G. MCCLAIN												

UIC No. / Rec. No.	Doc. Control No.	Prct. Date	Author Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	Record Type	Record Date	Author					
	Constr./Guid. No.	CTO No.	Recipient Affil.					
	EPA Cat. #		Recipient					
M60050 / 001163		12-26-1995	DTSC LONG BEACH	ADDITIONAL RESPONSE TO REQUEST FOR THE IDENTIFICATION OF POTENTIAL STATE APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS FOR THE INTERIM REMEDIAL INVESTIGATION FEASIBILITY STUDY	ADMIN RECORD	ARAR FS RI	OU 1	BECHTEL NATIONAL 80462350 IMAGED
LTR NONE 0002		05-09-1995 NONE 01.1	J.M. JIMENEZ NAVFAC - SOUTHWEST DIVISION J. JOYCE					
M60050 / 001043		12-08-1995	JACOBS ENGINEERING	RI/FS ADDITIONAL OU1 IAFS ALTERNATIVES REQUESTED BY OCWD	ADMIN RECORD	FS RI	018 OU 1	BECHTEL NATIONAL 80462364 IMAGED
MM N6871189D929600 0004		05-11-1995 00145 01.6	J. DOLEGOWSKI SOUTHWEST DIVISION G. MCCLAIN					
M60050 / 001310		03-14-1996	DEPT FISH AND GA	DEPT OF FISH AND GAME RESPONSE TO DTSC REQUEST FOR INFORMATION ON APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS ARARS	ADMIN RECORD	ARAR TECH/GUID DOC.	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 019 020 021 022 024 025	BECHTEL NATIONAL 80462353 IMAGED
LTR NONE 0001		05-11-1995 00059 06.2	J. TURNER DTSC REGION IV J. JIMENEZ					

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001567	07-11-1996	RAB MEMBER	COMMENTS FROM RAB MEMBER OF THE	ADMIN RECORD	COMMENTS	002	BECHTEL							
	05-11-1995	J. WERNER	OPERABLE UNIT (OU) 2 SUBCOMMITTEE		FS	003	NATIONAL							
LTR	NONE	MCAS EL TORO	ON THE REVISED DRAFT WORK PLAN AND		PUB. PARTICIPAT	005	37041207							
NONE	10.1	J. JOYCE	DRAFT FIELD SAMPLING PLAN/PHASE II		RI	015	IMAGED							
0003			RI/FS		SAP	017								
					TECH/GUID DOC.	024								
						OU 2								
M60050 / 001259	02-09-1996	BECHTEL	REVISED DRAFT WORK PLAN FOR THE	ADMIN RECORD	FS	001	IRON MOUNTAIN							
	05-17-1995	NATIONAL	PHASE II RI/FS		NFA	002	80462352							
RPT	00059	J. KLEUSENER			RI	003	IMAGED							
N6871192D467000	02.0	SOUTHWEST			TECH/GUID DOC.	004								
0003		DIVISION				005								
		J. ASHMAN				006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						019								
						020								
						021								
						022								
						024								
						025								
						OU 2								
						OU 3								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001403		03-20-1996	BECHTEL		05-17-1995	NATIONAL			BECHTEL NATIONAL				BECHTEL TECHNICAL REVIEW COMMENTS ON DRAFT WORK PLAN AND FIELD SAMPLING PLAN FOR PHASE II RI/FS	ADMIN RECORD	COMMENTS	001	BECHTEL
LTR		00080	D. TEDALDI						DTSC REGION IV						FS	002	NATIONAL
N6871192D467000		03.6	J. JIMENEZ												NFA	003	80462354
0020															RI	004	IMAGED
															TECH/GUID DOC.	005	
																006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 2	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001375	03-19-1996	BECHTEL	BECHTEL'S TECHNICAL REVIEW			ADMIN RECORD	COMMENTS	001	BECHTEL					
	05-22-1995	NATIONAL	COMMENTS ON DRAFT WORK PLAN AND				FS	002	NATIONAL					
LTR	00080	D. TEDALDI	FIELD SAMPLING PLAN FOR PHASE II R/FS				NFA	003	80462353					
N6871192D467000	03.3	RWQCB REGION					RI	004	IMAGED					
0009		L. VITALE					TECH/GUID DOC.	005						
								006						
								007						
								008						
								009						
								010						
								011						
								012						
								013						
								014						
								015						
								016						
								017						
								019						
								020						
								021						
								022						
								024						
								025						
								OU 2						
								OU 3						

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001376		03-19-1996	BECHTEL										BECHTEL'S TECHNICAL REVIEW	ADMIN RECORD	COMMENTS	001	BECHTEL
		05-22-1995	NATIONAL										COMMENTS ON DRAFT WORK PLAN AND		NFA	002	NATIONAL
LTR		00080	D. TEDALDI										FIELD SAMPLING PLAN FOR PHASE II R/FS		SAP	003	80462353
N6871192D467000		03.3	US EPA REGION												TECH/GUID DOC.	004	IMAGED
0009			IX													005	
			B. ARTHUR													006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 2	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Classification	Keywords	Sites	Location
Approx. # Pages	EPA Cat. #	Recipient	Subject										Box No.
M60050 / 001565		07-11-1996	RWQCB							ADMIN RECORD	COMMENTS	001	BECHTEL
		05-22-1995									NFA	002	NATIONAL
MEMO		NONE	DTSC REGION IV								RI	003	37041207
NONE		10.1	J. JIMENEZ								TECH/GUID DOC.	004	IMAGED
0008												005	
												006	
												007	
												008	
												009	
												010	
												011	
												012	
												013	
												014	
												015	
												016	
												017	
												019	
												020	
												021	
												022	
												024	
												025	
												OU 2	
												OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001292		03-13-1996	DTSC REGION IV		05-23-1995	J. JIMENEZ			MCAS EL TORO				DTSC'S REVIEW COMMENTS ON THE REVISED DRAFT WORK PLAN PHASE II RI/FS WORKPLAN	ADMIN RECORD	COMMENTS	001	IRON MOUNTAIN
LTR		00059							J. JOYCE						FS	002	80462352
NONE		03.3													NFA	003	IMAGED
0000															RI	004	
															TECH/GUID DOC.	005	
																006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																019	
																020	
																021	
																022	
																024	
																025	
M60050 / 000932		08-07-1995	OCWD FOUNTAIN		05-24-1995	VA			W.R. MILLS				OCWD POSITION ON ANY WATER REINJECTED TO THE GROUNDWATER BASIN	ADMIN RECORD	WATER	018	BECHTEL NATIONAL
LTR		NONE							SOUTHWEST DIVISION							OU 1	80462347
NONE		01.6							W.A. DOS SANTOS								IMAGED
0002																	

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000945	08-07-1995	EPA SAN FRANCISCO			05-24-1995	B. ARTHUR				COMMENTS ON THE REVISED DRAFT WORK PLAN PHASE II RI/ FS STUDY AND DRAFT FIELD SAMPLING PLAN PHASE II RI/FS	ADMIN RECORD	COMMENTS	002	BECHTEL NATIONAL
LTR	NONE	SOUTHWEST DIVISION				J. JOYCE						TECH/GUID DOC.	003	80462347
NONE	03.6												004	IMAGED
0042													005	
													007	
													008	
													009	
													010	
													011	
													012	
													013	
													017	
													022	
													023	
													024	

UIC No. / Rec. No.	Doc. Control No.	Prd. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	Recipient	Subject	Approx. # Pages	EPA Cat. #	Recipient					
M60050 / 001293	03-13-1996	US EPA REGION IX	US EPA EVIEW COMMENTS ON THE REVISED DRAFT WORK PLAN PHASE II					ADMIN RECORD	COMMENTS	001	IRON MOUNTAIN
	05-24-1995								FS	002	80462352
LTR	00059	B. ARTHUR	RI/FS WORKPLAN AND DRAFT FIELD SAMPLING PLAN						NFA	003	IMAGED
NONE	03.3	MCAS EL TORO							RI	004	
0018		J. JOYCE							TECH/GUID DOC.	005	
										006	
										007	
										008	
										009	
										010	
										011	
										012	
										013	
										014	
										015	
										016	
										017	
										019	
										020	
										021	
										022	
										024	
										025	
M60050 / 001294	03-13-1996	IRV RANCH	RESTORATION ADVISORY BOARD OU-2					ADMIN RECORD	COMMENTS	002	IRON MOUNTAIN
	05-25-1995	WATER	SUBCOMMITTEE COMMENTS TO REVISED DRAFT WORKPLAN AND DRAFT FIELD SAMPLING PLAN PHASE II RI/FS						FS	003	80462352
LTR	00059	R. MCVICKER							PUB. PARTICIPAT	005	IMAGED
NONE	10.1	RAB COMMUNITY							RAB	017	
0005		CH							RI	024	
		M. RUDOLPH							TECH/GUID DOC.	025	
										OU 2	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.	Recipient	Approx. # Pages	EPA Cat. #	Subject				
M60050 / 001566		07-11-1996	IRV. RANCH			LETTER FORWARDING COMMENTS FROM	ADMIN RECORD	COMMENTS	002	BECHTEL
		05-25-1995	WATER			THE OPERABLE UNIT (OU)2 RAB		FS	003	NATIONAL
LTR		NONE	R. MCVICKER			SUBCOMMITTEE ON THE REVISED DRAFT		PUB. PARTICIPAT	005	37041207
NONE		03.0	MCAS EL TORO			WORK PLAN AND DRAFT FIELD SAMPLING		RI	017	IMAGED
0001			RAB			PLAN/PHASE II RI/FS		SAP	024	
			M. RUDOLPH					TECH/GUID DOC.	025	
									OU 2	
M60050 / 001186		01-22-1996	OHM			FINAL WORK PLAN RCRA CLEAN CLOSURE	ADMIN RECORD	CLOSURE	OU 1	BECHTEL
		06-01-1995	REMEDICATION			OF B-673-T3 MCAS EL TORO, AND B-248		RCRA		NATIONAL
PLAN		DO 20	C. JESPERSEN			MCAS TUSTIN		WORK PLAN		80462350
N68711-93-D-1459		03.3	NAVFAC -							IMAGED
0350			SOUTHWEST							
			DIVISION							
M60050 / 001045		12-08-1995	JACOBS			REMEDIAL PROJECT MANAGERS'	ADMIN RECORD	FS	018	BECHTEL
CLE-J02-01F145-I2-		06-07-1995	ENGINEERING			MEETING, PROGRESS UPDATE ON THE		MTG MINS	OU 1	NATIONAL
0107		00145	J. DOLEGOWSKI			REMEDIAL INVESTIGATION/FEASIBILITY		RI		80462364
MM		01.6	NAVFAC -			STUDY OU 1 INTERIM ACTION FEASIBILITY				IMAGED
N68711-89-D-9296			SOUTHWEST			STUDY WITH REGULATORY AGENCIES				
0026			DIVISION							
			G. MCCLAIN							
M60050 / 001161		12-26-1995	SOUTHWEST			COMMENTS ON THE PROPOSED	ADMIN RECORD	COMMENTS	OU 1	BECHTEL
		06-09-1995	DIVISI			AMENDMENT TO THE BASIN PLAN FOR	CONFIDENTIAL			NATIONAL
LTR		NONE	R. CALLAWAY			THE SANTA ANA REGION	DOC			80462350
NONE		01.1	CRWQCB							IMAGED
0005			RIVERSIDE							
			J. SCHNEIDER							

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Confr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001348		03-18-1996	BECHTEL										BECHTEL'S TECHNICAL REVIEW	ADMIN RECORD	COMMENTS	001	BECHTEL
		06-09-1995	NATIONAL										COMMENTS ON DRAFT RI/FS EVALUATION		FS	002	NATIONAL
LTR		00080	D. TEDALDI										OF BACKGROUND CONCENTRATIONS OF		RI	003	80462353
N6871192D467000		03.6	SOUTHWEST										INORGANIC CONSTITUENTS IN		TECH/GUID DOC.	004	IMAGED
0005			DIVISION										GROUNDWATER PHASE II RI/FS			005	
			J. JOYCE													006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 2	
																OU 3	
M60050 / 000939		08-07-1995	NAVFAC -										DON REQUESTS A REVISED DEADLINE	ADMIN RECORD	FS	OU 1	BECHTEL
		06-23-1995	SOUTHWEST										FOR SUBMITTAL OF THE DRAFT INTERIM		ROD		NATIONAL
LTR		NONE	DIVISION										ACTION FEASIBILITY STUDY ASSOCIATED				80462347
NONE		01.6	J.R. PAWLISCH										WITH THE DRAFT PROPOSED PLAN &				IMAGED
0040			EPA SAN										DRAFT INTERIM RECORD OF DECISION				
			FRANCISCO										FOR OU 1				
			J. ANDERSON														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000947	08-07-1995 06-30-1995	EPA SAN FRANCISCO	J. ANDERSON	LTR	NONE	SOUTHWEST DIVISION			J.R. PAWLISCH	RESPONSE TO REQUEST FOR EXTENSION FOR OU 1 SUBMITTALS SETFORTH IN THE FFA	ADMIN RECORD		OU 1	BECHTEL NATIONAL 80462347 IMAGED
NONE 0002	01.6													
M60050 / 001194	01-22-1996 07-01-1995	BECHTEL NATIONAL	T.W. LATAS	PLAN	00059	SOUTHWEST DIVISION				FINAL WORK PLAN PHASE II RI/FS	ADMIN RECORD	FS NFA RI TECH/GUID DOC.	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 019 020 021 022 024 025 OU 1 OU 2 OU 2A OU 2B OU 2C OU 3	BECHTEL NATIONAL 80462351 IMAGED
N68711-92-D-4670 1800	03.3													

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001233	01-31-1996	BECHTEL	FINAL WORK PLAN PHASE II RI/FS	ADMIN RECORD	FS	001	BECHTEL							
	07-01-1995	NATIONAL			NFA	002	NATIONAL							
RPT	00059	T. LATAS			RI	004	80462351							
N6871192D467000	03.3	SOUTHWEST			TECH/GUID DOC.	006	IMAGED							
0200		DIVISION				007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						016								
						017								
						019								
						020								
						021								
						022								
						024								
						025								
						OU 2A								
						OU 2B								
						OU 3								
M60050 / 000182	10-11-1999	JACOBS	MINUTES OF OPERABLE UNIT 1 INTERIM-	ADMIN RECORD	ARAR	OU 1	SOUTHWEST							
CLE-C01-01F145-I2-	07-06-1995	ENGINEERING	ACTION FEASIBILITY STUDY PLANNING		FS		DIVISION							
0110	00145	GROUP	MEETING HELD ON JUNE 28, 1995		MTG MINS		SW01011002							
MM	03.6	J. DOLEGOWSKI			ROD									
N68711-89-D-9296		SOUTHWEST												
0006		DIVISION												
		G. MCCLAIN												

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guld. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001246	02-09-1996	BECHTEL	RESPONSE TO COMMENTS ON	ADMIN RECORD	FS	001	IRON MOUNTAIN							
	07-19-1995	NATIONAL	INVESTIGATION-DERIVED WASTE		IDWMP	002	80462352							
RPT	00059	J. KLEUSENER	MANAGEMENT PLAN PHASE II RI/FS		RI	003	IMAGED							
N6871192D467000	10.1	SOUTHWEST			TECH/GUID DOC.	004								
0002		DIVISION				005								
		J. ASHMAN				006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						019								
						020								
						021								
						022								
						024								
						025								
						OU 2								
						OU 3								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001248	02-09-1996	BECHTEL								RESPONSE TO COMMENTS FINAL HEALTH	ADMIN RECORD	COMMENTS	001	IRON MOUNTAIN
CTO-0059/0186	07-19-1995	NATIONAL, INC.								AND SAFETY PLAN SUPPLEMENT, PHASE II		FS	002	80462352
LTR	00059	D. COWSER								REMEDIAL INVESTIGATION/FEASIBILITY		GUID	003	IMAGED
N68711-92-D-4670	10.1	NAVFAC -								STUDY		H&SP	004	
0002		SOUTHWEST										RESPONSE	005	
		DIVISION										RJ	006	
		J. ASHMAN											007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													019	
													020	
													021	
													022	
													024	
													025	
													OU 2	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001249		02-09-1996	BECHTEL										FINAL INVESTIGATION-DERIVED WASTE	ADMIN RECORD	FS	001	IRON MOUNTAIN
		07-19-1995	NATIONAL										MANAGEMENT PLAN PHASE II RI/FS		IDWMP	002	80462352
LTR		00059	J. KLEUSENER												RI	003	IMAGED
N6871192D467000		03.6	SOUTHWEST												TECH/GUID DOC.	004	
0002			DIVISION													005	
			J. ASHMAN													006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 2	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001573	07-11-1996	BECHTEL								RESPONSE TO COMMENTS FROM DTSC	ADMIN RECORD	COMMENTS	001	BECHTEL
CTO-0059/0186	07-19-1995	NATIONAL, INC.								ON THE FINAL HEALTH AND SAFETY PLAN		GUID	002	NATIONAL
MISC	00059	D. COWSER								SUPPLEMENT, PHASE II REMEDIAL		H&SP	003	37041207
N68711-92-D-4670	10.1	NAVFAC -								INVESTIGATION/FEASIBILITY STUDY			004	IMAGED
0009		SOUTHWEST											005	
		DIVISION											006	
		J. ASHMAN											007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													019	
													020	
													021	
													022	
													024	
													025	
													OU 2	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001317	03-25-1996	BCT MEMBERS	BCT MEETING MINUTES FOR MEETING	ADMIN RECORD	BCT	001	BECHTEL							
	07-24-1995	VARIOUS	HELD 20 MARCH 1996 TO DISCUSS SITES		MTG MINS	002	NATIONAL							
MEMO	NONE	BECHTEL	24 AND 25, THE OU-3 FIELD WORK, AND		TECH/GUID DOC.	004	80462353							
NONE	02.7	NATIONAL	THE LANDFILL SITES			006	IMAGED							
0007		D. COWSER				007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						019								
						020								
						021								
						022								
						024								
						025								
						OU 2A								
						OU 2B								
						OU 3								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guld. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001193	01-22-1996	BECHTEL	FINAL FIELD SAMPLING PLAN PHASE II	ADMIN RECORD	FS	001	SOUTHWEST							
	08-01-1995	NATIONAL	RVFS		NFA	002	DIVISION							
PLAN	00059	T.W. LATAS			RI	003	SW02051702							
N68711-92-D-4670	03.3	SOUTHWEST			TECH/GUID DOC.	004	IMAGED							
1500		DIVISION				005								
						006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						018								
						020								
						021								
						022								
						024								
						025								
						OU 1								
						OU 2								
						OU 2A								
						OU 2B								
						OU 2C								
						OU 3								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001244	02-09-1996	BECHTEL	NATIONAL		08-01-1995	J. KLEUSENER				FINAL QUALITY ASSURANCE PROJECT PLAN, PHASE II RI/FS	ADMIN RECORD INFO REPOSITORY	FS NFA QAPP RI TECH/GUID DOC.	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 019 020 021 022 024 025 OU 2 OU 3	IRON MOUNTAIN 80462352 IMAGED
RPT N6871192D467000 0002	00059 01.1	SOUTHWEST DIVISION J. ASHMAN												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guld. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001245	02-09-1996	BECHTEL	COMPILED RESPONSE TO COMMENTS ON	ADMIN RECORD	COMMENTS	001	IRON MOUNTAIN							
	08-01-1995	NATIONAL, INC.	THE DRAFT QUALITY ASSURANCE	INFO	FS	002	80462352							
LTR	00059	J. KLEUSENER	PROJECT PLAN PHASE II REMEDIAL	REPOSITORY	NFA	003	IMAGED							
N68711-92-D-4670	10.1	NAVFAC -	INVESTIGATION/FEASIBILITY STUDY (SEE		QAPP	004								
0015		SOUTHWEST	AR #931 - EPA COMMENTS)		RESPONSE	005								
		DIVISION			RI	006								
		J. ASHMAN				007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						019								
						020								
						021								
						022								
						024								
						025								
						OU 2								
						OU 3								

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001373	03-19-1996	BECHTEL	FINAL QUALITY ASSURANCE PROJECT	ADMIN RECORD	NFA	001	BECHTEL							
	08-01-1995	NATIONAL	PLAN PHASE II RI/FS	INFO	QAPP	002	NATIONAL							
RPT	00059	D. COWSER		REPOSITORY	TECH/GUID DOC.	003	80462353							
N6871192D467000	03.4	SOUTHWEST				004	IMAGED							
0075		DIVISION				005								
		J. ASHMAN				006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						019								
						020								
						021								
						022								
						024								
						025								
						OU 2								
						OU 3								

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001465		05-21-1996	BECHTEL		08-01-1995	NATIONAL							FINAL RISK ASSESSMENT WORK PLAN (DOCUMENT SIGNED 8/29/95)	ADMIN RECORD	NFA	001	BECHTEL
RPT		00059	T. LATAS											INFO	RISK	002	NATIONAL
N6871192D467000		08.0	SOUTHWEST											REPOSITORY	TECH/GUID DOC.	003	37041204
0075			DIVISION													004	IMAGED
																005	
																006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																018	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 1	
																OU 2A	
																OU 2B	
																OU 2C	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001243		02-08-1996	BECHTEL										RESPONSE TO COMMENTS FOR WORK	ADMIN RECORD	COMMENTS	001	IRON MOUNTAIN
		08-09-1995	NATIONAL										PLAN AND FIELD SAMPLING PLAN PHASE II		FS	002	80462352
LTR		00059	J. KLEUSENER										RI/FS		NFA	003	IMAGED
N6871192D467000		10.1	SOUTHWEST												RI	004	
0002			DIVISION												TECH/GUID DOC.	005	
			J. ASHMAN													006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 2	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001296		03-13-1996	BECHTEL										BNI RESPONSE TO DTSC REVIEW	ADMIN RECORD	COMMENTS	001	IRON MOUNTAIN
		08-09-1995	NATIONAL										QUESTIONS CONCERNING		FS	002	80462352
LTR		00059	D. COWSER										FINAL INVESTIGATION DERIVED WASTE		IDWMP	003	IMAGED
N6871192D467000		02.7	DTSC REGION IV										MANAGEMENT PLAN FOR PHASE II RVFS		RI	004	
0001			J. JIMENEZ												TECH/GUID DOC.	005	
																006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																019	
																020	
																021	
																022	
																024	
																025	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001372	03-19-1996	BECHTEL								RESPONSE TO VARIOUS REGULATORS'	ADMIN RECORD	COMMENTS	001	BECHTEL
	06-09-1995	NATIONAL								COMMENTS FOR WORK PLAN AND FIELD		FS	002	NATIONAL
MISC	00059	D. COWSER								SAMPLING PLAN PHASE II RVFS		RI	003	80462353
N6871192D467000	10.1	SOUTHWEST										TECH/GUID DOC.	004	IMAGED
0050		DIVISION											005	
		J. ASHMAN											006	
													007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													019	
													020	
													021	
													022	
													024	
													025	
													OU 2	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001242		02-08-1996	BECHTEL										FINAL FIELD SAMPLING PLAN PHASE II	ADMIN RECORD	FS	001	IRON MOUNTAIN
		08-16-1995	NATIONAL										R/FS	INFO	NFA	002	80462352
RPT		00059	D. COWSER											REPOSITORY	RI	003	IMAGED
N68711920467000		03.2	SOUTHWEST												TECH/GUID DOC.	004	
0002			DIVISION													005	
			J. ASHMAN													006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 2	
																OU 3	
M60050 / 000972		08-29-1995	SOUTHWEST										APPROACH TO INVESTIGATION &	ADMIN RECORD	VOC	OU 1	BECHTEL
		08-21-1995	DIVISI										REMEDICATION OF REGIONAL VOC			OU 2	NATIONAL
LTR		NONE	J.R. PAWLISCH										GROUNDWATER CONTAMINATION IN OU 1			OU 3	80462347
NONE		04.5	EPA SAN										IAFS			OU 4	IMAGED
0013			FRANCISC														
			J. ANDERSON														

UIC No. / Rec. No.	Doc. Control No.	Prd. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001297	03-13-1996	US EPA REGION IX	EPA LETTER STATING CONCERN OVER PLANS TO CONDUCT CPT SOIL GAS TESTING AND HYDROPUNCH SAMPLING BEFORE APPROVAL OF PHASE II RI/FS, QAPP AND FSP	ADMIN RECORD	08-25-1995	B. ARTHUR					FS		001	IRON MOUNTAIN
LTR	00059	MCAS EL TORO				J. JOYCE					NFA		002	80462352
NONE	02.7										QAPP		003	IMAGED
0001											RI		004	
													005	
													006	
													007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													019	
													020	
													021	
													022	
													024	
													025	
M60050 / 001339	03-18-1996	BECHTEL NATIONAL, INC.	30 AUGUST 1995 MINUTES FOR WEEKLY BASE CLEANUP TEAM MEETING HELD TO DISCUSS FINDINGS AND DECISIONS FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY	ADMIN RECORD		T. LATAS					BCP		002	BECHTEL
CTO-0076/0029	08-30-1995					NAVFAC - SOUTHWEST DIVISION					BCT		003	NATIONAL
MISC	00076										BRAC		005	80462353
N68711-92-D-4670	03.6										FS		017	IMAGED
0007											GUID		024	
											LF		025	
											MAG RD LANDFIL			
											NFA			
											RI			

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001053	12-11-1995	EPA SAN FRANCISC	COMMENTS ON THE FINAL QUALITY ASSURANCE PROJECT PLAN	ADMIN RECORD	COMMENTS	OU 2	BECHTEL							
	09-05-1995	B. ARTHUR			QAPP	OU 2A	NATIONAL							
LTR	NONE	MCAS EL TORO			TECH/GUID DOC.	OU 2B	80462364							
NONE	01.6	J. JOYCE				OU 2C	IMAGED							
0003						OU 3								
M60050 / 001054	12-11-1995	EPA SAN FRANCISC	COMMENTS ON THE INTERIM OU1 RI REPORT DRAFT ADDENDUM	ADMIN RECORD	COMMENTS	018	BECHTEL							
	09-05-1995	B. ARTHUR			RI	OU 1	NATIONAL							
LTR	NONE	MCAS EL TORO					80462364							
NONE	03.6	J. JOYCE					IMAGED							
0002														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001239	02-08-1996	BECHTEL								RESPONSE TO COMMENTS DOCUMENT,	ADMIN RECORD	COMMENTS	001	IRON MOUNTAIN
	09-06-1995	NATIONAL								PREPARED IN CONJUNCTION WITH THE		FS	002	80462352
LTR	00059	J. KLEUSENER								FINAL RISK ASSESSMENT WORK PLAN		NFA	003	IMAGED
N6871192D467000	10.1	SOUTHWEST								PHASE II R/FS		RI	004	
0003		DIVISION										RISK	005	
		P. KENNEDY										TECH/GUID DOC.	006	
													007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													019	
													020	
													021	
													022	
													024	
													025	
													OU 2	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001240	02-08-1996	BECHTEL	NATIONAL		09-06-1995	J. KLEUSENER				FINAL RISK ASSESSMENT WORK PLAN PHASE II RI/FS	ADMIN RECORD	FS	001	IRON MOUNTAIN
LTR	00059	SOUTHWEST	DIVISION			J. ASHMAN						RI	002	80462352
N6871192D467000	08.2											TECH/GUID DOC.	003	IMAGED
0002													004	
													005	
													006	
													007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													019	
													020	
													021	
													022	
													024	
													025	
													OU 2	
													OU 3	
M60050 / 001341	03-18-1996	BECHTEL	NATIONAL, INC.		09-06-1995	T. LATAS				MEETING MINUTES FOR 6 SEPTEMBER 1994 WEEKLY BRAC CLEANUP TEAM MEETING HELD TO DISCUSS FINDINGS AND DECISIONS REGARDING REMEDIAL INVESTIGATION/FEASIBILITY STUDY	ADMIN RECORD	BCP	002	BECHTEL
CTO-0076/0044												BCT	003	NATIONAL
MM	00076	NAVFAC -	SOUTHWEST									BRAC	004	80462353
N68711-92-D-4670	03.6	DIVISION										FS	005	IMAGED
0007												GUID	017	
												MTG MINS	024	
												NFA	025	
												RI		

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001353		03-18-1996	BECHTEL										FINAL TECHNICAL NOTES/COMMENTS ON	ADMIN RECORD	COMMENTS	001	BECHTEL
		09-06-1995	NATIONAL										DRAFT RI/FS EVALUATION OF		FS	002	NATIONAL
MISC		00080	D. TEDALDI										BACKGROUND CONCENTRATIONS OF		GW	003	80462353
N6871192D467000		03.6	SOUTHWEST										INORGANIC CONSTITUENTS IN		RI	004	IMAGED
0001			J. ASHMAN										GROUNDWATER CLEAN I PHASE I RI/FS		TECH/GUID DOC.	005	
																006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																019	
																020	
																021	
																022	
																024	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001370		03-19-1996	BECHTEL										FINAL RISK ASSESSMENT WORK PLAN	ADMIN RECORD	FS	001	BECHTEL
		09-06-1995	NATIONAL										PHASE II RI/FS	INFO	NFA	002	NATIONAL
RPT		00059	D. COWSER											REPOSITORY	RI	003	80462353
N6871192D467000		08.0	SOUTHWEST												RISK	004	IMAGED
0130			DIVISION												TECH/GUID DOC.	005	
			J. ASHMAN													006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 2	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001371	03-19-1996	BECHTEL	NATIONAL		09-06-1995	D. COWSER				RESPONSES TO VARIOUS AGENCIES COMMENTS ON THE FINAL RISK ASSESSMENT WORKPLAN FOR PHASE II	ADMIN RECORD	COMMENTS	001	BECHTEL
MISC	00059	SOUTHWEST	DIVISION			J. ASHMAN				RI/FS		FS	002	NATIONAL
N6871192D467000	10.1											NFA	003	80462353
0020												RI	004	IMAGED
												RISK	005	
												TECH/GUID DOC.	006	
													007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													019	
													020	
													021	
													022	
													024	
													025	
													OU 2	
													OU 3	
M60050 / 001569	07-11-1996	BECHTEL	NATIONAL		09-06-1995	K. LYONS				MINUTES FROM BRAC CLEANUP TEAM (BCT) MEETING HELD TO DISCUSS FINDINGS OF OU-2 FIELD INVESTIGATIONS, SCHEDULE OF UPCOMING INVESTIGATIONS, AND BCT DECISIONS	ADMIN RECORD	BCT	002	BECHTEL
MM	NONE	BCT MEMBERS										MTG MINS	003	NATIONAL
NONE	01.1											NFA	005	37041207
0005												TECH/GUID DOC.	017	IMAGED
													024	
													025	
													OU 2	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001337	03-18-1996	BECHTEL	11 SEPTEMBER 1995 MEETING MINUTES	ADMIN RECORD	FS	001	BECHTEL										BECHTEL
CTO-0076/0028	09-11-1995	NATIONAL, INC.	REGARDING THE INFORMAL		GUID	002	NATIONAL										80462353
MM	00076	M. DALRYMPLE	CONSULTATION FOR THE PHASE II		MTG MINS	003	80462353										IMAGED
N68711-92-D-4670	03.6	NAVFAC -	REMEDIAL INVESTIGATION/FEASIBILITY		RI	004											
0015		SOUTHWEST	STUDY FIELD ACTIVITIES IN THE			005											
		DIVISION	CONSERVATION AREA			006											
		J. ASHMAN				007											
						008											
						009											
						010											
						011											
						012											
						013											
						014											
						015											
						016											
						019											
						020											
						021											
						022											
						OU 1											
						OU 2											
						OU 3											
M60050 / 001340	03-18-1996	BECHTEL	MEETING MINUTES FOR 13 SEPTEMBER	ADMIN RECORD	BCP	002	BECHTEL										BECHTEL
CTO-0076/0043	09-13-1995	NATIONAL, INC.	1995 BRAC CLEANUP TEAM MEETING TO		BCT	003	NATIONAL										80462353
MM	00076	T. LATAS	DISCUSS FINDINGS AND DISCUSSIONS		BRAC	005	80462353										IMAGED
N68711-92-D-4670	03.6	NAVFAC -	FOR REMEDIAL		FS	017											
0015		SOUTHWEST	INVESTIGATION/FEASIBILITY STUDY		GUID	024											
		DIVISION			LF	025											
					MAG RD LANDFIL												
					MTG MINS												
					NFA												
					RI												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001300		03-14-1996	US EPA REGION IX		09-15-1995								US EPA COMMENTS ON THE MCAS EL TORO FINAL WORK PLAN AND FIELD SAMPLING PLAN PHASE II RI/FS	ADMIN RECORD	COMMENTS	001	IRON MOUNTAIN
MISC		NONE															80462352
NONE		03.6	BECHTEL NATIONAL												FS	002	IMAGED
0001			D. COWSER												NFA	003	
															RI	004	
															TECH/GUID DOC.	005	
																006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																019	
																020	
																021	
																022	
																024	
																025	
M60050 / 001058		12-11-1995	EPA SAN FRANCISCO		09-18-1995								COMMENTS ON THE INTERIM OU1 RI REPORT DRAFT ADDENDUM ARE CONTAINED IN THE SEPTEMBER 5, 1995 LETTER	ADMIN RECORD	COMMENTS	018	BECHTEL NATIONAL
LTR		NONE	B. ARTHUR														80462364
NONE		03.6	SOUTHWEST DIVISION														IMAGED
0001			J. JOYCE														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location
Constr./Guid. No.	CTO No.	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Box No.		
Approx. # Pages	EPA Cat. #									
M60050 / 001059	12-11-1995	EPA SAN FRANCISCO	COMMENTS ON THE FINAL PHASE II RI/FS WORKPLAN AND FIELD SAMPLING PLAN IN EITHER REVISED PAGES OR BY ADDENDUM	ADMIN RECORD	COMMENTS	003	BECHTEL NATIONAL			
LTR	09-19-1995	B. ARTHUR			NFA	007	80462364			
NONE	NONE	SOUTHWEST DIVISION			RI	012	IMAGED			
0002	03.3	J. JOYCE			TECH/GUID DOC.	024				
						OU 2				
						OU 2A				
						OU 3				
M60050 / 001060	12-11-1995	NAVFAC - SOUTHWEST DIVISION	RESPONSE TO REQUEST OF AUGUST 18, 1995 ON THE DRAFT FEASIBILITY STUDY ALTERNATIVE DESCRIPTIONS AND ASSOCIATED COST ESTIMATES	ADMIN RECORD	COST	018	BECHTEL NATIONAL			
LTR	09-19-1995	W.A. DOS SANTOS			FS	OU 1	80462364			
NONE	NONE	ORANGE COUNTY WATER DISTRICT					IMAGED			
0012	04.5	W.R. MILLS								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001356		03-18-1996	BECHTEL										SUBMITTAL OF BECHTEL'S FINAL NOTES REGARDING RESPONSE TO COMMENTS	ADMIN RECORD	COMMENTS	001	BECHTEL
		09-20-1995	NATIONAL										DOCUMENT PREPARED IN CONJUNCTION WITH THE FINAL RISK ASSESSMENT		FS	002	NATIONAL
LTR		00080	D. TEDALDI										WORK PLAN PHASE II RI/FS		RI	003	80462353
N6871192D467000		08.3	VARIOUS AGENCIES												RISK	004	IMAGED
0028															TECH/GUID DOC.	005	
																006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																018	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 1	
																OU 2	
																OU 3	
M60050 / 001188		01-22-1996	JACOBS										FINAL TEMPORARY SITE FACILITIES OPERATION AND MAINTENANCE MANUAL	ADMIN RECORD	GUID	OU 1	BECHTEL
		09-22-1995	ENGINEERING										REVISION 0				NATIONAL
RPT		00145	M. BITNER														80462350
N68711-89-D-9296		01.1	NAVFAC - SOUTHWEST DIVISION														IMAGED
0750																	

UIC No. / Rec. No.	Doc. Control No.	Prs. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location
Approx. # Pages	EPA Cat. #	Recipient												Box No.
M60050 / 001061	12-11-1995 09-26-1995	EPA SAN FRANCISCO	EPA'S LTR OF 9/5/95 FORWARDED COMMENTS REGARDING THE DRAFT R/FS EVALUATION OF BACKGROUND CONCENTRATIONS OF INORGANIC CONSTITUENTS IN GW NOT THE DRAFT ADDENDUM	LTR NONE 0001	NONE 01.6	B. ARTHUR MCAS EL TORO J. JOYCE					ADMIN RECORD	COMMENTS IOG TECH/GUID DOC.	018 OU 1	BECHTEL NATIONAL 80462364 IMAGED
M60050 / 001073	12-11-1995 09-29-1995	DTSC LONG BEACH	COMMENTS ON THE DRAFT OU1 BASELINE HUMAN HEALTH RISK ASSESSMENT REPORT	LTR NONE 0008	NONE 01.6	A.A. ARELLANO MCAS EL TORO W.D. LEE					ADMIN RECORD	COMMENTS HRA	018 OU 1	BECHTEL NATIONAL 80462364 IMAGED
M60050 / 001232	01-31-1996 10-04-1995	BECHTEL NATIONAL	RESPONSE TO COMMENTS ON TECHNICAL REVIEW OF EE/CA FOR VARIOUS SITES PHASE II R/FS	LTR N6871192D467000 0018	00059 10.1	J. KLEUSENER SOUTHWEST DIVISION P. KENNEDY					ADMIN RECORD	COMMENTS EE/CA FS RI	001 004 006 007 008 009 010 011 012 013 014 015 016 019 020 021 022 OU 1 OU 2 OU 3	SOUTHWEST DIVISION 37041206* IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Subject	Classification	Keywords	Sites	Location Box No.	
M60050 / 001064	12-11-1995	10-05-1995	EPA SAN FRANCISCO	LTR	NONE	COMMENTS ON THE FINAL RISK ASSESSMENT WORK PLAN	ADMIN RECORD	COMMENTS RISK	018 OU 1	BECHTEL NATIONAL 80462364 IMAGED	
NONE 0004	03.6		B. ARTHUR SOUTHWEST DIVIIS J. JOYCE								
M60050 / 001006	10-23-1995	10-15-1995	JACOBS ENGINEERING GROUP	CLE-C01-01F145-B7-0010	00145	DRAFT RI/FS OU 1 INTERIM- ACTION FEASIBILITY REPORT [VOLUME VII OF OU-1 RI/IAFS REPORT, APPENDICES B THROUGH J] (SEE AR #648, #696, #1007 AND #1008; SUPERCEDES AR #858 AND #869)	ADMIN RECORD	FS GW TCE VOC	OU 1	BECHTEL NATIONAL 80462348 IMAGED	
RPT N68711-89-D-9296 0650	04.2		J. DOLEGOWSKI NAVFAC - SOUTHWEST DIVISION								
M60050 / 001007	10-23-1995	10-15-1995	JACOBS ENGINEERING GROUP	CLE-C01-01F145-B7-0010	00145	DRAFT RI/FS OU 1 INTERIM- ACTION FEASIBILITY REPORT [VOLUME VI OF OU-1 RI/IAFS REPORT, APPENDIX A - GROUNDWATER MODELING REPORT] (SEE AR #648, #696, #1006 AND #1008; SUPERCEDES AR #858 AND AR #869)	ADMIN RECORD	FS GW TCE VOC	OU 1	BECHTEL NATIONAL 80462348 IMAGED	
RPT N68711-89-D-9296 0950	04.2		J. DOLEGOWSKI SOUTHWEST DIVISION								
M60050 / 001008	10-23-1995	10-15-1995	JACOBS ENGINEERING GROUP	CLE-C01-01F145-B7-0010	00145	DRAFT RI/FS OU 1 INTERIM- ACTION FEASIBILITY REPORT [VOLUME IV OF OU-1 RI/IAFS REPORT] (SEE AR #648, #696, #1006, #1007; SUPERCEDES AR #858 AND #869)	ADMIN RECORD	FS GW TCE VOC	OU 1	BECHTEL NATIONAL 80462348 IMAGED	
RPT N68711-89-D-9296 0650	04.2		J. DOLEGOWSKI NAVFAC - SOUTHWEST DIVISION								

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001377		03-19-1996	BECHTEL										SUBMITTAL OF BECHTEL'S REVIEW	ADMIN RECORD	DMP	001	BECHTEL
		10-18-1995	NATIONAL										COMMENTS ON DRAFT QAPP, SAP, AND		GW	002	NATIONAL
MISC		00080	D. TEDALDI										DATA MANAGEMENT PLAN FOR		IDWMP	003	80462353
N6871192D467000		10.1	SOUTHWEST										GROUNDWATER MONITORING		QAPP	004	IMAGED
0009			P. KENNEDY												SAP	005	
															TECH/GUID DOC.	006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 2	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location
Confr./Guid. No.	CTO No.	CTO No.	Recipient	Subject	Classification	Keywords	Sites	Location	Box No.		
Approx. # Pages	EPA Cat. #	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location	Box No.		
M60050 / 001363	03-18-1996	03-18-1996	BECHTEL	LETTER INITIATING ECOLOGICAL RISK	ADMIN RECORD	ERA	001	BECHTEL			
CTO-0076/0054	10-23-1995	10-23-1995	NATIONAL, INC.	ASSESSMENT AS PART OF THE PHASE II		FS	002	NATIONAL			
LTR	00076	00076	D. COWSER	REMEDIAL INVESTIGATION/FEASIBILITY		GUID	003	80462353			
N68711-92-D-4670	03.6	03.6	NAVFAC -	STUDY		RI	004	IMAGED			
0001			SOUTHWEST			RISK	005				
			DIVISION				006				
			P. KENNEDY				007				
							008				
							009				
							010				
							011				
							012				
							013				
							014				
							015				
							016				
							017				
							019				
							020				
							021				
							022				
							024				
							025				
							OU 2				
							OU 3				
M60050 / 001050	12-11-1995	12-11-1995	JACOBS	RESPONSE TO COMMENTS REGARDING	ADMIN RECORD	COMMENTS	018	BECHTEL			
	10-31-1995	10-31-1995	ENGINEERING	DRAFT OU 1 INTERIM ACTION FEASIBILITY		FS	OU 1	NATIONAL			
RPT	00145	00145	J. DOLEGOWSKI	STUDY REPORT OF 01 SEPTEMBER 1994,		RESPONSE		80462364			
N68711-89-D-9296	04.5	04.5	NAVFAC -	REVISION 0				IMAGED			
0150			SOUTHWEST								
			DIVISION								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001237	02-08-1996	BECHTEL	RESPONSE TO COMMENTS FOR FINAL	ADMIN RECORD	COMMENTS	001	IRON MOUNTAIN							
	11-06-1995	NATIONAL	QUALITY ASSURANCE PROJECT PLAN		FS	002	80462352							
LTR	00059	D. COWSER	PHASE II RI/FS		NFA	003	IMAGED							
N6871192D467000	10.1	SOUTHWEST			QAPP	004								
0008		DIVISION			RI	005								
		P. KENNEDY			TECH/GUID DOC.	006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						019								
						020								
						021								
						022								
						024								
						025								
						OU 2								
						OU 3								
M60050 / 001196	01-23-1996	DTSC LONG	COMMENTS ON DRAFT HEALTH AND	ADMIN RECORD	COMMENTS	OU 1	SOUTHWEST							
	11-17-1995	BEACH	SAFETY PLAN, DRAFT QUALITY		DMP		DIVISION							
LTR	00145	J. JIMENEZ	ASSURANCE PLAN, DRAFT SAMPLING AND		IDWMP		37041206*							
NONE	01.6	MCAS EL TORO	ANALYSIS PLAN, DRAFT DATA		QA		IMAGED							
0002		J. JOYCE	MANAGEMENT PLAN AND INVESTIGATION		SAP									
			DERIVED WASTE MANAGEMENT PLAN											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001228	01-31-1996	BECHTEL								RESPONSE TO COMMENTS FOR MCAS	ADMIN RECORD	COMMENTS	001	SOUTHWEST
CTO-0063/0181	11-21-1995	NATIONAL, INC.								TUSTIN AND MCAS EL TORO DRAFT		CRP	002	DIVISION
LTR	00063	H. MASRI								REVISED COMMUNITY RELATIONS PLAN		RESPONSE	003	37041206*
N68711-92-D-4670	10.1	NAVFAC -											004	IMAGED
0020		SOUTHWEST											005	
		DIVISION											006	
		P. KENNEDY											007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													018	
													019	
													020	
													021	
													022	
													023	
													024	
													025	
													OU 1	
													OU 2	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000232	12-27-1999	BECHTEL	DRAFT - WORK PLAN FOR AIR SPARGING	ADMIN RECORD	AIR	024	SOUTHWEST							
CTO-0073/0058	11-27-1995	NATIONAL INC	PILOT TESTING		GW		DIVISION							
PLAN	00073	G. BROOKS			MONITORING		SW01011003							
N68711-92-D-4670	03.3	VARIOUS			SOIL									
0030		AGENCIES			TCE									
					VOCS									
					WELLS									
					WORK PLAN									
M60050 / 001236	02-08-1996	BECHTEL	RESPONSE TO COMMENTS FOR DRAFT	ADMIN RECORD	NFA	001	IRON MOUNTAIN							
	11-27-1995	NATIONAL	FINAL WORKPLAN AND FIELD SAMPLING		RI	002	80462352							
LTR	00059	D. COWSER	PLAN PHASE II RI/FS		TECH/GUID DOC.	003	IMAGED							
N6871192D467000	10.1	SOUTHWEST				004								
0008		DIVISION				005								
		P. KENNEDY				006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						019								
						020								
						021								
						022								
						024								
						025								
						OU 2								
						OU 3								

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001177		12-26-1995 11-29-1995	JACOBS ENGINEERING				RESPONSE TO COMMENTS RECEIVED FROM THE DTSC AND EPA REGARDING THE RI/FS DRAFT OU1 BASELINE HUMAN HEALTH RISK ASSESSMENT REPORT OF 01 JULY 1994	ADMIN RECORD	COMMENTS HRA NFA	OU 1	BECHTEL NATIONAL 80462350 IMAGED
LTR N6871189D929600 0010		00145 01.1	SOUTHWEST DIVISION A. BARKER								
M60050 / 001185		01-22-1996 12-01-1995	BECHTEL NATIONAL, INC. J. LORD				DRAFT FINAL ADDENDUM TO THE RCRA FACILITY ASSESSMENT (VOLUME 6 OF THE FINAL RFA REPORT)	ADMIN RECORD	RCRA RFA	OU 1 SWMU 131 SWMU 165 SWMU 171 SWMU 229 SWMU 244 SWMU 260 SWMU 264 SWMU 39 SWMU 46 SWMU 7 SWMU 88 SWMU 9	BECHTEL NATIONAL 80462350
CTO-0065/0103 RPT N68711-92-D-4670 0350		00065 01.1	NAVFAC - SOUTHWEST DIVISION								
M60050 / 001115		12-22-1995 12-13-1995	OCWD FOUNTAIN VALLEY W.R. MILLS				COMMENTS FROM ORANGE COUNTY WATER DISTRICT ON THE DRAFT INITIAL ASSESSMENT FEASIBILITY STUDY REPORT	ADMIN RECORD	COMMENTS FS IAS	OU 1	BECHTEL NATIONAL 80462349 IMAGED
LTR NONE 0028		NONE 01.6	NAVFAC - SOUTHWEST DIVISION A. PISZKIN								
M60050 / 001202		01-23-1996 12-13-1995	OCWD - IRVINE W. MILLS				ORANGE COUNTY WATER DISTRICT COMMENTS ON THE DRAFT INTERIM ACTION FEASIBILITY STUDY REPORT	ADMIN RECORD	COMMENTS FS	018 OU 1	SOUTHWEST DIVISION 37041206* IMAGED
LTR NONE 0028		NONE 05.4	NAVFAC - SOUTHWEST DIVISION A. PISZKIN								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001195 CLE-J02-01F145-S1-0010 LTR N68711-89-D-9296 0021	01-23-1996 12-15-1995 00145 10.1	JACOBS ENGINEERING J. DOLEGOWSKI NAVFAC - SOUTHWEST DIVISION A. BARKER	AGENCY & RESTORATION ADVISORY BOARD REVIEW OF THE DRAFT PROPOSED PLAN	ADMIN RECORD	GW HRA RAB	OU 1	SOUTHWEST DIVISION 37041206* IMAGED							
M60050 / 002632 NONE MISC NONE 0018	05-21-2002 12-15-1995 NONE	DTSC - LONG BEACH J. JIMENEZ MCAS EL TORO J. JOYCE	COMMENTS ON THE DRAFT SECOND INTERIM ACTION OPERABLE UNIT 1 FEASIBILITY STUDY REPORT (INCLUDED ALSO ARE COMMENTS FROM CRWQCB) (SEE AR #1006-1008 - DRAFT IAFS REPORT)	ADMIN RECORD BASE	ARAR COMMENTS DATA FS GW HAZ WASTE RCRA TCE VOC WATER WELLS	018 024 OU 1	SOUTHWEST DIVISION							
M60050 / 002633 NONE MISC NONE 0012	05-21-2002 12-15-1995 NONE	US EPA - SAN FRANCISCO B. ARTHUR MCAS EL TORO J. JOYCE	COMMENTS ON THE DRAFT SECOND INTERIM ACTION OPERABLE UNIT 1 FEASIBILITY STUDY REPORT (SEE AR #1006-1008 - IAFS REPORT)	ADMIN RECORD BASE	AOC ARAR BCT BRAC COMMENTS FS GW METALS PRG ROD SOIL SVE TCE VOC WATER WELLS	018 024 OU 1 OU 3	SOUTHWEST DIVISION							

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002634 NONE MISC NONE 0003	05-21-2002 12-18-1995 NONE	CITY OF IRVINE P. HERSH MCAS EL TORO OU-1 SUB-COMMITTEE	COMMENTS ON THE DRAFT INTERIM ACTION OPERABLE UNIT 1 FEASIBILITY STUDY REPORT (SEE AR #1006-1008 - IAFS REPORT)	ADMIN RECORD BASE	COMMENTS COST FS GW RAB ROD TCE VOC	018 OU 1	SOUTHWEST DIVISION							
M60050 / 002635 NONE LTR NONE 0002	05-21-2002 01-03-1996 NONE	ORANGE COUNTY WATER DISTRICT W. MILLS US CONGRESSMEN C. COX & R. DORNAN	INFORMATION REGARDING THE CLEANUP ALTERNATIVES OF GROUNDWATER TCE CONTAMINATION - THE REGULATORS MAY ALLOW TCE CONTAMINATION AT OVER SIX TIMES THE FEDERAL AND STATE DRINKING WATER LIMITS WITH NO REMEDIATION NECESSARY	ADMIN RECORD BASE	DRINKING WATE GW TCE	018 OU 1	SOUTHWEST DIVISION							
M60050 / 002636 NONE LTR NONE 0002	05-22-2002 01-12-1996 NONE	ORANGE COUNTY WATER DISTRICT W. MILLS SARWQCB & DTSC G. THIBEAULT & J. SCANDURA	QUERY AS TO WHETHER EPA'S COMMENTS IN REGARD TO A POSSIBLE NO-ACTION ALTERNATIVE FOR THE PRINCIPAL AQUIFER ARE IN COMPLIANCE WITH STATE APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS)	ADMIN RECORD BASE	ARAR COMMENTS DRINKING WATE GW TCE	018 OU 1	SOUTHWEST DIVISION							
M60050 / 001620 LTR NONE 0001	09-04-1996 01-17-1996 NONE 01.6	EPA SAN FRANCISC B. ARTHUR MCAS EL TORO J. JOYCE	EXTENSION OF COMMENT PERIOD OF THE DRAFT OU1 INTERIM- ACTION PROPOSED PLAN FOR AN ADDITIONAL 30 DAYS	ADMIN RECORD INFO REPOSITORY	COMMENTS	OU 1	BECHTEL NATIONAL 80462358 IMAGED							

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001466	05-21-1996	BECHTEL	DRAFT 1996 BASE REALIGNMENT AND	ADMIN RECORD	BCP	001	BECHTEL										BECHTEL
CTO-00103/0045	01-22-1996	NATIONAL, INC.	CLOSURE CLEANUP PLAN		BCT	002	NATIONAL										NATIONAL
RPT	00103	D. COWSER			BRAC	003	80462357										IMAGED
N68711-92-D-4670	03.3	NAVFAC -				004											
0300		SOUTHWEST				005											
		DIVISION				006											
		P. KENNEDY				007											
						008											
						009											
						010											
						011											
						012											
						013											
						014											
						015											
						016											
						017											
						018											
						019											
						020											
						021											
						022											
						024											
						025											
						OU 1											
						OU 2A											
						OU 2B											
						OU 2C											
						OU 3											

UIC No. / Rec. No.	Doc. Control No.	Prd. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001378	03-19-1996	BECHTEL	MEETING MINUTES FROM 24 JANUARY	ADMIN RECORD	BCP	001	BECHTEL							
	01-29-1996	NATIONAL	1996 WEEKLY BCT BRIEFING FOR PHASE II		FS	002	NATIONAL							
MISC	00079	D. COWSER	R/FS		MTG MINS	003	80462353							
N6871192D467000	03.6	SOUTHWEST			RI	004	IMAGED							
0002		P. KENNEDY			TECH/GUID DOC.	005								
						006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						019								
						020								
						021								
						022								
						024								
						025								
						OU 2								
						OU 3								
M60050 / 001269	02-21-1996	BECHTEL	DRAFT PHASE II REMEDIAL	ADMIN RECORD	OU	024	BECHTEL							
CTO-0073/0080	02-01-1996	NATIONAL, INC.	INVESTIGATION REPORT OPERABLE UNIT	INFO	RI	025	NATIONAL							
RPT	00073	P. BROOKS	2A - VOC SOURCE AREA (SEE AR #489 -	REPOSITORY	VOC	OU 2A	SW00120601							
N68711-92-D-4670	03 0	NAVFAC -	EPA CONTRACTOR COMMENTS, #2639 -											
0250		SOUTHWEST	DTSC & CRWQCB COMMENTS, AND #2640 -											
		DIVISION	EPA COMMENTS)											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001270	02-21-1996	BECHTEL	DRAFT PHASE II REMEDIAL	ADMIN RECORD	OU	024	BECHTEL							
	02-01-1996	NATIONAL	INVESTIGATION REPORT OPERABLE UNIT	INFO	RI	025	NATIONAL							
RPT	00073	P. BROOKS	2A - SITE 24 VOLUME II APPENDICES A-I	REPOSITORY		OU 2A	SW00120601							
N68711-92-D-4670	03.0	SOUTHWEST												
0250		DIVISION												
M60050 / 001271	02-21-1996	BECHTEL	DRAFT PHASE II REMEDIAL	ADMIN RECORD	OU	024	BECHTEL							
	02-01-1996	NATIONAL	INVESTIGATION REPORT OPERABLE UNIT	INFO	RI	025	NATIONAL							
RPT	00073	P. BROOKS	2A - SITE 24 VOLUME III APPENDIX J	REPOSITORY		OU 2A	SW00120601							
N68711-92-D-4670	03.0	SOUTHWEST												
0250		DIVISION												
M60050 / 001272	02-21-1996	BECHTEL	DRAFT PHASE II REMEDIAL	ADMIN RECORD	OU	024	BECHTEL							
	02-01-1996	NATIONAL	INVESTIGATION REPORT OPERABLE UNIT	INFO	RI	025	NATIONAL							
RPT	00073	P. BROOKS	2A - SITE 24 VOLUME IV APPENDICES K-P	REPOSITORY		OU 2A	SW00120601							
N68711-92-D-4670	03.0	SOUTHWEST												
0250		DIVISION												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001276	03-12-1996	BECHTEL								MINUTES OF 30 JANUARY 1996 WEEKLY	ADMIN RECORD	BCP	001	IRON MOUNTAIN
	02-06-1996	NATIONAL, INC.								BRAC CLEANUP TEAM (BCT) MEETING FOR		BCT	002	80462352
MM	NONE	D. COWSER								PHASE II REMEDIAL		BRAC	003	IMAGED
N68711-92-D-4670	11.3	NAVFAC -								INVESTIGATIONFEASIBILITY STUDY (R/FS)		GUID	004	
0020		SOUTHWEST										MTG MINS	005	
		DIVISION										NFA	006	
		P. KENNEDY											007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													019	
													020	
													021	
													022	
													024	
													025	
													OU 2	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location Box No.		
Approx. # Pages	EPA Cat. #									
M60050 / 001397	03-20-1996	BECHTEL	MEETING MINTUES FOR THE 30 JANUARY	ADMIN RECORD	BCP	001	BECHTEL			
	02-06-1996	NATIONAL	1996 WEEKLY BASE CLEANUP TEAM		MTG MINS	004	NATIONAL			
MISC	00079	D. COWSER	BRIEFING HELD TO DISCUSS OU3, THE		TECH/GUID DOC.	006	80462354			
N6871192D467000	05.4	SOUTHWEST	BCP, OU2A, AND THE LANDFILL SITES AND			007	IMAGED			
0019		DIVISION	MEETING MATERIALS			008				
		P. KENNEDY				009				
						010				
						011				
						012				
						013				
						014				
						015				
						016				
						019				
						020				
						021				
						022				
						024				
						025				
						OU 2A				
						OU 3				
M60050 / 001477	05-21-1996	ORANGE	ORANGE COUNTY WATER DISTRICT'S	ADMIN RECORD	COMMENTS	018	BECHTEL			
	02-08-1996	COUNTY WATER	RESPONSE TO COMMENTS ISSUED IN		FS	OU 1	NATIONAL			
LTR	00065	DISTRICT	DECEMBER 1995 BY EPA, DTSC, AND		GW		80462357			
NONE	10.1	W. MILLS	CALIFORNIA RWQCB ON THE INTERIM		RESPONSE		IMAGED			
0002		NAVFAC -	ACTION FEASIBILITY STUDY FOR OU 1							
		SOUTHWEST								
		DIVISION								
		W. DOS SANTOS								
M60050 / 001481	05-21-1996	NAVFAC -	LETTER REGARDING DEPARTMENT OF	ADMIN RECORD	FS	018	BECHTEL			
	02-13-1996	SOUTHWEST	THE NAVY PLANNED APPROACH FOR		OU	OU 1	NATIONAL			
LTR	NONE	DIVISION	DRAFT FINAL INTERIM ACTION				80462357			
NONE	04.0	W. DOS SANTOS	FEASIBILITY STUDY FOR OPERABLE UNIT 1				IMAGED			
0004		US EPA REGION								
		IX								
		J. ANDERSON								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Reclpent Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001399	03-20-1996	BECHTEL								MEETING MINTUES 07 FEBRUARY 1996	ADMIN RECORD	BCP	001	BECHTEL
	02-14-1996	NATIONAL								WEEKLY BCT BRIEFING HELD TO DISCUSS		MTG MINS	002	NATIONAL
MISC	00079	D. COWSER								OU3, THE BCP, LANDFILL SITES, OU2A,		NFA	004	80462354
N6871192D467000	05.4	SOUTHWEST								OU2B		TECH/GUID DOC.	007	IMAGED
0003		P. KENNEDY											008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													019	
													020	
													021	
													022	
													024	
													025	
													OU 2A	
													OU 2B	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Classification	Keywords	Sites	Location
Approx. # Pages	EPA Cat. #	Recipient	Subject										Box No.
M60050 / 001472	05-21-1996	US EPA REGION I	US EPA LETTER TRANSMITTING	ADMIN RECORD	COMMENTS	018	BECHTEL						
	02-16-1996	B. ARTHUR	COMMENTS ON THE DRAFT OU 1 INTERIM		DRINKING WATE	024	NATIONAL						
LTR	NONE	MCAS EL TORO	PROPOSED PLAN		FS	OU 1	80462357						
NONE	10.1	J. JOYCE			GW	OU 2A	IMAGED						
0005					MW								
					NCP								
					PROPOSED PLAN								
					ROD								
					SOLVENTS								
					TCE								
					VOC								
					WATER								
					WELLS								
M60050 / 002637	05-22-2002	DTSC - LONG	COMMENTS ON THE DRAFT OU 1 INTERIM	ADMIN RECORD	COC	018	SOUTHWEST						
NONE	02-16-1996	BEACH	PROPOSED PLAN WITH ENCLOSURE OF	BASE	COMMENTS	024	DIVISION						
MISC	NONE	T. MAHMOUD	ADDITIONAL COMMENTS FROM THE		DCE	OU 1							
NONE		MCAS EL TORO	PUBLIC PARTICIPATION SPECIALIST AND		DRINKING WATE	OU 2A							
0031		J. JOYCE	INFORMATION MATERIALS		GW								
					PCE								
					PROPOSED PLAN								
					SOIL								
					TCE								
					VOC								
					WELLS								

UIC No. / Rec. No.

Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient											
M60050 / 001398	03-20-1996	BECHTEL							MEETING MINTUES 14 FEBRUARY 1996	ADMIN RECORD	BCP	001	BECHTEL
	02-20-1996	NATIONAL							WEEKLY BCT BRIEFING HELD TO DISCUSS		MTG MINS	002	NATIONAL
MISC	00079	D. COWSER							OU2A, OU2B, THE RCRA FACILITY		RFA	004	80462354
N6871192D467000	05.4	SOUTHWEST							ASSESSMENT, AND THE BCP		TECH/GUID DOC.	006	IMAGED
0003		DIVISION										007	
		P. KENNEDY										008	
												009	
												010	
												011	
												012	
												013	
												014	
												015	
												016	
												017	
												019	
												020	
												021	
												022	
												024	
												025	
												OU 2A	
												OU 2B	
M60050 / 001413	03-25-1996	BECHTEL							DRAFT PHASE II REMEDIAL	ADMIN RECORD	OU	024	BECHTEL
CTO-0073/0080	02-20-1996	NATIONAL							INVESTIGATION REPORT OPERABLE UNIT	INFO	RI	OU 2A	NATIONAL
RPT	00073	P. BROOKS							(OU) 2A SITE 24, DATED FEBRUARY 1996 -	REPOSITORY			80462354
N68711-92-D-4670	03.4	SOUTHWEST							(VOLUME I OF IV), TEXT				IMAGED
0300		DIVISION											
		P. KENNEDY											
M60050 / 001414	03-25-1996	BECHTEL							DRAFT PHASE II REMEDIAL	ADMIN RECORD	OU	024	BECHTEL
CTO-073/0080	02-20-1996	NATIONAL							INVESTIGATION REPORT OU 2A - SITE 24,	INFO	RI	OU 2A	NATIONAL
RPT	00073	P. BROOKS							DATED FEBRUARY 1996 - (VOLUME II OF	REPOSITORY			80462354
N68711-92-D-4670	03.4	SOUTHWEST							IV), APPENDICES A - I				IMAGED
0300		DIVISION											
		P. KENNEDY											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001415	CTO-073/0080	03-25-1996	BECHTEL NATIONAL	RPT	02-20-1996	P. BROOKS	N68711-92-D-4670	03.4	SOUTHWEST DIVISION	0300	03.4	P. KENNEDY	DRAFT PHASE II REMEDIAL INVESTIGATION REPORT OU 2A - SITE 24, DATED FEBRUARY 1996 - (VOLUME III OF IV), APPENDIX J	ADMIN RECORD INFO REPOSITORY	OU RI	024 OU 2A	BECHTEL NATIONAL 80462355 IMAGED
M60050 / 001416	CTO-073/0080	03-25-1996	BECHTEL NATIONAL	RPT	02-20-1996	P. BROOKS	N68711-92-D-4670	03.4	SOUTHWEST DIVISION	0300	03.4	P. KENNEDY	DRAFT PHASE II REMEDIAL INVESTIGATION REPORT OU 2A - SITE 24, DATED FEBRUARY 1996 - (VOLUME IV OF IV), APPENDICES K - P	ADMIN RECORD INFO REPOSITORY	OU RI	024 OU 2A	BECHTEL NATIONAL 80462355 IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prd. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001395		03-20-1996	DTSC REGION IV		02-23-1996	T. MAHMOUD			MCAS EL TORO				DTSC COMMENTS ON THE DRAFT FINAL ADDENDUM TO THE RCRA FACILITY ASSESSMENT	ADMIN RECORD	COMMENTS RFA	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 019 020 021 022 024 025 OU 2 OU 3	BECHTEL NATIONAL 80462354 IMAGED
LTR		00065				J. JOYCE											
NONE		10.1															
0010																	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001273	03-07-1996	BECHTEL								MEETING MINUTES - 20 FEBRUARY 1996	ADMIN RECORD	BCP	001	IRON MOUNTAIN
	02-26-1996	NATIONAL								BRAC CLEANUP PLAN MEETING HELD TO		MTG MINS	002	80462352
MISC	00103	D. COWSER								DISCUSS COMMENTS ON THE BCP AND			003	IMAGED
N6871192D467000	06.0	SOUTHWEST								DISTRIBUTION OF THE BCP			004	
0005		DIVISION											005	
		P. KENNEDY											006	
													007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													018	
													019	
													020	
													021	
													022	
													024	
													025	
													OU 1	
													OU 2	
													OU 3	

UJC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001401		03-20-1996	BECHTEL										BASE REALIGNMENT AND CLOSURE PLAN	ADMIN RECORD	BCP	001	BECHTEL
		03-01-1996	NATIONAL										(BCP) DATED MARCH 1, 1996 (SIGNED	INFO	NFA	002	NATIONAL
MISC		00079	D. COWSER										2/20/96)	REPOSITORY	TECH/GUID DOC.	003	80462354
N6871192D467000		05.4	SOUTHWEST													004	IMAGED
0250			DIVISION													005	
			P. KENNEDY													006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																018	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 1	
																OU 2	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001396		03-20-1996	BECHTEL										MEETING MINUTES FOR THE 28	ADMIN RECORD	BCP	001	BECHTEL
		03-05-1996	NATIONAL										FEBRUARUY 1996 BASE CLEANUPTEAM		MTG MINS	004	NATIONAL
MISC		00079	D. COWSER										MEETING HELD TO DISCUSS OU3, THE		NFA	006	80462354
N6871192D467000		05.4	SOUTHWEST										BCP, OU2A, AND THE LANDFILL SITES		TECH/GUID DOC.	007	IMAGED
0009			DIVISION													008	
			P. KENNEDY													009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 2A	
																OU 3	
M60050 / 001382		03-20-1996	BECHTEL										MEETING MINUTES FOR 6 MARCH 1996	ADMIN RECORD	CLEANUP	024	BECHTEL
		03-12-1996	NATIONAL										BASE CLEANUP TEAM MEETING HELD TO		MTG MINS	025	NATIONAL
MISC		00079	D. COWSER										DISCUSS SITES 24,25, LANDFILL SITES,		NFA	OU 3	80462354
N6871192D467000		05.4	SOUTHWEST										AND OU3 FIELD WORK; MEETING		TECH/GUID DOC.		IMAGED
0020			DIVISION										MATERIALS				
			P. KENNEDY														

UIC No. / Rec. No.	Doc. Control No.	Pr. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001617		09-04-1996	DTSC LONG BEACH		03-12-1996								COMMENTS AND RECOMMENDATIONS ON THE FINAL RESULTS OF EMPLOYEE INTERVIEW, AUGUST 17, 1996 FOR THE NO FURTHER ACTION DETERMINATIONS	ADMIN RECORD	COMMENTS NFA	006 007 008 009 010 012 014 017 019 023 024	BECHTEL NATIONAL 37041260 IMAGED
LTR		00080	T. MAHMOUD						MCAS EL TORO			J. JOYCE					
NONE		10.1															
0006																	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001393	03-20-1996	BECHTEL	NATIONAL, INC.		03-14-1996	D. COWSER				DRAFT GROUNDWATER EXTRACTION AND INJECTION WELL AQUIFER TESTS FOR FINAL PHASE II RI/FS WORK PLAN	ADMIN RECORD	FS	001	BECHTEL
RPT	00073	D. COWSER										GW	002	NATIONAL
N68711-92-D-4670	03.4	NAVFAC -	SOUTHWEST									MW	003	80462354
0150		DIVISION										RI	004	IMAGED
		P. KENNEDY										WELLS	005	
												WORK PLAN	006	
													007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													019	
													020	
													021	
													022	
													024	
													025	
													OU 2	
													OU 3	
M60050 / 001420	04-03-1996	BECHTEL	NATIONAL		03-25-1996	D. COWSER				DRAFT FINAL - WORK PLAN FOR AIR SPARGING PILOT TEST	ADMIN RECORD	AIR	024	BECHTEL
CTO-0073/0128	00073	D. COWSER										VOC		NATIONAL
RPT	00073	D. COWSER												80462355
N68711-92-D-4670	03.3	SOUTHWEST	DIVISION											IMAGED
0055		P. KENNEDY												

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002201	CTO-0073/0128	05-31-2001	BECHTEL NATIONAL, INC.	PLAN	03-25-1996	P. BROOKS	N68711-92-D-4670	00073	NAVFAC - SOUTHWEST DIVISION	0100			DRAFT FINAL WORK PLAN FOR AIR SPARGING PILOT TESTING (SEE AR #1613 - COMMENTS)	ADMIN RECORD	AIR DQO GW PID SOIL SVE TCE VOC WATER WELLS WORK PLAN	024 OU 2A	CHOICE MICROGRAPHICS SW01080901
M60050 / 002638	NONE	05-22-2002	CRWQCB - RIVERSIDE	LTR	03-27-1996	G. THIBEALT	NONE		ORANGE COUNTY WATER DISTRICT	0002		W. MILLS	RESPONSE TO REQUEST FOR CLARIFICATION REGARDING THE APPLICABILITY OF STATE LAWS AND REGULATIONS FOR DETERMINING REMEDIAL ACTION OBJECTIVES FOR THE PRINCIPAL AQUIFER AT ACTIVITY (SEE AR #2636 - ORIGINAL LETTER & #1392 & #1468 - RELATED LETTERS)	ADMIN RECORD BASE	ARAR DRINKING WATE GW MCL REMEDIAL ACTIO	018 OU 1	SOUTHWEST DIVISION

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001419	04-03-1996	BECHTEL								LETTER TRANSMITTING COPY OF	ADMIN RECORD	IRP	001	BECHTEL
	03-28-1996	NATIONAL								MATERIALS FOR "CURRENT STATUS MCAS			002	NATIONAL
LTR	0063B	D. COWSER								EL TORO ENVIRONMENTAL			003	80462355
N6871192D467000	10.0	SOUTHWEST								INVESTIGATION INSTALLATION			004	IMAGED
0025		DIVISION								RESTORATION PROGRAM" PRESENTATION			005	
		P. KENNEDY											006	
													007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													018	
													019	
													020	
													021	
													022	
													024	
													025	
													OU 1	
													OU 2	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prd. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001331	CTO-0079/0126	03-18-1996	BECHTEL NATIONAL, INC.	MM	04-01-1996	D. COWSER	N68711-92-D-4670	03.6	NAVFAC - SOUTHWEST DIVISION	0007		P. KENNEDY	MEETING MINUTES FOR 27 MARCH 1996 WEEKLY BASE CLEANUP TEAM MEETING HELD TO DISCUSS SITES 24 AND 25, THE LANDFILL SITES, AND OU 3 (SITE 15) FIELDWORK	ADMIN RECORD	BCP BCT BRAC GUID MTG MINS NFA	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 019 020 021 022 024 025 OU 2A OU 2B OU 3	BECHTEL NATIONAL 80462353 IMAGED
M60050 / 000335	CTO-0073/0137	06-19-1996	BECHTEL NATIONAL, INC.	MISC	04-03-1996	D. COWSER	N68711-92-D-4670	10.1	NAVFAC - SOUTHWEST DIVISION	0004		P. KENNEDY	RESPONSE TO COMMENTS ON DRAFT FINAL WORK PLAN FOR AIR SPARGING PILOT TESTING (SEE AR #1613 - COMMENTS)	ADMIN RECORD	AIR COMMENTS RESPONSE	024 OU 2A	BECHTEL NATIONAL 37041130 IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001613	09-04-1996	BECHTEL NATIONAL, INC.	COMPILED COMMENTS ON DRAFT FINAL WORK PLAN FOR AIR SPARGING AND DRAFT REMEDIAL INVESTIGATION REPORT (SEE AR #2201 - DRAFT FINAL WORK PLAN)	ADMIN RECORD	AIR	024	BECHTEL NATIONAL										
CTO-0080/0117	04-15-1996	D. TEDALDI			COMMENTS	OU 2A	37041260										
LTR	00080	NAVAFAC - SOUTHWEST DIVISION			RI		IMAGED										
N68711-92-D-4670	01.6	J. JOYCE			WORK PLAN												
0006																	
M60050 / 000365	06-19-1996	BECHTEL NATIONAL	MINUTES FROM 10 APRIL 1996 WEEKLY BRAC CLEANUP TEAM MEETING HELD TO DISCUSS OU2A, OU2B, OU3, AND RCRA FACILITY ASSESSMENT ADDENDUM	ADMIN RECORD	BCP	001	BECHTEL NATIONAL										
	04-17-1996	D. COWSER			MTG MINS	002	37041130										
MM	00079	SOUTHWEST DIVISION			NFA	003	IMAGED										
N68711-92-D-4670	00.0	P. KENNEDY			RFA	004											
0005					TECH/GUID DOC.	006											
						007											
						008											
						009											
						010											
						011											
						012											
						013											
						014											
						015											
						016											
						017											
						019											
						020											
						021											
						022											
						024											
						025											
						OU 2A											
						OU 2B											
						OU 3											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Data	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001491 CTO-0073/0130 RPT N68711-92-D-4670 0050	05-22-1996 04-17-1996 00073 02.0	BECHTEL NATIONAL, INC. D. COWSER NAVFAC - SOUTHWEST DIVISION P. KENNEDY								DRAFT WORK PLAN FOR SOIL VAPOR EXTRACTION PILOT TESTING AT THE VOC SOURCE AREA (SEE AR #2641 - EPA COMMENTS)	ADMIN RECORD	SOIL SVE VOC WELLS WORK PLAN	024 OU 2A	BECHTEL NATIONAL 80462357 IMAGED
M60050 / 002639 NONE MISC NONE 0015	05-22-2002 04-18-1996 NONE	DTSC - LONG BEACH T. MAHMOUD MCAS EL TORO J. JOYCE								TRANSMITTAL OF COMMENTS FROM DTSC, DTSC - HUMAN AND ECOLOGICAL RISK SECTION, AND CRWQCB ON THE DRAFT PHASE II REMEDIAL INVESTIGATION REPORT FOR THE VOC SOURCE AREA, OPERABLE UNIT 2A (SEE AR #1269 - RI)	ADMIN RECORD BASE	BCT BRAC COMMENTS DQO GW RCRA RD REMEDIAL ACTIO RI SOIL SOLVENTS TCE TOC UST VOC WELLS	024 BLDG. 296 BLDG. 297 OU 2A	SOUTHWEST DIVISION

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002640 NONE MISC NONE 0006	05-22-2002 04-22-1996 NONE	US EPA - SAN FRANCISCO B. ARTHUR MCAS EL TORO J. JOYCE							COMMENTS ON THE DRAFT PHASE II REMEDIAL INVESTIGATION REPORT FOR THE VOC SOURCE AREA (SEE AR #1269 - RI REPORT)	ADMIN RECORD BASE	BCT BRAC COMMENTS DCA DCE DQO GW PCE RI SOIL SOIL BORING TCE VOC	024 OU 2A	SOUTHWEST DIVISION	
M60050 / 001932 LTR NONE 0012	04-29-1997 05-01-1996 NONE 10.1	NAVFAC - SOUTHWEST DIVISION L. NUZUM DTSC LONG BEACH T. MAHMOUD							REQUEST THAT DTSC AS LEAD AGENCY FOR STATE OF CALIFORNIA ARARS FOR OPERABLE UNIT (OU) 24	ADMIN RECORD	ARAR REQUEST	024 025 OU 2	SOUTHWEST DIVISION	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr/JGuid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000837		06-19-1996	BECHTEL										MINUTES FROM 7 MAY 1996 BRAC	ADMIN RECORD	BCP	001	BECHTEL
		05-16-1996	NATIONAL										CLEANUP TEAM MEETING HELD TO		MTG MINS	002	NATIONAL
MM		00079	D. COWSER										DISCUSS OU2A, OU2B, AND OU3 SOIL		TECH/GUID DOC.	004	80462345
N68711-92-D-4670		00.0	SOUTHWEST										SAMPLING RESULTS			006	IMAGED
0030			DIVISION													007	
			P. KENNEDY													008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 2A	
																OU 2B	
																OU 3	
M60050 / 002641		05-22-2002	US EPA - SAN										COMMENTS ON THE DRAFT WORK PLAN	ADMIN RECORD	COMMENTS	024	SOUTHWEST
NONE		05-20-1996	FRANCISCO										FOR SOIL VAPOR EXTRACTION PILOT	BASE	SOIL	OU 2A	DIVISION
LTR		NONE	B. ARTHUR										TESTING AT THE VOC SOURCE AREA (SEE		SVE		
NONE			MCAS EL TORO										AR #1491 - WORK PLAN)		VOC		
0002			J. JOYCE												WELLS		
															WORK PLAN		

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001507	06-06-1996	BECHTEL			06-05-1996	NATIONAL				DOCUMENT REVIEW COMMENTS AND RESPONSES ON FINAL RCRA FACILITY ASSESSMENT ADDENDUM	ADMIN RECORD	COMMENTS	001	BECHTEL
												RFA	002	NATIONAL
LTR	00065	D. COWSER											003	37041251
N6871192D467000	10.1	SOUTHWEST											004	IMAGED
0025		DIVISION											005	
		P. KENNEDY											006	
													007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													019	
													020	
													021	
													022	
													024	
													025	
													OU 2A	
													OU 2B	
													OU 2C	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prct. Date	Author Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Record Type	Record Date	Author	Recipient					
Contr./Guid. No.	CTO No.	Recipient Affil.						
Approx. # Pages	EPA Cat. #	Recipient						
M60050 / 001633	09-24-1996 06-12-1996	BNI SAN DIEGO G. P. BROOKS	SOUTHWEST DIVISION	DRAFT FINAL PHASE II RI REPORT OU2A-SITE 24 VOLUME I	ADMIN RECORD INFO REPOSITORY	GW RI	024 BLDG. 1589 BLDG. 296 BLDG. 297 BLDG. 299 BLDG. 324 BLDG. 326 BLDG. 359 BLDG. 529 BLDG. 655 OU 1 OU 2A	BECHTEL NATIONAL 80462358 IMAGED
RPT N68711-92-D-4670 1000	00073 03.4							
M60050 / 001634	09-24-1996 06-12-1996	BNI SAN DIEGO G. P. BROOKS	SOUTHWEST DIVISION	DRAFT FINAL PHASE II RI REPORT OU2A-SITE 24 VOLUME II APPENDICES A-I (ENCL. ONLY APPENDICES H & I)	ADMIN RECORD INFO REPOSITORY	RI	024 OU 2A	BECHTEL NATIONAL 80462358 IMAGED
RPT N68711-92-D-4670 0025	00073 03.4							
M60050 / 001635	09-24-1996 06-12-1996	BNI SAN DIEGO G. P. BROOKS	SOUTHWEST DIVISION	DRAFT FINAL PHASE II RI REPORT OU2A-SITE 24 VOLUME III APPENDICES J	ADMIN RECORD INFO REPOSITORY	FS RI	OU 2A	BECHTEL NATIONAL 80462358 IMAGED
RPT N68711-92-D-4670 1000	00073 03.4							
M60050 / 001636	09-24-1996 06-12-1996	BNI SAN DIEGO G. P. BROOKS	SOUTHWEST DIVISION	DRAFT FINAL PHASE II RI REPORT OU2A-SITE 24 VOLUME IV APPENDICES K-P	ADMIN RECORD INFO REPOSITORY	FS RI	024 OU 2	BECHTEL NATIONAL 80462358 IMAGED
RPT N68711-92-D-4670 1000	00073 03.4							

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001516	07-03-1996	BECHTEL	MEETING MINUTES FROM 5 JUNE 1996	ADMIN RECORD	BCT	001	BECHTEL							
	06-14-1996	NATIONAL	BRAC CLEANUP TEAM (BCT) MEETING		FS	002	NATIONAL							
MM	00079	D. COWSER	HELD TO DISCUSS OU 1, 2A, 2B, 2C, 3 AND		MTG MINS	003	37041251							
N6871192D467000	01.1	SOUTHWEST	THE SITE 25 RI/FS		RI	004	IMAGED							
0005		DIVISION			TECH/GUID DOC.	005								
		P. KENNEDY				006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						018								
						019								
						020								
						021								
						022								
						024								
						025								
						OU 1								
						OU 2A								
						OU 2B								
						OU 2C								
						OU 3								
M60050 / 001607	09-04-1996	DTSC LONG	RESPONSE TO LETTER OF MAY 1, 1996	ADMIN RECORD	ARAR	024	BECHTEL							
	07-01-1996	BEACH	PRELIMINARY ARAR'S FOR OU 2A SITE 24		RESPONSE	OU 2A	NATIONAL							
LTR	NONE	R. YEAMAN	W/ENCL				37041260							
NONE	01.6	SOUTHWEST					IMAGED							
0020		DIVISION												
		A. PISZKIN												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient	Subject										
M60050 / 002266	09-21-1998	BECHTEL NATIONAL	CHAIN OF CUSTODY RECORDS, PHASE II RI/FS, VOC SOURCE AREA AND MAJOR DRAINAGES	ADMIN RECORD	FS							024	SOUTHWEST DIVISION
MISC	07-08-1996	D. TEDALDI			RI							025	SW01013108
N6871192D467000	00073	SOUTHWEST DIVISION			VOC							OU 2A	
0190	03.2	C. POTTER										OU 3	
M60050 / 001647	09-27-1996	BECHTEL NATIONAL, INC.	MINUTES OF 3 JULY 1996 BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING W/ENCL	ADMIN RECORD	BCP							002	BECHTEL NATIONAL
MM	07-11-1996	D. COWSER			BCT							003	37041205
N68711-92-D-4670	00079	NAVFAC - SOUTHWEST DIVISION			BRAC							005	IMAGED
0008	10.5	P. KENNEDY			GW							017	
					MTG MINS							019	
					REMEDIAL ACTIO							OU 1	
					SOIL							OU 2A	
												OU 2B	
												OU 2C	
M60050 / 002642	05-22-2002	ORANGE COUNTY WATER DISTRICT	TRANSMITTAL OF 3 JULY 1996 LETTER SENT BY WATER DISTRICT TO US EPA REQUESTING THAT OCWD BE GIVEN THE OPPORTUNITY TO ATTEND AND PARTICIPATE AT MEETINGS BETWEEN EPA AND THE DEPARTMENT OF THE NAVY IN CONNECTION WITH SUPERFUND SITE	ADMIN RECORD	CERCLA							018	SOUTHWEST DIVISION
NONE	07-11-1996	W. MILLS		BASE	DRINKING WATE							024	
LTR	NONE	MCAS EL TORO			GW							OU 1	
NONE		P. A. FRATARANGELO			NPL							OU 2A	
0006					SOIL								
					TCE								
					VOC								
					WELLS								
M60050 / 001602	09-04-1996	EPA SAN FRANCISC	COMMENTS ON THE DRAFT FINAL PHASE II RI REPORT OU 2A- SITE 24 AND COMMENTS ON THE DRAFT FINAL OU 2A FS REPORTS	ADMIN RECORD	COMMENTS							024	BECHTEL NATIONAL
LTR	07-22-1996	B. ARTHUR		INFO REPOSITORY	FS							OU 2A	37041260
NONE	NONE	MCAS EL TORO			RI								IMAGED
0002	10.1	J. JOYCE											
M60050 / 001603	09-04-1996	DTSC LONG BEACH	APPROVAL OF THE DRAFT FINAL PHASE II RI REPORT SITE 24, OU 2A	ADMIN RECORD	RI							024	BECHTEL NATIONAL
LTR	07-22-1996	J. SCANDURA		INFO REPOSITORY	VOC							OU 2A	37041260
NONE	NONE	MCAS EL TORO											IMAGED
0003	01.6	J. JOYCE											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001582	08-22-1996	JACOBS	DRAFT FINAL OU 1 INTERIM-ACTION	ADMIN RECORD	FS	018	BECHTEL				
CLE-C01-01F145-B7-0014	08-09-1996	ENGINEERING	FEASIBILITY STUDY REPORT, REV. 0	INFO	GW	OU 1	NATIONAL				
RPT	00145	GROUP	EXECUTIVE SUMMARY VOLUME I OF IX	REPOSITORY	RI		37041207				
N68711-89-D-9296	03.4	NAVFAC -	(INCLUDES REVISED TABLE ES-6 DATED 4				IMAGED				
0045		SOUTHWEST	SEPTEMBER 1996) (SEE AR #1583, #1584,								
		DIVISION	#1585, #1586, #1587, #1588, #1589 & #1590 -								
			OTHER VOLUMES & #2645 - IRWD								
			COMMENTS)								
M60050 / 001583	08-22-1996	JACOBS	DRAFT FINAL OU 1 INTERIM-ACTION	ADMIN RECORD	FS	OU 1	BECHTEL				
CLE-C01-01F145-B7-0014	08-09-1996	ENGINEERING	FEASIBILITY STUDY REPORT, REV. 0	INFO	RI	OU 2	NATIONAL				
RPT	00145	GROUP	VOLUME II OF IX (SEE AR #1582, #1584,	REPOSITORY		OU 3	37041207				
N68711-89-D-9296	03.4	NAVFAC -	#1585, #1586, #1587, #1588, #1589, & #1590 -				IMAGED				
2500		SOUTHWEST	OTHER VOLUMES & #2645 - IRWD								
		DIVISION	COMMENTS)								
M60050 / 001584	08-22-1996	JACOBS	DRAFT FINAL OU 1 INTERIM-ACTION	ADMIN RECORD	FS	OU 1	BECHTEL				
CLE-C01-01F145-B7-0014	08-09-1996	ENGINEERING	FEASIBILITY STUDY REPORT, REV. 0	INFO	RI		NATIONAL				
RPT	00145	GROUP	VOLUME III OF IX (SEE AR #1582, #1583,	REPOSITORY	RISK		37041207				
N68711-89-D-9296	03.4	NAVFAC -	#1585, #1586, #1587, #1588, #1589, & #1590 -				IMAGED				
0450		SOUTHWEST	OTHER VOLUMES & #2645 - IRWD								
		DIVISION	COMMENTS)								
M60050 / 001585	08-22-1996	JACOBS	DRAFT FINAL OU 1 INTERIM-ACTION	ADMIN RECORD	FS	018	BECHTEL				
CLE-C01-01F145-B7-0014	08-09-1996	ENGINEERING	FEASIBILITY STUDY REPORT ADDENDUM,	INFO	RI	OU 1	NATIONAL				
RPT	00145	GROUP	REV. 0 VOLUME IV OF IX (SEE AR #1582,	REPOSITORY			37041207				
N68711-89-D-9296	03.4	NAVFAC -	#1583, #1584, #1586, #1587, #1588, #1589, &				IMAGED				
0450		SOUTHWEST	#1590 - OTHER VOLUMES & #2645 - IRWD								
		DIVISION	COMMENTS)								
M60050 / 001586	08-22-1996	JACOBS	DRAFT FINAL OU 1 INTERIM-ACTION	ADMIN RECORD	FS	OU 1	BECHTEL				
CLE-C01-01F145-B7-0014	08-09-1996	ENGINEERING	FEASIBILITY STUDY REPORT, REV. 0	INFO	RI		NATIONAL				
RPT	00145	GROUP	APPENDICES VOLUME V OF IX (SEE #1582,	REPOSITORY			37041207				
N68711-89-D-9296	03.4	NAVFAC -	#1583, #1584, #1585, #1587, #1588, #1589, &				IMAGED				
2500		SOUTHWEST	#1590 - OTHER VOLUMES & #2645 - IRWD								
		DIVISION	COMMENTS)								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Recipient						
M60050 / 001587	08-22-1996	08-22-1996	JACOBS			JACOBS		DRAFT FINAL OU 1 INTERIM-ACTION	ADMIN RECORD	FS	018	BECHTEL
CLE-C01-01F145-B7-0014	08-09-1996	08-09-1996	ENGINEERING GROUP			ENGINEERING GROUP		FEASIBILITY STUDY REPORT ADDENDUM, REV. 0 VOLUME VI OF IX (SEE AR #1582, #1583, #1584, #1585, #1586, #1588, #1589, & #1590 - OTHER VOLUMES & #2645- IRWD COMMENTS)	INFO REPOSITORY	RI	OU 1	NATIONAL 37041207 IMAGED
RPT	03.4	03.4										
N68711-89-D-9296			NAVFAC - SOUTHWEST DIVISION			NAVFAC - SOUTHWEST DIVISION						
2500												
M60050 / 001588	08-22-1996	08-22-1996	JACOBS			JACOBS		DRAFT FINAL OU 1 INTERIM-ACTION	ADMIN RECORD	ARAR	OU 1	BECHTEL
CLE-C01-01F145-B7-0014	08-09-1996	08-09-1996	ENGINEERING GROUP			ENGINEERING GROUP		FEASIBILITY STUDY REPORT ADDENDUM, REV. 0 VOLUME VII OF IX (APPENDICES B THROUGH J) (SEE AR #1582, #1583, #1584, #1585, #1586, #1587, #1589, & #1590 - OTHER VOLUMES & #2645- IRWD COMMENTS)	INFO REPOSITORY	FS RI		NATIONAL 37041260 IMAGED
RPT	03.4	03.4										
N68711-89-D-9296			NAVFAC - SOUTHWEST DIVISION			NAVFAC - SOUTHWEST DIVISION						
0500												
M60050 / 001589	08-22-1996	08-22-1996	JACOBS			JACOBS		DRAFT FINAL OU 1 INTERIM-ACTION	ADMIN RECORD	FS	OU 1	BECHTEL
CLE-C01-01F145-B7-0014	08-09-1996	08-09-1996	ENGINEERING GROUP			ENGINEERING GROUP		FEASIBILITY STUDY REPORT ADDENDUM, REV. 0 VOLUME VIII OF IX (SEE #1582, #1583, #1584, #1585, #1586, #1587, #1588, & #1590 - OTHER VOLUMES & #2645 - IRWD COMMENTS)	INFO REPOSITORY	GW RI		NATIONAL 37041260 IMAGED
RPT	03.4	03.4										
N68711-89-D-9296			NAVFAC - SOUTHWEST DIVISION			NAVFAC - SOUTHWEST DIVISION						
0275												
M60050 / 001590	08-22-1996	08-22-1996	JACOBS			JACOBS		DRAFT FINAL OU 1 INTERIM-ACTION	ADMIN RECORD	FS	018	BECHTEL
CLE-C01-01F145-B7-0014	08-09-1996	08-09-1996	ENGINEERING GROUP			ENGINEERING GROUP		FEASIBILITY STUDY REPORT ADDENDUM, REV. 0 VOLUME IX OF IX (INCLUDES REVISED TABLE ES-1 DATED 4 SEPTEMBER 1996) (SEE AR #1582, #1583, #1584, #1585, #1586, #1587, #1588 & #1589 - OTHER VOLUMES & #2645- IRWD COMMENTS)	INFO REPOSITORY	GW RI	OU 1	NATIONAL 37041260 IMAGED
RPT	03.4	03.4										
N68711-89-D-9296			NAVFAC - SOUTHWEST DIVISION			NAVFAC - SOUTHWEST DIVISION						
1500												
M60050 / 001645	09-27-1996	09-27-1996	BECHTEL NATIONAL, INC.			BECHTEL NATIONAL, INC.		DRAFT PHASE II FEASIBILITY STUDY	ADMIN RECORD	COST	024	BECHTEL
CTO-0073/0159	08-09-1996	08-09-1996	G.BROOKS			G.BROOKS		REPORT FOR THE OU 2A VOC SOURCE AREA (DISCREPANCY IN TEXT EDIT TOC TABLES 3-3 THRU 3-7 TO BE IN PLACE IN FINAL PHASE II FS REPORT) (SEE AR #490 & 491 - COMMENTS BY RAB MEMBER & #2645- IRWD COMMENTS)	INFO REPOSITORY	FS	OU 1 OU 2A	NATIONAL 37041205 IMAGED
RPT	00073	00073										
N68711-92-D-4670	04.2	04.2	NAVFAC - SOUTHWEST DIVISION			NAVFAC - SOUTHWEST DIVISION						
2000												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location
Contr./Guid. No.	CTO No.	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Box No.		
Approx. # Pages	EPA Cat. #									
M60050 / 001632	09-16-1996	MCAS EL TORO	REVISED TABLES ES-6 RI/FS AND ES-1 FOR OU1 FROM FS	ADMIN RECORD	ES	OU 1	BECHTEL			
XMTL	09-04-1996	J. DOLEGOWSKI		INFO	FS		NATIONAL			
N68711-89-D-9296	00145	SOUTHWEST DIVISION		REPOSITORY	RI		80462358			
0002	01.6	K. KENNEDY					IMAGED			
M60050 / 001881	03-26-1997	NAVFAC - SOUTHWEST DIVISION	CLARIFICATION OF HOW NAVY WILL ADDRESS REMEDIATION OF VOC CONTAMINATION ORIGINATING FROM ACTIVITY WITH ENCLOSURE OF SETTLEMENT AGREEMENT (SEE AR #2643 - NOTIFICATION OF RECEIPT OF LETTER, #2644 - REQUEST FOR EXTENSION & #2646 - ACTUAL RESPONSE)	ADMIN RECORD	CERCLA	018	SOUTHWEST			
LTR	09-04-1996	M. JOHNSON		INFO	FFA	OU 1	DIVISION			
NONE	NONE	ORANGE COUNTY WATER DISTRICT		REPOSITORY	GW		37041242*			
0019	01.6	W. MILLS			TCE		IMAGED			
					VOC					
M60050 / 001688	10-08-1996	EPA SAN FRANCISCO	EPA SUPPORTS THE STATE OF CALIFORNIA'S REQUEST FOR A 30 DAY EXTENSION TO REVIEW OU 1 DRAFT FINAL INTERIM ACTION FEASIBILITY STUDY ADDENDUM	ADMIN RECORD	FFA	OU 1	BECHTEL			
LTR	09-05-1996	B. ARTHUR		INFO	FS	OU 2	NATIONAL			
NONE	NONE	MCAS EL TORO		REPOSITORY	IRA		80462359			
0001	01.6	J. JOYCE					IMAGED			
M60050 / 001671	09-30-1996	BNI SAN DIEGO	SEPTEMBER 25, 1996, DRAFT RAB MEETING AGENDA SITE (B) BASEWIDE COMMUNITY RELATIONS SUPPORT MEETING MAILER & JULY 31, 1996 DRAFT MEETING MINUTES	ADMIN RECORD	CRP	002	BECHTEL			
XMTL	09-11-1996	D. COWSER		INFO	MTG MINS	004	NATIONAL			
N6871192D467000	0063B	SOUTHWEST DIVISION		REPOSITORY	NFA	007	80462359			
0013	10.5	R. SELBY			PUB. PARTICIPAT	011	IMAGED			
					RAB	013				
						014				
						017				
						019				
						020				
						B				
						OU 2A				
M60050 / 001931	04-29-1997	CITY OF IRVINE	COMMENTS REGARDING EVALUATION OF OU 1 INTERIM ACTION FEASIBILITY STUDY ADDENDUM AND OU 2A REMEDIATION ALTERNATIVES	ADMIN RECORD	ADPM	OU 1	SOUTHWEST			
LTR	09-16-1996	P. HERSH		INFO	COMMENTS	OU 2A	DIVISION			
NONE	NONE	MCAS EL TORO		REPOSITORY	FS					
0003	10.1	J. JOYCE								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002644	NONE	05-22-2002 10-03-1996	ORANGE COUNTY WATER DISTRICT W. MILLS NAVFAC - SOUTHWEST DIVISION M. JOHNSON	LTR NONE 0001	NONE				REQUEST FOR EXTENSION TO RESPOND TO THE DEPARTMENT OF THE NAVY'S SETTLEMENT OFFER TO PARTICIPATE IN THE IRVINE DESALTER PROJECT (SEE AR #1881 - 9/4 LETTER & #1879 - RESPONSE TO REQUEST)				ADMIN RECORD BASE		018 OU 1	SOUTHWEST DIVISION	
M60050 / 001879	LTR NONE 0001	03-26-1997 10-08-1996	NAVFAC - SOUTHWEST DIVISION M. JOHNSON ORANGE COUNTY WATER DISTRICT W. MILLS	NONE 10.1					RESPONSE TO REQUEST FOR 1-WEEK EXTENSION OF MODIFIED SETTLEMENT OFFER - EXTENSION GRANTED (SEE AR #2644 - REQUEST)				ADMIN RECORD	RESPONSE	018 OU 1	SOUTHWEST DIVISION 37041242* IMAGED	
M60050 / 001930	LTR NONE 0003	04-29-1997 10-08-1996	BL ASSOCIATES M. RUDOLPH NAVFAC - SOUTHWEST DIVISION J. JOYCE	NONE 10.1					COMMENTS ON DRAFT PHASE II FEASIBILITY STUDY FOR OPERABLE UNIT 2A VOC SOURCE AREA, FROM THE ORANGE COUNTY WATER DISTRICT AND OU 2 SUBCOMMITTEE CO-CHAIR W/ENCLS				ADMIN RECORD INFO REPOSITORY	COMMENTS FS GW VOC	024 OU 2A	SOUTHWEST DIVISION	
M60050 / 002645	NONE LTR NONE 0002	05-22-2002 10-08-1996	IRVINE RANCH WATER DISTRICT R. MCVICKER MCAS EL TORO J. JOYCE	NONE					COMMENTS ON THE DRAFT FINAL OPERABLE UNIT 1 INTERIM-ACTION FEASIBILITY STUDY REPORT ADDENDUM AND THE DRAFT PHASE II FEASIBILITY STUDY REPORT FOR THE OPERABLE UNIT 2A VOC SOURCE AREA				ADMIN RECORD BASE	COMMENTS FS GW REMEDIAL ACTIO TCE VOC	024 OU 1 OU 2A	SOUTHWEST DIVISION	
M60050 / 001710	CTO-0076/0272 RPT N68711-92-D-4670 0140	01-31-2000 10-09-1996 00076 00.0	BECHTEL NATIONAL INC. T. LATAS NAVFAC - SOUTHWEST DIVISION						FINAL TECHNICAL MEMORANDUM - BACKGROUND & REFERENCE LEVELS REMEDIAL INVESTIGATIONS				ADMIN RECORD	IDW RI TECH MEMO	OU 1 OU 2 OU 3	BECHTEL NATIONAL 80462360 IMAGED	

## UIC No. / Rec. No.

Doc. Control No.	Prc. Date	Author Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Record Type	Record Date	Author					
Contr./Guid. No.	CTO No.	Recipient Affil.					
Approx. # Pages	EPA Cat. #	Recipient					
M60050 / 001875	03-26-1997 10-10-1996	EPA SAN FRANCISCO B. ARTHUR MCAS EL TORO J. JOYCE	ACCEPTANCE OF "DRAFT FINAL INTERIM ACTION REMEDIAL INVESTIGATION/ FEASIBILITY STUDY REPORTS," AND COMMENTS FOR FUTURE OU 1 DRAFT FINAL PROPOSED PLAN AND RECORD OF DECISION	ADMIN RECORD INFO REPOSITORY	COMMENTS FS OU RI ROD	018 OU 1	SOUTHWEST DIVISION 37041242* IMAGED
LTR NONE 0009	NONE 10.1						
M60050 / 002042	12-15-1997 10-10-1996	BECHTEL NATIONAL, INC. D. TEDALDI VARIOUS AGENCIES	COMPILED RESPONSE TO COMMENTS ON DRAFT PHASE II FEASIBILITY STUDY FOR THE OPERABLE UNIT 2A VOC SOURCE AREA (SEE AR #2645 - IRWD COMMENTS & #1645 - FS)	ADMIN RECORD INFO REPOSITORY	COMMENTS FS GW RESPONSE SOIL VOC	024 OU 2A	IRON MOUNTAIN 37041253 IMAGED
CTO-0073/0360 MISC N68711-92-D-4670 0038	00073 10.1						
M60050 / 002646	05-22-2002 10-10-1996	ORANGE COUNTY WATER DISTRICT W. MILLS NAVFAC - SOUTHWEST DIVISION M. JOHNSON	COUNTER PROPOSAL TO THE SETTLEMENT AGREEMENT, TRANSMITTED BY NAVY, INVOLVING COST SHARING FOR ALTERNATIVE 6A REGARDING THE IRVINE DESALTER PROJECT (SEE AR #1881 - SETTLEMENT AGREEMENT & #2647 - RESPONSE TO THIS PROPOSAL)	ADMIN RECORD BASE	COST GW TCE VOC WATER WELLS	018 OU 1	SOUTHWEST DIVISION
NONE LTR NONE 0006	NONE						
M60050 / 001692	11-11-1996 10-11-1996	OHM REMEDIATION W. SEDLAK NAVFAC - SOUTHWEST DIVISION	TECHNICAL MEMORANDUM: CONTINUATION OF SITE 24 SOIL VAPOR EXTRACTION PILOT TEST	ADMIN RECORD INFO REPOSITORY	H&SP SOIL SVEI TECH MEMO	024 OU 2A	BECHTEL NATIONAL 80462359 IMAGED
SW2362 RPT N68711-93-D-1459 0350	DO 75 01.1						
M60050 / 001871	03-26-1997 10-11-1996	DTSC LONG BEACH J. SCANDURA MCAS EL TORO J. JOYCE	COMMENTS ON THE DRAFT FINAL REPORT APPROVAL: INTERIM RI/FS STUDY FOR SITE 18, OU 1	ADMIN RECORD INFO REPOSITORY	COMMENTS FS RI	018 OU 1	SOUTHWEST DIVISION 37041242* IMAGED
LTR NONE 0013	NONE 10.1						
M60050 / 001872	03-26-1997 10-11-1996	OCWD FOUNTAIN VA W. MILLS VARIOUS AGENCIES	ORANGE CO. WATER DIST. COMMENTS ON DRAFT FINAL OU 1 INTERIM RI/FS REPORT OF AUGUST 9, 1996	ADMIN RECORD INFO REPOSITORY	COMMENTS FS OU RI	018 OU 1	SOUTHWEST DIVISION 37041242* IMAGED
LTR NONE 0021	NONE 10.1						

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	EPA Cat. #	Recipient	Approx. # Pages								
M60050 / 001873		03-26-1997 10-11-1996	EPA SAN FRANCISCO	LTR NONE 0014		B. ARTHUR MCAS EL TORO J. JOYCE		DRAFT PHASE II FS OU 2A REPORT WAS REVIEWED AND ATTACHED COMMENTS FOR RECOMMENDATION THAT THE BCT MEET TO DISCUSS OPTIONS FOR COMMENT RESOLUTION	ADMIN RECORD INFO REPOSITORY	COMMENTS FS MONITORING WELLS	024 OU 2A	SOUTHWEST DIVISION 37041242* IMAGED
M60050 / 001874		03-26-1997 10-11-1996	DTSC LONG BEACH	LTR NONE 0011		T. MAHMOUD MCAS EL TORO J. JOYCE		COMMENTS ON DRAFT PHASE II FS FOR SITE 24, OU 2A	ADMIN RECORD INFO REPOSITORY	COMMENTS FS OU	024 025 OU 2A	SOUTHWEST DIVISION 37041242* IMAGED
M60050 / 001928		04-29-1997 10-11-1996	EPA - SAN FRANCISCO	LTR NONE 0014		B. ARTHUR MCAS EL TORO J. JOYCE		REVIEW AND COMMENTS ON THE DRAFT PHASE II FEASIBILITY STUDY REPORT W/ENCLOSURES	ADMIN RECORD INFO REPOSITORY	COMMENTS FS OU	024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 001929		04-29-1997 10-11-1996	DTSC LONG BEACH	LTR NONE 0011		T. MAHMOUD MCAS EL TORO J. JOYCE		COMMENTS ON DRAFT PHASE II FEASIBILITY STUDY W/ENCLS	ADMIN RECORD INFO REPOSITORY	COMMENTS FS	024 OU 2A	SOUTHWEST DIVISION
M60050 / 001708		11-13-1996 10-15-1996	BNI SAN DIEGO	MISC N6871192D467000 0025		D. COWSER SOUTHWEST DIVISION R. SELBY		SITE (B) BASEWIDE COMMUNITY RELATIONS SUPPORT-EL TORO DRAFT FACT SHEET NO. 7-CYCLE 2 REVIEW, DTD 10/14/96	ADMIN RECORD INFO REPOSITORY	CRP	019 OU 1 OU 2A UNIT 2	BECHTEL NATIONAL 80462360
M60050 / 001709		11-13-1996 10-15-1996	BNI SAN DIEGO	MISC N6871192D467000 0025		D. COWSER SOUTHWEST DIVISION R. SELBY		SITE (B) BASEWIDE COMMUNITY RELATIONS SUPPORT-EL TORO DRAFT FACT SHEET NO. 7-CYCLE 2 REVIEW, DTE 10/14/96	ADMIN RECORD INFO REPOSITORY	CRP	019 OU 1 OU 2A UNIT 2	BECHTEL NATIONAL 80462360 IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location
Constr./Guid. No.	CTO No.	Recipient Affil.	Subject	Approx. # Pages	EPA Cat. #	Recipient				Box No.
M60050 / 001870	03-26-1997 10-15-1996	EPA SAN FRANCISCO	ADDITIONAL COMMENTS ON THE DRAFT PHASE II FS - OU 2A REPORT	LTR NONE 0005	NONE 10.1	B. ARTHUR MCAS EL TORO J. JOYCE	ADMIN RECORD INFO REPOSITORY	COMMENTS FS OU	024 025 OU 2A	SOUTHWEST DIVISION 37041242* IMAGED
M60050 / 001927	04-29-1997 10-15-1996	EPA SAN FRANCISCO	COMMENTS ON THE DRAFT PHASE II FEASIBILITY STUDY OPERABLE UNIT 2A REPORT ON OCTOBER 11, 1996	LTR NONE 0005	NONE 10.1	B. ARTHUR MCAS EL TORO J. JOYCE	ADMIN RECORD INFO REPOSITORY	COMMENTS FS OU	025 OU 2A	SOUTHWEST DIVISION
M60050 / 001691	10-23-1996 10-18-1996	JACOBS ENGINEERING	SEPTEMBER 26, 1996 MEETING MINUTES TO DISCUSS ORANGE COUNTY WATER DISTRICT'S COMMENTS ON GROUNDWATER MODELING FOR THE 9 AUGUST 1996 DRAFT FINAL OU-1 INTERIM-ACTION FEASIBILITY STUDY REPORT ADDENDUM	LTR N68711-89-D-9296 0010	00145 10.4	J. DOLEGOWSKI NAVFAC - SOUTHWEST DIVISION K. KENNEDY	ADMIN RECORD	COMMENTS GW MTG MINS	018 OU 1	BECHTEL NATIONAL 80462359 IMAGED
M60050 / 002647	05-22-2002 10-18-1996	NAVFAC - SOUTHWEST DIVISION	RESPONSE TO COUNTER PROPOSAL FROM WATER DISTRICT INVOLVING COST SHARING FOR ALTERNATIVE 6A REGARDING THE IRVINE DESALTER PROJECT (SEE AR #1881 - SETTLEMENT AGREEMENT & #2646 - COUNTER PROPOSAL)	LTR NONE 0002	NONE	D. SAKAMOTO ORANGE COUNTY WATER DISTRICT W. MILLS	ADMIN RECORD BASE	COST GW TCE	018 OU 1	SOUTHWEST DIVISION
M60050 / 001701	11-12-1996 10-21-1996	BECHTEL NATIONAL, INC.	SOIL VAPOR EXTRACTION PILOT TEST REPORT	RPT N68711-92-D-4670 0150	00076 03.4	D. COWSER NAVFAC - SOUTHWEST DIVISION	ADMIN RECORD INFO REPOSITORY	LAB SOIL SVE	024 OU 2A	SOUTHWEST DIVISION SW01013104
M60050 / 001868	03-26-1997 10-21-1996	DTSC LONG BEACH	RESPONSE TO REQUEST FOR ADDITIONAL APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARAR) FOR OU 1 INTERIM ACTION FEASIBILITY STUDY	LTR NONE 0004	NONE 01.6	R. YEAMAN MCAS EL TORO J. JOYCE	ADMIN RECORD	ARAR FS	018 OU 1	SOUTHWEST DIVISION 37041242* IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002648	NONE	05-22-2002	CITY OF IRVINE	LTR	10-24-1996	P. BRADY			DEPARTMENT OF THE NAVY	0001	NONE	C. KANDERAS	CITY OF IRVINE ENCOURAGES NAVY TO REACH AGREEMENT WITH ORANGE COUNTY WATER DISTRICT'S PROPOSAL FOR GROUNDWATER CLEANUP THROUGH THE IRVINE DESALTER PROJECT (SEE AR #1881, #2646, & #2647 - NEGOTIATION LETTERS)	ADMIN RECORD BASE	DRINKING WATE GW TCE	018 OU 1	SOUTHWEST DIVISION
M60050 / 002649	NONE	05-23-2002	IRVINE RANCH WATER DISTRICT	LTR	10-24-1996	D. MILLER			DEPARTMENT OF THE NAVY	0001	NONE	C. KANDERAS	CITY OF IRVINE ENCOURAGES NAVY TO REACH AGREEMENT WITH ORANGE COUNTY WATER DISTRICT'S PROPOSAL FOR GROUNDWATER CLEANUP THROUGH THE IRVINE DESALTER PROJECT (SEE AR #1881, #2646, & #2647 - NEGOTIATION LETTERS)	ADMIN RECORD BASE	GW TCE	018 OU 1	SOUTHWEST DIVISION
M60050 / 001923	NONE	03-27-1997	OCWD FOUNTAIN VA	LTR	10-25-1996	W. MILLS			SOUTHWEST DIVISION	0005	10.1	D. SAKAMOTO	RESPONSE TO LETTER OF OCTOBER 18, 1996, ON THE COST SHARING FOR ALTERNATIVE 6A	ADMIN RECORD	COST	018 OU 1	SOUTHWEST DIVISION 37041243* IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001268	02-09-1996	BECHTEL	DRAFT RISK ASSESSMENT WORK PLAN	ADMIN RECORD	FS	001	SOUTHWEST										
CTO-0059/0033	11-04-1996	NATIONAL	FOR THE PHASE II RI/FS (DOCUMENT		NFA	002	DIVISION										
RPT	00059	T. LATAS	NEEDS TO BE RE-IMAGED - DUE TO		PCE	003	SW02051702										
N68711-92-D-4670	02.4	SOUTHWEST	TRANSMITTAL LETTER ONLY BEING		RI	004	IMAGED										
0070		DIVISION	(IMAGED)		TCE	005											
		J. ASHMAN			TECH/GUID DOC.	006											
					VOC	007											
						008											
						009											
						010											
						011											
						012											
						013											
						014											
						015											
						016											
						017											
						019											
						020											
						021											
						022											
						024											
						025											
						OU 2											
						OU 3											
M60050 / 001720	11-21-1996	BECHTEL	AIR-SPARGING PILOT TEST REPORT SITE	ADMIN RECORD	AIR	024	BECHTEL										
CTO-0073/0197	11-12-1996	NATIONAL	24	INFO			NATIONAL										
RPT	00073	D. COWSER		REPOSITORY			80462362										
N68711-92-D-4670	04.2	SOUTHWEST					IMAGED										
0075		DIVISION															
		R. SELBY															

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002650	05-23-2002	11-14-1996	HOUSE OF REPRESENTATIVE S	NONE	NONE	C. COX & OTHERS	HOUSE OF REPRESENTATIVES ENCOURAGES NAVY TO REACH AGREEMENT WITH ORANGE COUNTY WATER DISTRICT'S PROPOSAL FOR GROUNDWATER CLEANUP THROUGH THE IRVINE DESALTER PROJECT (SEE AR #1881, #2646, & #2647 - NEGOTIATION LETTERS)	ADMIN RECORD BASE	GW TCE	018 OU 1	SOUTHWEST DIVISION
NONE											
LTR											
NONE											
0001											
M60050 / 001736	03-17-1997	11-28-1996	BECHTEL NATIONAL, INC.		00073	D. COWSER	AQUIFER TEST REPORT DATED NOVEMBER 1996 (SEE AR #1820 - DTSC COMMENTS & #2653 - EPA COMMENTS)	ADMIN RECORD INFO REPOSITORY	GW WATER WELLS	007 008 009 010 011 012 015 022 024	BECHTEL NATIONAL 80462363 IMAGED
CTO-073/0185											
RPT											
N68711-92-D-4670											
1025											
M60050 / 001888	03-27-1997	11-27-1996	DTSC LONG BEACH		NONE	T. MAHMOUD	COMMENTS ON DRAFT BRAC CLEANUP PLAN	ADMIN RECORD INFO REPOSITORY	BCP BRAC CLEANUP COMMENTS	015 019 020 024 025 OU 2 OU 2A	SOUTHWEST DIVISION 37041242* IMAGED
LTR											
NONE											
0008											
M60050 / 001769	03-20-1997	12-06-1996	DTSC LONG BEACH		NONE	T. MAHMOUD	COMMENTS ON AIR-SPARGING PILOT TEST, SITE 24, OU 2A	ADMIN RECORD INFO REPOSITORY	AIR COMMENTS OU	024 OU 2A	SOUTHWEST DIVISION 37041241* IMAGED
LTR											
NONE											
0003											
M60050 / 001770	03-20-1997	12-06-1996	DTSC LONG BEACH		NONE	T. MAHMOUD	COMMENTS ON AIR-SPARGING PILOT TEST, SITE 24, OU 2A	ADMIN RECORD INFO REPOSITORY	AIR COMMENTS OU	024 OU 2A	SOUTHWEST DIVISION 37041241* IMAGED
LTR											
NONE											
0003											

UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001765  LTR NONE 0002	03-20-1997 12-12-1996 NONE 10.1	DTSC LONG BEACH T. MAHMOUD VARIOUS AGENCIES SE	COMMENTS ON TECH. MEMO, CONTINUATION OF CLEAN II SITE 24 SVE PILOT TEST, OU 2A	ADMIN RECORD INFO REPOSITORY	OU TECH MEMO	024 OU 2A	SOUTHWEST DIVISION 37041241* IMAGED
M60050 / 001857 SWDIV SER 56MC.AP/161 MISC NONE 0010	03-25-1997 12-30-1996 NONE 01.6	NAVFAC - SOUTHWEST DIVISION D. SAKAMOTO OC WATER DISTRICT W. MILLS JR	RESPONSE TO LETTER OF OCTOBER 25, 1996, CONCERNING A COST-SHARING AGREEMENT FOR REMEDIATION OF VOLATILE ORGANIC COMPOUND (VOC) GROUNDWATER CONTAMINATION W/ENCLS	ADMIN RECORD CONFIDENTIAL	GW RESPONSE VOC	OU 1	SOUTHWEST DIVISION SW01013104

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001730		01-29-1997	BECHTEL		01-01-1997	NATIONAL			J. KLUESENER				DRAFT BASE REALIGNMENT AND CLOSURE CLEANUP PLAN (BCP)	ADMIN RECORD	BCP	001	BECHTEL
				PLAN				00103							CLEANUP	002	NATIONAL
				NONE				04.4							CLOSURE	003	80462363
				1500												004	IMAGED
																005	
																006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																018	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 1	
																OU 2	
																OU 2A	
																OU 2B	
																OU 2C	
																OU 3	
																OU 3A	
																OU 3B	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002064	01-30-1998	DTSC LONG BEACH	DTSC'S RESPONSE TO MCAS EL TORO'S REQUEST FOR EXTENSIONS TO THE FEDERAL FACILITY AGREEMENT (FFA) SCHEDULES	ADMIN RECORD	01-05-1997	J. SCANDURA					FFA	001	IRON MOUNTAIN	
LTR	NONE	J. SCANDURA									GW	002	37041253	
NONE	10.1	MCAS EL TORO									LANDFILL	003	IMAGED	
0004		J. JOYCE									REQUEST	005		
											RESPONSE	007		
											ROD	008		
												011		
												012		
												014		
												016		
												017		
												018		
												024		
												OU 1		
												OU 2A		
												OU 2B		
												OU 2C		
												OU 3		
M60050 / 001817	03-21-1997	MCAS EL TORO	DEFENSE ENVIRONMENTAL RESPONSE TASK FORCE (DERTF) PRESENTATION	ADMIN RECORD	01-09-1997	J. JOYCE					PUB. PARTICIPAT	002	SOUTHWEST	
MISC	NONE	J. JOYCE		INFO							RAB	003	DIVISION	
NONE	10.4			REPOSITORY							RESPONSE	005	37041240*	
0017												017	IMAGED	
												OU 1		
												OU 2A		
												OU 2B		
												OU 2C		
												OU 3		
M60050 / 001753	03-19-1997	BECHTEL NATIONAL	JANUARY 7, 1997, MEETING MINUTES ONE-DAY SVE PILOT TEST AT SITE 24	ADMIN RECORD	01-13-1997	D. COWSER					MTG MINS	024	SOUTHWEST	
XMTL	00124	D. COWSER									VOC		DIVISION	
N6871192D467000	10.4	VARIOUS INDIVIDU											37041241*	
0003													IMAGED	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001856	03-25-1997	BECHTEL	JANUARY 15, 1997 MEETING MINUTES,	ADMIN RECORD	GW	024	SOUTHWEST							
	01-15-1997	NATIONAL	SOIL AND GROUNDWATER REMEDIATION -		MTG MINS	OU 2A	DIVISION							
XMTL	00124	D. COWSER	SITE 24		SOIL		37041242*							
N6871192D467000	10.4	VARIOUS					IMAGED							
0005		AGENCIES												
M60050 / 001729	01-29-1997	BECHTEL	DRAFT PHASE II REMEDIAL	ADMIN RECORD	ADPM	001	BECHTEL							
	01-21-1997	NATIONAL, INC.	INVESTIGATION/FEASIBILITY STUDY	INFO	FS	002	NATIONAL							
RPT	00073	P. BROOKS	ADDENDUM FOR SITE 25	REPOSITORY	NFA	003	80462362							
N68711-92-D-4670	03.4	NAVFAC -			RI	004	IMAGED							
2000		SOUTHWEST				005								
		DIVISION				006								
						008								
						009								
						010								
						011								
						012								
						013								
						015								
						016								
						017								
						018								
						019								
						020								
						021								
						022								
						024								
						025								
						OU 1								
						OU 2A								
						OU 2B								
						OU 2C								
						OU 3								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001820	03-21-1997	DTSC LONG BEACH	COMMENTS ON AQUIFER TEST REPORT (SEE AR #1736 - AQUIFER TEST REPORT)	ADMIN RECORD	COMMENTS	024	SOUTHWEST DIVISION							
LTR	01-21-1997	T. MAHMOUD		INFO REPOSITORY	GW	OU 2A	37041240*							
NONE	NONE	MCAS EL TORO			WELLS		IMAGED							
0006	10.1	J. JOYCE												
M60050 / 002651	05-23-2002	US EPA - SAN FRANCISCO	PARTIAL APPROVAL OF DRAFT PHASE II FEASIBILITY STUDY REPORT FOR THE OU 2A VOC SOURCE AREA - SOIL PORTION IS APPROVED (SEE AR #1645 - FS REPORT)	ADMIN RECORD	FS	024	SOUTHWEST DIVISION							
NONE	01-21-1997	G. KISTNER		BASE	REMEDIAL ACTIO	OU 2A								
LTR	NONE	MCAS EL TORO			SOIL									
NONE		J. JOYCE			VOC									
0001														
M60050 / 002652	05-23-2002	DTSC - LONG BEACH	APPROVAL OF DRAFT PHASE II FEASIBILITY STUDY REPORT FOR THE OU 2A VOC SOURCE AREA - APPROVAL OF SOIL PORTION (SEE AR #1645 - FS REPORT)	ADMIN RECORD	COMMENTS	024	SOUTHWEST DIVISION							
NONE	01-23-1997	J. SCANDURA		BASE	FS	OU 2A								
LTR	NONE	MCAS EL TORO			SOIL									
NONE		J. JOYCE			VOC									
0002														
M60050 / 002653	05-28-2002	US EPA - SAN FRANCISCO	COMMENTS ON THE AQUIFER TEST REPORT, SOIL VAPOR EXTRACTION PILOT TEST REPORT FOR THE VOC SOURCE AREA - EPA HAS NO COMMENTS ON SVE REPORT OTHER THAN IT IS ACCEPTABLE (SEE AR #1736 - AQUIFER TEST REPORT)	ADMIN RECORD	AIR	024	SOUTHWEST DIVISION							
NONE	01-29-1997	G. KISTNER		BASE	COMMENTS	OU 2A								
LTR	NONE	MCAS EL TORO			GW									
NONE		J. JOYCE			SVE									
0003					VOC									

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001745	03-17-1997	BECHTEL	BASE REALIGNMENT AND CLOSURE	ADMIN RECORD	BCP	001	SOUTHWEST										
CTO-0103/0144	01-30-1997	NATIONAL, INC.	CLEANUP PLAN (BCP) DATED MARCH 1997	INFO	BCT	002	DIVISION										
PLAN	00103			REPOSITORY	BRAC	003	37041241*										
N68711-92-D-4670	04.2	NAVFAC -			GUID	004	IMAGED										
2000		SOUTHWEST			NFA	005											
		DIVISION				006											
						007											
						008											
						009											
						010											
						011											
						012											
						013											
						014											
						015											
						016											
						017											
						018											
						019											
						020											
						021											
						022											
						024											
						025											
						OU 1											
						OU 2											
						OU 2A											
						OU 2B											
						OU 2C											
						OU 3											
						OU 3A											
						OU 3B											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Subject	Classification	Keywords	Sites	Keywords	Sites	Location Box No.	
Approx. # Pages	EPA Cat. #	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Keywords	Sites	Location Box No.	
M60050 / 001763	03-20-1997	02-03-1997	BECHTEL NATIONAL	RESPONSE TO CAL EPA SOIL-RELATED COMMENTS, DRAFT PHASE II FS FOR SITE 24, OU 2A	ADMIN RECORD INFO REPOSITORY	COMMENTS FS OU RESPONSE SOIL	024 OU 2A			SOUTHWEST DIVISION 37041241* IMAGED	
XMTL N6871192D467000 0004	00073 10.1		D. COWSER VARIOUS AGENCIES								
M60050 / 001935	05-28-1997	02-05-1997	BECHTEL NATIONAL, INC.	RESPONSE TO COMMENTS ON DRAFT FINAL REMEDIAL INVESTIGATION/FEASIBILITY STUDY ECOLOGICAL RISK ASSESSMENT FOR SITE 25 (VARIOUS DATES)	ADMIN RECORD INFO REPOSITORY	COMMENTS ERA FS RESPONSE RI RISK	025 OU 2A			SOUTHWEST DIVISION 37041243* IMAGED	
CTO-0073/0339 MISC N68711-92-D-4670 0013	00073 10.1		NAVFAC - SOUTHWEST DIVISION								
M60050 / 002073	02-23-1998	02-06-1997	BECHTEL NATIONAL	JANUARY 21, 1998, MEETING MINUTES SITE 24 PILOT TEST UPDATE	ADMIN RECORD	MTG MINS	024 OU 2A			IRON MOUNTAIN 37041253 IMAGED	
XMTL N6871192D467000 0006	00142 10.4		D. TEDALDI VARIOUS AGENCIES								
M60050 / 002074	02-23-1998	02-06-1997	BECHTEL NATIONAL	JANUARY 14, 1998, MEETING MINUTES SITE 24 PILOT TEST UPDATE	ADMIN RECORD	MTG MINS	024 OU 2A			IRON MOUNTAIN 37041253 IMAGED	
XMTL N6871192D467000 0015	00142 10.4		D. TEDALDI VARIOUS AGENCIES								
M60050 / 002075	02-23-1998	02-06-1997	BECHTEL NATIONAL	JANUARY 28, 1998, MEETING MINUTES SITE 24 PILOT TEST UPDATE	ADMIN RECORD	MTG MINS	024 OU 2A			IRON MOUNTAIN 37041253 IMAGED	
XMTL N6871192D467000 0025	00142 10.4		D. TEDALDI VARIOUS AGENCIES								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001737		03-17-1997	BECHTEL										DRAFT FINAL PHASE II REMEDIAL	ADMIN RECORD	RI	007	BECHTEL
		03-11-1997	NATIONAL										INVESTIGATION REPORT OPERABLE UNIT	INFO		008	NATIONAL
RPT		00073	G. BROOKS										2A-SITE 24 VOLUME I, VOLUME II, VOLUME	REPOSITORY		009	80462363
N68711-92-D-4670		03.4	SOUTHWEST										III, APPENDICES A-J, VOLUME IV,			010	IMAGED
3050			DIVISION										APPENDICES K-P			011	
																012	
																022	
																024	
																025	
																BLDG. 296	
																BLDG. 297	
																BLDG. 299	
																BLDG. 326	
																BLDG. 359	
																BLDG. 360	
																BLDG. 529	
																BLDG. 655	
																BLDG. 800	
																OU 1	
																OU 2A	
																OU 3	
M60050 / 001741		03-17-1997	BECHTEL										DRAFT FINAL PHASE II VADOSE ZONE	ADMIN RECORD	FS	024	BECHTEL
CTO-0073/0317		03-11-1997	NATIONAL, INC.										FEASIBILITY STUDY REPORT	INFO		BLDG. 296	NATIONAL
RPT		00073	G. BROOKS											REPOSITORY		BLDG. 297	37041250
N68711-92-D-4670		03.4	NAVFAC -													OU 2A	IMAGED
1050			SOUTHWEST														
			DIVISION														
M60050 / 001846		03-24-1997	BECHTEL										DRAFT PROPOSED PLAN	ADMIN RECORD	OU	024	SOUTHWEST
CTO-0063/0529		03-11-1997	NATIONAL, INC.												PROPOSED PLAN	025	DIVISION
XMTL		00063	C. CARLISLE												SOIL	OU 2A	37041242*
N68711-92-D-4670		01.1	VARIOUS														IMAGED
0011			AGENCIES														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Subject	Classification	Keywords	Sites	Location Box No.			
Approx. # Pages	EPA Cat. #	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.			
M60050 / 001938	05-28-1997	03-26-1997	MCAS EL TORO	PUBLIC INFORMATION MATERIALS/HANDOUTS INCLUDES: RAB MEETING AGENDA, JANUARY 30, 1997 DRAFT MTG MINUTES, COMMENTS FROM VARIOUS AGENCIES	ADMIN RECORD INFO REPOSITORY	COMMENTS MTG MINS PUB. PARTICIPAT RAB	024 OU 2A	SOUTHWEST DIVISION 37041243* IMAGED			
MISC NONE 0075	NONE 10.3		PUBLIC INTEREST								
M60050 / 001926	04-29-1997	03-27-1997	DTSC LONG BEACH T. MAHMOUD MCAS EL TORO J. JOYCE	COMMENTS ON DRAFT PROPOSED PLAN FOR OPERABLE UNIT 2A SITE 24-SOIL W/ENCLS	ADMIN RECORD INFO REPOSITORY	COMMENTS OU	024 OU 2A	SOUTHWEST DIVISION			
LTR NONE 0008	NONE 10.1										
M60050 / 001995	09-23-1997	04-03-1997	NAVFAC - SOUTHWEST DIVISION A. PISZKIN BECHTEL NATIONAL, INC. C. CARLISLE	REVIEW OF DRAFT PROPOSED PLAN FOR CLEANUP OF CONTAMINATED SOIL AT VOC SOURCE AREA, DATED 12 MARCH 1997	ADMIN RECORD	NFA SOIL VOC	024 OU 2A	SOUTHWEST DIVISION			
MEMO N68711-92-D-4670 0017	00063 10.0										
M60050 / 001925	04-29-1997	04-23-1997	BECHTEL NATIONAL C. CARLISLE VARIOUS AGENCIES	PROPOSED PLAN FOR OPERABLE UNIT 2A SITE 24 SOIL VADOSE ZONE CLEANUP	INFO REPOSITORY	CLEANUP PUB. PARTICIPAT SOIL	024 OU 2A	SOUTHWEST DIVISION			
PLAN NONE 0008	NONE 04.3										
M60050 / 001933	05-28-1997	04-28-1997	BECHTEL NATIONAL G. BROOKS VARIOUS AGENCIES	DRAFT FINAL PHASE II REMEDIAL INVESTIGATION FEASIBILITY STUDY ADDENDUM SITE-25 MAJOR DRAINAGES	ADMIN RECORD INFO REPOSITORY	ADPM FS INVESTIGATION RI	024 025 OU 2A	SOUTHWEST DIVISION 37041243* IMAGED			
RPT N6871192D467000 1025	00073 03.4										
M60050 / 001944	06-06-1997	05-15-1997	BECHTEL NATIONAL, INC. C. CARLISLE VARIOUS AGENCIES	WRITTEN COMMENTS SITE 24 PROPOSED PLAN SOIL CLEANUP, PUBLIC MTG. EVALUATION FORMS, & MAILING LIST COUPONS FROM 5/15/97 PUBLIC MEETING	ADMIN RECORD INFO REPOSITORY	COMMENTS CRP EVALUATION	024 OU 2A	BECHTEL NATIONAL 80462363 IMAGED			
CTO-0063B/0583 LTR N68711-92-D-4670 0031	00063 01.6										

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001961		06-30-1997 05-15-1997	HAHN & BOWERSOCK	PLAN NONE 0093	NONE 10.4	J. BURGNER MCAS EL TORO							PROPOSED PLAN FOR ENVIRONMENTAL RESTORATION PUBLIC COMMENT MEETING DATED MAY 15, 1997 ENCLOSED WITH VARIOUS COMMENTS	ADMIN RECORD INFO REPOSITORY	CLEANUP COMMENTS GW MTG MINS PUB. PARTICIPAT	024 OU 2A	SOUTHWEST DIVISION 37041248* IMAGED
M60050 / 000339		04-12-2000 05-28-1997	RAB MEMBER E. COHN	NONE MISC NONE 0003	NONE	NAVFAC - SOUTHWEST DIVISION J. JOYCE							COMMENTS BY RAB MEMBER ON THE SITE 24 SOIL CLEANUP PROPOSED PLAN (MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL	COMMENTS SOIL	024	SOUTHWEST DIVISION SW01011005

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001934	05-28-1997	BECHTEL			05-28-1997	NATIONAL				SITE (B) BASEWIDE COMMUNITY RELATIONS SUPPORT-INCLUDESMAY 28, 1997 RAB AGENDA, MARCH 26, 1997 DRAFT MEETING MINUTES, PUBLIC NOTICE & (MAILING LIST IN CONFIDNTL)	ADMIN RECORD	CRP	001	SOUTHWEST DIVISION
MISC	0063B	C. CARLISLE									CONFIDENTIAL	MTG MINS	002	37041243*
N6871192D467000	10.4	VARIOUS AGENCIES									DOC	PUB. PARTICIPAT	003	IMAGED
0017											INFO	RAB	004	
											REPOSITORY		005	
													006	
													007	
													008	
													010	
													011	
													012	
													013	
													015	
													016	
													017	
													019	
													020	
													021	
													022	
													024	
													025	
													OU 1	
													OU 2C	
													OU 3	
													OU 3A	

UIC No. / Rec. No.	Doc. Control No.	Prct. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000342	NONE	04-12-2000	RAB COMMUNITY CO-CHAIR	NONE	05-29-1997	C. BENNETT				0020	NONE	VARIOUS	COMPILED COMMENTS, STATEMENTS, AND QUESTIONS BY RAB COMMUNITY CO-CHAIR ON THE PROPOSED PLAN, SVE OF VADOSE ZONE SOIL (WITH ATTACHMENTS)	ADMIN RECORD	ARAR DCE FS GW PCE RAB ROD SVE TCA TCE TDS VOC	024 OU 1 OU 2 OU 2A	SOUTHWEST DIVISION SW01011005
M60050 / 000388	NONE	04-18-2000	RAB MEMBER	LTR	05-29-1997	M. RUDOLPH				0002	NONE	J. JOYCE	COMMENTS REGARDING THE PROPOSED PLAN WHICH PERTAINS TO THE SOIL IN THE VADOSE ZONE (MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL	COMMENTS GW RAB SOIL	024	SOUTHWEST DIVISION SW01011005
M60050 / 000144	NONE	09-21-1999	EL TORO LOCAL REDEVELOPMENT	LTR	05-30-1997	C. WIERCIOCH				0002	10.1	J. JOYCE	COMMENTS ON PROPOSED PLAN FOR ENVIRONMENTAL RESTORATION	ADMIN RECORD	IRP VOC	024	SOUTHWEST DIVISION SW01011002
M60050 / 000337	NONE	04-12-2000	RAB MEMBER	LTR	05-30-1997	J. WERNER				0002	NONE	J. JOYCE	PUBLIC COMMENT PERIOD, "PROPOSED NO FURTHER ACTION SITES" (MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL	NFA PUBNOT	024	SOUTHWEST DIVISION SW01011005
M60050 / 000341	NONE	04-12-2000	RAB MEMBER	LTR	05-30-1997	J. WERNER				0002	NONE	J. JOYCE	COMMENTS BY RESTORATION ADVISORY BOARD MEMBER ON SOIL CLEANUP PROPOSED PLAN (MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL	COMMENTS SOIL SVE TCE	024	SOUTHWEST DIVISION SW01011005

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000384 NONE LTR NONE 0003	04-18-2000 05-30-1997 NONE	ALZETA CORP, SANTA CLARA, CA B. MYATT NAVFAC - SOUTHWEST DIVISION J. JOYCE	COMMENTS ON THE CONTAMINATED SOILS CLEANUP, SOIL VAPOR EXTRACTION WITH CARBON ABSORPTION AND REGENERATION PROPOSED PLAN	ADMIN RECORD	EMISSION SOIL SVE	024	SOUTHWEST DIVISION							
M60050 / 001957 LTR NONE 0000	06-12-1997 06-01-1997 NONE 01.6	MCAS EL TORO J. JOYCE VARIOUS AGENCIES	CLARIFICATION OF SITE 25 BOUNDARY	ADMIN RECORD	NFA	025 OU 2A	SOUTHWEST DIVISION							
M60050 / 001947 CTO-0142/0007 PLAN N68711-92-D-4670 0050	06-06-1997 06-02-1997 00142 03.3	BECHTEL NATIONAL, INC. C. CARLISLE VARIOUS AGENCIES	DRAFT GROUNDWATER REMEDIATION PILOT TEST WORK PLAN, DATED JUNE 1997 (SEE AR #2655 - EPA COMMENTS, #2656 - CRWQCB COMMENTS, & #2657 - DTSC COMMENTS)	ADMIN RECORD	GW WORK PLAN	024 BLDG. 296 BLDG. 297 OU 2A	SOUTHWEST DIVISION 37041243* IMAGED							
M60050 / 001948 CTO-0142/0010 PLAN N68711-92-D-4670 0035	06-06-1997 06-02-1997 00142 01.1	BECHTEL NATIONAL, INC. P. BROOKS VARIOUS AGENCIES	DRAFT QUALITY ASSURANCE PROJECT PLAN (SEE AR #2658 - DTSC COMMENTS & #2659 - US EPA COMMENTS)	ADMIN RECORD	QAPP	024 OU 2A	SOUTHWEST DIVISION 37041243* IMAGED							
M60050 / 002654 NONE LTR NONE 0001	05-28-2002 06-11-1997 NONE	US EPA - SAN FRANCISCO T. MAHMOUD MCAS EL TORO J. JOYCE	REQUEST FOR ACCESS TO THE ACTIVITY TO OVERSEE THE GROUNDWATER REMEDATION PILOT TEST WORK AT THE VOC SOURCE AREA ON 16 & 24 JUNE 1997	ADMIN RECORD BASE	GW REMEDIAL ACTIO SV VOC	024 OU 2A	SOUTHWEST DIVISION							
M60050 / 002655 NONE LTR NONE 0003	05-28-2002 06-17-1997 NONE	US EPA - SAN FRANCISCO G. KISTNER MCAS EL TORO J. JOYCE	COMMENTS ON THE DRAFT GROUNDWATER REMEDIATION PILOT TEST WORK PLAN, DATED JUNE 1997 (SEE AR #1947 - PILOT TEST)	ADMIN RECORD BASE	AIR COMMENTS GW REMEDIAL ACTIO VOC WELLS WORK PLAN	024 OU 2A	SOUTHWEST DIVISION							

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	Reciprocity Affil.	Recipient	Subject	Classification	Keywords	Sites	Location Box No.		
Approx. # Pages	EPA Cat. #									
M60050 / 001959	06-30-1997	ORANGE COUNTY REPORTER	NEWSPAPER ARTICLE: "ELEVEN EL TORO SITES WON'T NEED CLEANUP, MARINES SAY"	ADMIN RECORD	FUEL	004	SOUTHWEST DIVISION			
MISC	06-20-1997			INFO REPOSITORY	NEWSART	006				
NONE	NONE	GENERAL PUBLIC			PIM	009				37041248*
0001	10.6					010				IMAGED
						013				
						015				
						019				
						020				
						021				
						022				
						025				
						OU 2A				
						OU 3A				
M60050 / 002656	05-28-2002	CRWQCB - RIVERSIDE	COMMENTS ON THE DRAFT GROUNDWATER REMEDIATION PILOT TEST WORK PLAN, DATED JUNE 1997 - REPORT MEETS WATER BOARD'S REQUIREMENTS (SEE AR #1947 - PILOT TEST WORK PLAN)	ADMIN RECORD	COMMENTS	024	SOUTHWEST DIVISION			
NONE	06-20-1997	L. VITALE		BASE	GW	OU 2A				
LTR	NONE	DTSC - LONG BEACH			REMEDIAL ACTIO					
NONE		T. MAHMOUD								
0001										
M60050 / 002657	05-28-2002	DTSC - LONG BEACH	COMMENTS ON THE DRAFT GROUNDWATER REMEDIATION PILOT TEST WORK PLAN, DATED JUNE 1997 (SEE AR #1947 - PILOT TEST WORK PLAN)	ADMIN RECORD	COMMENTS	024	SOUTHWEST DIVISION			
NONE	06-24-1997	T. MAHMOUD		BASE	GW	OU 2A				
LTR	NONE	MCAS EL TORO			REMEDIAL ACTIO					
NONE		J. JOYCE			VOC					
0004					WELLS					
					WORK PLAN					
M60050 / 001960	06-30-1997	BECHTEL NATIONAL	RESPONSIVENESS SUMMARY: RESPONSE TO COMMENTS; COMMENTS FROM PROGRAM MANAGER MCAS EL TORO LOCAL REDEVELOPMENT AUTHORITY ON OU 2A VADOSE ZONE	ADMIN RECORD	CERCLA	024	SOUTHWEST DIVISION			
CTO-135/0049	06-25-1997				COMMENTS	BLDG. 296				
MISC	00135	SOUTHWEST DIVISION			GW	BLDG. 297				37041248*
N68711-92-D-4670	10.1				OU	OU 2A				IMAGED
0004					PUB. PARTICIPAT					
					RESPONSE					
					SOIL					
					VOC					

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Recipient						
M60050 / 002658	05-28-2002	05-28-2002	DTSC - LONG BEACH	NONE	06-25-1997	T. MAHMOUD	MCAS EL TORO	DTSC HAS REVIEWED AND FINDS THE DRAFT QUALITY ASSURANCE PROJECT PLAN ACCEPTABLE (SEE AR #1948 - DRAFT QAPP & GW WP)	ADMIN RECORD BASE	COMMENTS DATA GW QAPP REMEDIAL ACTIO	024 OU 2A	SOUTHWEST DIVISION
LTR	NONE		J. JOYCE	NONE								
NONE				0002								
M60050 / 001962	06-30-1997	06-30-1997	BECHTEL NATIONAL, INC.	CTO-135/0033 & CTO-0135/0101 & CTO-0135/0098	07-01-1997 00135 05.0	D. TEDALDI	VARIOUS AGENCIES	DRAFT INTERIM RECORD OF DECISION OPERABLE UNIT 2A VOC SOURCE AREA VADOSE ZONE (SEE AR #2660 - US EPA COMMENTS)	ADMIN RECORD	GW OU PIM ROD SOIL VOC	024 OU 2A	BECHTEL NATIONAL 37041248 IMAGED
RPT				N68711-92-D-4670								
0162												
M60050 / 001966	08-20-1997	07-01-1997	BECHTEL NATIONAL, INC.	MM	00076	D. TEDALDI	VARIOUS AGENCIES	JULY 1, 1997 BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING MINUTES	ADMIN RECORD	BCT BRAC MTG MINS NFA ROD	002 003 005 008 011 012 017 024 OU 1 OU 2A OU 2B OU 2C	SOUTHWEST DIVISION 37041248* IMAGED
N68711-92-D-4670	01.6			0005								
M60050 / 002659	05-28-2002	07-03-1997	US EPA - SAN FRANCISCO	NONE	NONE	G. KISTNER	MCAS EL TORO	COMMENTS ON THE DRAFT QUALITY ASSURANCE PROJECT PLAN AND DRAFT GROUNDWATER REMEDIATION WORK PLAN (SEE AR #1948 - DRAFT QAPP & GW WP)	ADMIN RECORD BASE	COMMENTS GC/MS GW METALS PRG QAPP QC SOP VOC WORK PLAN	024 OU 2A	SOUTHWEST DIVISION
LTR			J. JOYCE	NONE								
NONE				0005								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000231 CTO-0142/0018 RPT N68711-92-D-4670 0025	12-27-1999 07-09-1997 00142 01.1	BECHTEL NATIONAL INC G. BROOKS NAVFAC - SOUTHWEST DIVISION R. SELBY	TECHNICAL MEMORANDUM; PREDESIGN EVALUATION OF SOIL VAPOR EXTRACTION EQUIPMENT FACILITY OPTIONS	ADMIN RECORD	SOIL SVE TECH MEMO VOCS WELLS	024	SOUTHWEST DIVISION SW01011003							
M60050 / 001964 CTO-0142/0027 PLAN N68711-92-D-4670 0122	07-23-1997 07-14-1997 00142 03.3	BECHTEL NATIONAL, INC. G. BROOKS VARIOUS AGENCIES	DRAFT FINAL GROUNDWATER REMEDATION PILOT TEST WORK PLAN	ADMIN RECORD INFO REPOSITORY	GW SOIL VOC WELLS WORK PLAN	024 BLDG. 296 BLDG. 297 OU 2A	SOUTHWEST DIVISION 37041248* IMAGED							
M60050 / 002019 CTO-0142/0023 PLAN N68711-92-D-4670 0072	09-24-1997 07-16-1997 00142 03.3	BECHTEL NATIONAL, INC. D. TEDALDI VARIOUS AGENCIES	DRAFT FINAL QUALITY ASSURANCE PROJECT PLAN GROUNDWATER REMEDATION PILOT TEST	ADMIN RECORD INFO REPOSITORY	GW QAPP	024 OU 2A	SOUTHWEST DIVISION 37041254* IMAGED							
M60050 / 002660 NONE LTR NONE 0003	05-28-2002 07-24-1997 NONE	US EPA - SAN FRANCISCO G. KISTNER MCAS EL TORO J. JOYCE	COMMENTS ON THE DRAFT INTERIM RECORD OF DECISION OPERABLE UNIT 2A VOC SOURCE AREA VADOSE ZONE (SEE AR #1962 - DRAFT ROD)	ADMIN RECORD BASE	ARAR COMMENTS COPC GW ROD SOIL SVE TCE VOC	024 OU 2A	SOUTHWEST DIVISION							
M60050 / 002018 CTO-0142/0045 XMTL N68711-92-D-4670 0010	09-24-1997 07-30-1997 00142 10.1	BECHTEL NATIONAL, INC. D. TEDALDI VARIOUS AGENCIES	RESPONSE TO COMMENTS ON DRAFT GROUNDWATER REMEDIATION WORK PLAN AND DRAFT QUALITY ASSURANCE PROJECT PLAN DATED JUNE 1997 (SEE AR #2658 - DTSC COMMENTS & #2659 - EPA COMMENTS)	ADMIN RECORD INFO REPOSITORY	COMMENTS GW QAPP RESPONSE WORK PLAN	024 OU 2A	SOUTHWEST DIVISION 37041254* IMAGED							

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001967	09-18-1997	09-18-1997	BECHTEL NATIONAL	DRAFT RECORD OF DECISION OPERABLE UNITS 2A AND 3A NO ACTION SITES	ADMIN RECORD	NFA										004	SOUTHWEST DIVISION
CTO-135/0034	08-18-1997	08-18-1997	D. TEDALDI			OU										006	37041248*
RPT	00135	00135	VARIOUS AGENCIES			ROD										009	IMAGED
N68711-92-D-4670	05.1	05.1														010	
0129																013	
																015	
																019	
																020	
																021	
																022	
																025	
																OU 2A	
																OU 3A	
M60050 / 001968	09-18-1997	09-18-1997	BECHTEL NATIONAL, INC.	AUGUST 6, 1997, BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING MINUTES	ADMIN RECORD	FFA										005	SOUTHWEST DIVISION
MM	00076	00076	D. TEDALDI			GUID										017	37041248*
N68711-92-D-4670	10.4	10.4	VARIOUS AGENCIES			LF										024	IMAGED
0016						MTG MINS										OU 1	
						ROD										OU 2A	
																OU 3A	
M60050 / 000581	11-22-2000	11-22-2000	OHM REMEDIATION	RAW DATA PACKAGE - SOIL VAPOR EXTRACTION PILOT TESTS	ADMIN RECORD	DATA										024	SOUTHWEST DIVISION
SW4218	09-10-1997	09-10-1997	NAVAC - SOUTHWEST DIVISION		BASE	SOIL											SW02051702
MISC	DO075	DO075				SVE											
N68711-93-D-1459																	
0600																	
M60050 / 000580	11-22-2000	11-22-2000	OHM REMEDIATION	OPERATION AND MAINTENANCE CHECKLIST - GROUNDWATER PUMP TEST TREATMENT SYSTEM, VOLUMES I & II, REVISION 2	ADMIN RECORD	GW										024	BECHTEL NATIONAL
SW4249	09-15-1997	09-15-1997	C. ORTEZ		BASE	WELLS										OU 2A	SW01012201
MISC	DO075	DO075	NAVAC - SOUTHWEST DIVISION														
N68711-93-D-1459																	
0450																	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.	Recipient	Approx. # Pages	EPA Cat. #						
M60050 / 001977	09-18-1997	BECHTEL NATIONAL, INC.	DRAFT RESPONSIVENESS SUMMARY PROPOSED PLAN, NO ACTION SITES					ADMIN RECORD	CLEANUP	004	SOUTHWEST DIVISION
MISC	09-16-1997	D. TEDALDI						INFO REPOSITORY	GW	006	37041248*
NONE	NONE	SOUTHWEST DIVISION							NFA	009	IMAGED
0015	10.1	R. SELBY							OU	010	
									ROD	013	
									SOIL	015	
									VOC	019	
										020	
										021	
										022	
										024	
										025	
										OU 2A	
										OU 3A	
M60050 / 001979	09-18-1997	MCAS EL TORO	FAXED COPIES OF VARIOUS NEWS CLIPPINGS: PUBLIC NOTICE DATED 31 JULY 1997, PRESENTATION & DISCUSSION MEETING, IRP PROPOSED PLAN OPERABLE UNIT 2A, NO FURTHER ACTION OPERABLE UNIT 3A					ADMIN RECORD	GW	024	SOUTHWEST DIVISION
NONE	09-17-1997	COMMANDING OFFICER						INFO REPOSITORY	NFA	OU 2A	
FAX	NONE	BECHTEL NATIONAL, INC.							PIM	OU 3A	
NONE	10.3	B. COLEMAN							PROPOSED PLAN		
0004									PUBNOT		
									ROD		
									SOIL		
									VOC		
M60050 / 001985	09-18-1997	NAVFAC - SOUTHWEST DIVISION	INTERIM RECORD OF DECISION (ROD) OU 2A, SITE 24 VOC SOURCE AREA; MODIFICATION OF THE LANGUAGE INCLUDED AT THE END OF DRAFT FINAL ROD, SECTION 10.2.1.1					ADMIN RECORD	ROD	024	SOUTHWEST DIVISION
LTR	09-18-1997	R. CALLAWAY						INFO REPOSITORY	VOC	OU 2A	37041248*
NONE	NONE	VARIOUS AGENCIES									IMAGED
0002	01.6										



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	Classification	Keywords	Sites	Location Box No.
M60050 / 001999 MM N68711-92-D-4670 0007	09-23-1997 09-23-1997 00142 10.4	BECHTEL NATIONAL, INC. D. TEDALDI VARIOUS AGENCIES	MINUTES FROM 10 SEPTEMBER 1997 MEETING REGARDING THE VOC SOURCE AREA PILOT TEST UPDATE	ADMIN RECORD	GW MTG MINS SOIL VOC	024 OU 2A	SOUTHWEST DIVISION 37041257* IMAGED
M60050 / 001999 MM N68711-92-D-4670 0005	09-23-1997 09-23-1997 00142 10.4	BECHTEL NATIONAL, INC. D. TEDALDI VARIOUS AGENCIES	MINUTES FROM THE 17 SEPTEMBER 1997, MEETING REGARDING THE VOC SOURCE AREA PILOT TEST UPDATE	ADMIN RECORD	GW MTG MINS SOIL VOC	024 OU 2A	SOUTHWEST DIVISION 37041257* IMAGED
M60050 / 002000 MM N68711-92-D-4670 0009	09-23-1997 09-23-1997 00142 10.4	BECHTEL NATIONAL, INC. D. TEDALDI VARIOUS AGENCIES	MINUTES OF THE 3 SEPTEMBER 1997, MEETING REGARDING THE VOC SOURCE AREA PILOT TEST UPDATE	ADMIN RECORD	GW MTG MINS SOIL VOC	024 OU 2A	SOUTHWEST DIVISION 37041257* IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002039		11-24-1997	MCAS EL TORO		09-24-1997	RAB					SEPTEMBER 24, 1997, RAB MEETING; PUBLIC INFORMATION MATERIALS	ADMIN RECORD	COMMENTS	001	SOUTHWEST
												INFO	MTG MINS	004	DIVISION
MISC		NONE	RAB MEMBERS								INCLUDES: RAB MTG.AGENDA, PUBLIC NOTICE, RAB MTG.MINS OF 8/6/97, MISC.	REPOSITORY	PUB. PARTICIPAT	006	37041254*
NONE		10.6									AGENCIES COMMENTS		PUBNOT	007	IMAGED
0071													RAB	008	
														009	
														010	
														011	
														012	
														013	
														014	
														015	
														016	
														019	
														020	
														021	
														022	
														024	
														OU 2A	
														OU 3	
														OU 3A	
M60050 / 002025		11-21-1997	BECHTEL		09-25-1997						RESPONSE TO COMMENTS ON DRAFT	ADMIN RECORD	COMMENTS	009	SOUTHWEST
CTO-135/0102			NATIONAL, INC.								ROD, OU'S 2A AND 3A, NO ACTION SITES	INFO	RESPONSE	024	DIVISION
LTR		00135	D. TEDALDI								AND ASSOCIATED RESPONSIVENESS	REPOSITORY	ROD	025	37041254*
N68711-92-D-4670		01.6	VARIOUS								SUMMARY (VARIOUS DATES)			OU 2A	IMAGED
0008			AGENCIES											OU 3A	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002020	09-26-1997	BECHTEL	DRAFT FINAL RECORD OF DECISION	ADMIN RECORD	ARAR	004	SOUTHWEST							
CTO-135/0086	09-26-1997	NATIONAL, INC.	OPERABLE UNITS 2A AND 3A NO ACTION	INFO	ARSENIC	006	DIVISION							
RPT	00135	D. TEDALDI	SITES (SEE AR #2663 - SIGNED	REPOSITORY	BCT	009	37041254*							
N68711-92-D-4670	05.1	VARIOUS	SIGNATURE PAGE FROM CRWQCB)		BRAC	010	IMAGED							
0100		AGENCIES			CANCER	013								
					COPC	015								
					COPEC	019								
					DQO	020								
					FFA	021								
					GW	022								
					METALS	025								
					MONITORING	OU 2A								
					MW	OU 3								
					NFA	OU 3A								
					NPL	OU 3B								
					OU									
					PCB									
					PCE									
					PESTICIDES									
					RAB									
					RFA									
					ROD									
					SOIL									
					SVOC									
					SWMU									
					TCE									
					TPH									
					UST									
					VOC									
M60050 / 002662	05-28-2002	CRWQCB -	RESPONSE TO FEDERAL FACILITIES	ADMIN RECORD	FFA	024	SOUTHWEST							
NONE	09-26-1997	RIVERSIDE	AGREEMENT EXTENSION REQUEST FOR	BASE	ROD	OU 2A	DIVISION							
LTR	NONE	L. VITALE	AN EXTENSION OF FIVE DAYS FOR THE											
NONE		MCAS EL TORO	DRAFT FINAL INTERIM RECORD OF											
0001		J. JOYCE	DECISION (ROD) - RWQCB CONCURS WITH											
			REQUEST (SEE AR #1987 - REQUEST)											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #							
M60050 / 002663	05-28-2002	05-28-2002	CRWQCB - RIVERSIDE	NONE	09-29-1997	L. VITALE	MCAS EL TORO	TRANSMITTAL OF SIGNED SIGNATURE PAGE FOR THE DRAFT FINAL RECORD OF DECISION OPERABLE UNITS 2A AND 3A NO ACTION SITES (SEE AR #2020 - ROD)	ADMIN RECORD BASE	ROD	004 006 009 010 013 015 019 020 021 022 024 025 OU 2A OU 3 OU 3A OU 3B	SOUTHWEST DIVISION
LTR	NONE											
NONE												
0004												
M60050 / 002037	11-24-1997	09-30-1997	MCAS EL TORO J. JOYCE	LTR	NONE	VARIOUS	AGENCIES	REQUEST CHANGES TO FEDERAL FACILITIES AGREEMENT (FFA) SUBMITTAL DATES FOR THE PRE-DRAFT PROPOSED PLAN, DRAFT FINAL INTERIM ACTION FEASIBILITY STUDY, DRAFT PROPOSED PLAN, AND DRAFT RECORD OF DECISION (SEE AR #2664 & #2665 - DTSC RESPONSES TO REQUEST)	ADMIN RECORD	FFA FS ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION 37041254* IMAGED
NONE												
0005												
M60050 / 002023	11-21-1997	10-01-1997	BECHTEL NATIONAL, INC. D. TEDALDI	CTO-0142/0084	00142	VARIOUS	AGENCIES	MAP SHOWING REVISED CPT/HYDROPUNCH SAMPLING LOCATIONS FOR DISCUSSION PURPOSES, TCE CONCENTRATIONS IN SHALLOW AND PRINCIPAL AQUIFER	ADMIN RECORD	GW TCE WATER WELLS	017 018 024 OU 1 OU 2A	SOUTHWEST DIVISION 37041254* IMAGED
MISC												
N68711-92-D-4670												
0002												
M60050 / 002225	07-30-1998	10-01-1997	CDM FEDERAL PROGRAMS L. DAVIDSON	RPT	DO005	NAVFAC - SOUTHWEST DIVISION		FINAL GROUNDWATER MONITORING REPORT FOR JULY 1997 SAMPLING ROUND	ADMIN RECORD INFO REPOSITORY	GW MONITORING NFA VOC VOLATILES	OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION SW01013107
N68711-96-D-2029												
1500												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002035	CTO-0142/0089	11-24-1997	BECHTEL NATIONAL, INC.	LTR	10-03-1997	D. TEDALDI					00142	VARIOUS AGENCIES	CAPTURE ZONE MODELING AND GEOLOGIC CROSS SECTIONS TO ASSIST IN LOCATING EXTRACTION WELL 24EX4	ADMIN RECORD	GW MW WELLS	024 BLDG. 296 OU 2A	SOUTHWEST DIVISION 37041254* IMAGED
M60050 / 002664	NONE	05-28-2002	DTSC - LONG BEACH	LTR	10-03-1997	J. SCANDURA					NONE	MCAS EL TORO	ACKNOWLEDGEMENT OF RECEIPT OF REQUEST FOR EXTENSION OF SIX DEADLINES FOR THE PRE-DRAFT PROPOSED PLAN, DRAFT FINAL INTERIM ACTION FEASIBILITY STUDY, DRAFT PROPOSED PLAN, AND DRAFT RECORD OF DECISION - DTSC WILL MAKE A DECISION AFTER MEETING WITH THE BCT	ADMIN RECORD BASE	BCT BRAC FFA FS PROPOSED PLAN ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 002031	XMTL	11-24-1997	BECHTEL NATIONAL	NONE	10-08-1997	D. TEDALDI					00142	VARIOUS AGENCIES	SEPTEMBER 24, 1997, MEETING MINUTES ON SITE 24 PILOT TEST UPDATE	ADMIN RECORD	MTG MINS	024 OU 2A	SOUTHWEST DIVISION 37041254* IMAGED
M60050 / 002033	MM	11-24-1997	BECHTEL NATIONAL	NONE	10-08-1997	D. TEDALDI					00142	VARIOUS AGENCIES	OCTOBER 1, 1997, MEETING MINUTES FOR SITE 24 PILOT TEST UPDATE	ADMIN RECORD	MTG MINS	024	SOUTHWEST DIVISION 37041254* IMAGED
M60050 / 002051	MM	12-16-1997	BECHTEL NATIONAL	NONE	10-15-1997	D. TEDALDI					00142	VARIOUS AGENCIES	OCTOBER 15, 1997, MEETING MINUTES, SITE 24 PILOT TEST UPDATE	ADMIN RECORD	GW MTG MINS TCE WELLS	024 BLDG. 296 BLDG. 297 OU 2A	IRON MOUNTAIN 37041253 IMAGED
M60050 / 002665	NONE	05-28-2002	DTSC - LONG BEACH	LTR	10-17-1997	J. SCANDURA					NONE	MCAS EL TORO	RESPONSE TO REQUEST FOR EXTENSION OF SIX DEADLINES FOR THE PRE-DRAFT PROPOSED PLAN, DRAFT FINAL INTERIM ACTION FEASIBILITY STUDY, DRAFT PROPOSED PLAN, AND DRAFT RECORD OF DECISION - DTSC GRANTS REQUEST (SEE AR #2037 - REQUEST)	ADMIN RECORD BASE	BCT BRAC FFA FS PROPOSED PLAN ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002036		11-24-1997	MCAS EL TORO										PROPOSED DEADLINES FOR COMPLETION OF POST RECORD OF DECISION DRAFT PRIMARY DOCUMENTS FOR OPERABLE UNIT 2A, VOLATILE ORGANIC COMPOUND SOURCE AREA (SEE AR #2049 - EPA RESPONSE)	ADMIN RECORD	FFA OU ROD VOC	024 OU 2A	SOUTHWEST DIVISION 37041254* IMAGED
LTR NONE 0003		10-20-1997	J. JOYCE														
		NONE	VARIOUS														
		01.6	AGENCIES														
M60050 / 002052		12-16-1997	BECHTEL NATIONAL, INC.										MINUTES OF 22 OCTOBER 1997 MEETING ON THE VOC SOURCE AREA PILOT TEST UPDATE	ADMIN RECORD	GW MTG MINS SOIL TCE VOC WELLS	024 BLDG. 297 OU 2A	IRON MOUNTAIN 37041253 IMAGED
CTO-0142/0141		10-22-1997	D. TEDALDI														
MM		00142	VARIOUS														
N68711-92-D-4670		10.4	AGENCIES														
0010																	
M60050 / 002666		05-28-2002	CRWQCB - RIVERSIDE										RESPONSE TO REQUEST FOR EXTENSION OF SIX DEADLINES FOR THE PRE-DRAFT PROPOSED PLAN, DRAFT FINAL INTERIM ACTION FEASIBILITY STUDY, DRAFT PROPOSED PLAN, AND DRAFT RECORD OF DECISION - CRWQCB GRANTS REQUEST (SEE AR #2037 - REQUEST)	ADMIN RECORD BASE	FFA FS GW PROPOSED PLAN ROD VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
NONE		10-22-1997	L. VITALE														
LTR		NONE	MCAS EL TORO														
NONE			J. JOYCE														
0001																	
M60050 / 002164		04-15-1998	BECHTEL NATIONAL, INC.										SEPTEMBER 20, 1995, BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING MINUTES	ADMIN RECORD	BCP BCT BRAC FS GUID LF MAG RD LANDFIL MTG MINS RI	002 003 005 017 024 025 BLDG. 296 OU 2A OU 2B OU 2C	SOUTHWEST DIVISION SW01013106
CTO-0076/0624		10-28-1997	D. TEDALDI														
MM		00076	VARIOUS														
N68711-92-D-4670		10.4	AGENCIES														
0014																	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002165	CTO-0076/0625	04-15-1998	BECHTEL NATIONAL, INC.	XMTL	10-28-1997	D. TEDALDI	N68711-92-D-4670	10.4	VARIOUS AGENCIES	0017	10.4		SEPTEMBER 27, 1995, BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING MINUTES	ADMIN RECORD	BCP BCT BRAC GUID GW MTG MINS RI SOIL	002 003 005 017 024 025 OU 2A OU 2B OU 2C	SOUTHWEST DIVISION SW01013106
M60050 / 002166	CTO-0076/0626	04-15-1998	BECHTEL NATIONAL, INC.	MM	10-28-1997	D. TEDALDI	N68711-92-D-4670	10.4	VARIOUS AGENCIES	0015	10.4		OCTOBER 4, 1995, BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING MINUTES	ADMIN RECORD	BCP BCT BRAC FS GUID MTG MINS RAB RI	002 003 005 017 024 025 OU 2A OU 2B OU 2C	SOUTHWEST DIVISION SW01013106
M60050 / 002167	CTO-0076/0627	04-15-1998	BECHTEL NATIONAL, INC.	XMTL	10-28-1997	D. TEDALDI	N68711-92-D-4670	10.4	VARIOUS AGENCIES	0026	10.4		OCTOBER 11, 1995, BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING MINUTES	ADMIN RECORD	BCP BCT BRAC FS GUID MTG MINS RI SOIL TCE	002 003 005 017 024 025	SOUTHWEST DIVISION SW01013106

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002168	04-15-1998	BECHTEL	OCTOBER 28, 1995, BASE REALIGNMENT	ADMIN RECORD	BCP	002	SOUTHWEST										
CTO-0076/0628	10-28-1997	NATIONAL	AND CLOSURE CLEANUP TEAM MEETING	BCT	003	DIVISION											
XMTL	00076	D. TEDALDI	MINUTES	BRAC	005	SW01013106											
N68711-92-D-4670	10.4	VARIOUS		FS	017												
0015		AGENCIES		GUID	024												
				MTG MINS	025												
				RI	OU 2A												
				SOIL	OU 2B												
					OU 2C												
M60050 / 002169	04-15-1998	BECHTEL	OCTOBER 25, 1995, BASE REALIGNMENT	ADMIN RECORD	BCP	002	SOUTHWEST										
CTO-0076/0629	10-28-1997	NATIONAL, INC.	AND CLOSURE CLEANUP TEAM MEETING	BCT	003	DIVISION											
XMTL	00076	D. TEDALDI	MINUTES	BRAC	005	SW01013106											
N68711-92-D-4670	10.4	VARIOUS		FS	017												
0026		AGENCIES		GUID DOC.	024												
				LF	025												
				MONITORING													
				MTG MINS													
				RI													
				SOIL													
M60050 / 002171	04-15-1998	BECHTEL	NOVEMBER 8, 1995, BASE REALIGNMENT	ADMIN RECORD	BCP	024	SOUTHWEST										
CTO-0076/0631	10-28-1997	NATIONAL, INC.	AND CLOSURE CLEANUP TEAM MEETING	BCT	025	DIVISION											
MM	00076	D. TEDALDI	MINUTES	BRAC	OU 2A	SW01013106											
N68711-92-D-4670	10.4	VARIOUS		GUID													
0034		AGENCIES		GW													
				MTG MINS													
				SOIL													
M60050 / 002172	04-15-1998	BECHTEL	NOVEMBER 15, 1995, BASE REALIGNMENT	ADMIN RECORD	BCP	024	SOUTHWEST										
CTO-0076/0632	10-28-1997	NATIONAL, INC.	AND CLOSURE CLEANUP TEAM MEETING	BCT	025	DIVISION											
XMTL	00076	D. TEDALDI	MINUTES	BRAC	OU 2A	SW01013106											
N68711-92-D-4670	10.4	VARIOUS		MTG MINS													
0015		AGENCIES		TCE													

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location
Constr./Guid. No.	CTO No.	CTO No.	Recipient	Subject	Classification	Keywords	Sites	Location	Box No.		
Approx. # Pages	EPA Cat. #	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location	Box No.		
M60050 / 002173	04-16-1998	10-28-1997	BECHTEL NATIONAL, INC.	NOVEMBER 22, 1995, BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING MINUTES	ADMIN RECORD	BCP BCT BRAC MTG MINS SOIL	024 025 OU 2A	SOUTHWEST DIVISION	SW01013106		
CTO-0076/0633	10-28-1997	10-28-1997	D. TEDALDI								
XMTL	00076	00076	VARIOUS AGENCIES								
N68711-92-D-4670 0026	10.4	10.4									
M60050 / 002174	04-16-1998	10-28-1997	BECHTEL NATIONAL, INC.	NOVEMBER 30, 1995, BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING MINUTES	ADMIN RECORD	BCP BCT BRAC GW MTG MINS SOIL WELLS	024 025 OU 2A	SOUTHWEST DIVISION	SW01013106		
CTO-0076/0634	10-28-1997	10-28-1997	D. TEDALDI								
XMTL	00076	00076	VARIOUS AGENCIES								
N68711-92-D-4670 0015	10.4	10.4									
M60050 / 002175	04-16-1998	10-28-1997	BECHTEL NATIONAL, INC.	DECEMBER 13, 1995, BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING MINUTES	ADMIN RECORD	BCP BCT BRAC GW MTG MINS SOIL WATER	024 025 OU 2A	SOUTHWEST DIVISION	SW01013106		
CTO-0076/0635	10-28-1997	10-28-1997	D. TEDALDI								
XMTL	00076	00076	VARIOUS AGENCIES								
N68711-92-D-4670 0013	10.4	10.4									
M60050 / 002176	04-16-1998	10-28-1997	BECHTEL NATIONAL, INC.	JANUARY 3, 1996, BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING MINUTES	ADMIN RECORD	BCP BCT BRAC GW MTG MINS SOIL VOC	024 025 OU 2A	SOUTHWEST DIVISION	SW01013106		
CTO-0076/0636	10-28-1997	10-28-1997	D. TEDALDI								
XMTL	00076	00076	VARIOUS AGENCIES								
N68711-92-D-4670 0048	10.4	10.4									

UIC No. / Rec. No.	Doc. Control No.	Prct. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Constr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002026	11-21-1997	10-29-1997	DTSC LONG BEACH				RESPONSIVENESS SUMMARY FOR PROPOSED PLAN OU 2A VADOSE ZONE; FORWARDED TO INDIVIDUALS WHO SUBMITTED COMMENTS (MAILING LIST IN CONFIDENTIAL FILE)	ADMIN RECORD CONFIDENTIAL DOC	COMMENTS OU PUB. PARTICIPAT	007 008 009 010 011 022 024 BLDG. 296 BLDG. 297 OU 2A	SOUTHWEST DIVISION 37041254* IMAGED
LTR NONE 0049	NONE 01.6		M. MINGAY VARIOUS AGENCIES								
M60050 / 002027	11-21-1997	10-29-1997	DTSC LONG BEACH				RESPONSIVENESS SUMMARY FOR PROPOSED PLAN OU 2A AND 3A NO ACTION SITES; FORWARDED TO INDIVIDUALS WHO SUBMITTED COMMENTS (MAILING LIST IN CONFIDENTIAL FILE)	ADMIN RECORD CONFIDENTIAL DOC	COMMENTS OU PUB. PARTICIPAT	009 024 025 OU 2A OU 3A	SOUTHWEST DIVISION 37041254* IMAGED
LTR NONE 0024	NONE 01.6		M. MINGAY VARIOUS AGENCIES								
M60050 / 002053	12-16-1997	10-29-1997	BECHTEL NATIONAL				OCTOBER 29, 1997, MEETING MINUTES, SITE 24 PILOT TEST UPDATE	ADMIN RECORD	MTG MINS WELLS	024 OU 2A	IRON MOUNTAIN 37041253 IMAGED
MM N6871192D467000 0009	00142 10.4		D. TEDALDI VARIOUS AGENCIES								
M60050 / 002047	12-16-1997	11-05-1997	BECHTEL NATIONAL				NOVEMBER 5, 1997, BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING MINUTES	ADMIN RECORD	BCP BRAC MTG MINS	005 024 OU 2A SWMU 46	IRON MOUNTAIN 37041253 IMAGED
CTO-0142/0129 MM N68711-92-D-4670 0006	00142 10.4		D. TEDALDI VARIOUS AGENCIES								
M60050 / 002049	12-16-1997	11-05-1997	EPA SAN FRANCISCO				RESPONSE TO LETTER DATED OCTOBER 20, 1997 THAT CONTAINED A PROPOSED SCHEDULE FOR REMEDIAL DESIGN/REMEDIAL ACTION DELIVERABLES (SEE AR #2036 - ORIGINAL LETTER)	ADMIN RECORD	FFA RD REMEDIAL ACTIO RESPONSE	024 OU 2A	IRON MOUNTAIN 37041253 IMAGED
LTR NONE 0002	NONE 01.6		G. KISTNER MCAS EL TORO J. JOYCE								

UIC No. / Rec. No.	Doc. Control No.	Prct. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002044		12-16-1997	BECHTEL NATIONAL		11-12-1997	D. TEDALDI							NOVEMBER 12, 1997, MEETING MINUTES, SITE 24 PILOT TEST UPDATE	ADMIN RECORD	MTG MINS	024 OU 2A	IRON MOUNTAIN 37041253 IMAGED
MM N6871192D467000 0013		00142 10.4	VARIOUS AGENCIES														
M60050 / 002043		12-15-1997	BECHTEL NATIONAL		11-19-1997	D. TEDALDI							NOVEMBER 19, 1997, MEETING MINUTES, 24 PILOT TEST UPDATE	ADMIN RECORD	MTG MINS	024 OU 2A	IRON MOUNTAIN 37041253 IMAGED
MM N6871192D467000 0010		00142 10.4	VARIOUS AGENCIES														
M60050 / 002040		12-15-1997	BECHTEL NATIONAL, INC.		11-26-1997	P. BROOKS							DRAFT SOIL VAPOR EXTRACTION PILOT TEST SUMMARY REPORT (VOC SOURCE AREA) VOLUMES I AND II REPORT AND APPENDICES A-D (SEE AR #2669 - CRWQCB COMMENTS & #2673 - DTSC COMMENTS)	ADMIN RECORD INFO REPOSITORY	BACKGROUND MONITORING REMOVAL SOIL SVE VOC WELLS	024 OU 2A	IRON MOUNTAIN 37041253 IMAGED
CTO-0142/0113 RPT N68711-92-D-4670 1200		00142 01.3	NAVFAC - SOUTHWEST DIVISION														
M60050 / 002046		12-16-1997	BECHTEL NATIONAL		12-03-1997	D. TEDALDI							DECEMBER 3, 1997, MEETING MINUTES, SITE 24 PILOT TEST UPDATE	ADMIN RECORD	MTG MINS	024 OU 2A	IRON MOUNTAIN 37041253 IMAGED
MM N6871192D467000 0003		00142 10.4	VARIOUS AGENCIES														

UIC No. / Rec. No.	Doc. Control No.	Prct. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient	Subject										
M60050 / 002058	01-29-1998	MCAS EL TORO	PUBLIC INFORMATION	ADMIN RECORD	COMMENTS	002	IRON MOUNTAIN						
	12-03-1997		MATERIAL/HANDOUTS INCLUDES:	INFO	LANDFILL	003	37041253						
MISC	NONE	RAB MEMBERS	12/3/97RAB MEETING AGENDA, PUB.	REPOSITORY	PUB. PARTICIPAT	005	IMAGED						
NONE	10.4		NOTICE, SEPTEMBER 24, 1997 MTG MIN.		RAB	008							
0091			RAB SIGN-IN SHEET & VARIOUS AGENCIES			011							
			COMMENTS			012							
						017							
						024							
						OU 2A							
						OU 2B							
						OU 2C							
						OU 3A							
M60050 / 002041	12-15-1997	BECHTEL	DRAFT FINAL PHASE II GROUNDWATER	ADMIN RECORD	FS	024	IRON MOUNTAIN						
CTO-073/0357	12-05-1997	NATIONAL, INC.	FEASIBILITY STUDY REPORT (SEE AR	INFO	GW	BLDG. 296	37041253						
RPT	00073	P. BROOKS	#2215, #2315 - REPLACEMENT PAGES, AR	REPOSITORY	OU	BLDG. 297	IMAGED						
N68711-92-D-4670	04.2	VARIOUS	#2670 - CRWQCB COMMENTS, #2671 - EPA			OU 2A							
1000		AGENCIES	REQUEST FOR EXTENSION, #2680 - EPA										
			COMMENTS, & #2681 - DTSC COMMENTS)										
M60050 / 002070	02-02-1998	OHM	VIDEO TAPE OF WELL 24_IN20B2,	ADMIN RECORD	GW	024	IRON MOUNTAIN						
	12-05-1997	REMEDIAION	GROUNDWATER REMEDIATION PILOT		IRP	OU 2A	37041253						
MISC	DO111	W. SEDLAK	TEST AT IRP SITE 24		WELLS		IMAGED						
N68711-93-D-1459	01.1	NAVFAC -											
0003		SOUTHWEST											
		DIVISION											
		D. JESPERSEN											
M60050 / 002668	05-28-2002	DTSC - LONG	REQUEST FOR WRITTEN REQUEST FOR	ADMIN RECORD	BCT	018	SOUTHWEST						
NONE	12-08-1997	BEACH	EXTENSION FOR THE DRAFT FINAL	BASE	BRAC	OU 1	DIVISION						
LTR	NONE	T. MAHMOUD	INTERIM ACTION FEASIBILITY STUDY,		FFA								
NONE		MCAS EL TORO	ACCORDING TO THE TERMS OF THE		FS								
0002		J. JOYCE	FEDERAL FACILITY AGREEMENT, AS THE										
			REVISED DEADLINE WAS MISSED (SEE AR										
			#2665 - APPROVAL OF EXTENSION)										
M60050 / 002045	12-16-1997	BECHTEL	DECEMBER 10, 1997, MEETING MINUTES,	ADMIN RECORD	MTG MINS	024	IRON MOUNTAIN						
	12-10-1997	NATIONAL	SITE 24 PILOT TEST UPDATE			OU 2A	37041253						
MM	00142	D. TEDALDI					IMAGED						
N6871192D467000	10.4	VARIOUS											
0004		AGENCIES											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002669 NONE LTR NONE 0001	05-28-2002 12-15-1997 NONE	05-28-2002 12-15-1997 NONE	CRWQCB - RIVERSIDE L. VITALE MCAS EL TORO J. JOYCE				COMMENTS ON THE DRAFT SOIL VAPOR EXTRACTION PILOT TEST SUMMARY REPORT FOR THE VOC SOURCE AREA CRWQCB CONCURS WITH RECOMMENDATIONS IN REPORT (SEE AR #2040 - SUMMARY REPORT)	ADMIN RECORD BASE	COMMENTS SVE VOC	024 OU 2A	SOUTHWEST DIVISION
M60050 / 002670 NONE LTR NONE 0001	05-28-2002 12-16-1997 NONE	05-28-2002 12-16-1997 NONE	CRWQCB - RIVERSIDE L. VITALE MCAS EL TORO J. JOYCE				WATER BOARD HAS NO COMMENTS ON THE DRAFT FINAL GROUNDWATER FEASIBILITY STUDY REPORT FOR THE VOC SOURCE AREA (SEE AR #2041 - FS REPORT)	ADMIN RECORD BASE	COMMENTS FS GW VOC	024 OU 2A	SOUTHWEST DIVISION
M60050 / 002062 MM N6871192D467000 0014	01-30-1998 12-17-1997 00142 10.4	01-30-1998 12-17-1997 00142 10.4	BECHTEL NATIONAL D.TEDALDI VARIOUS AGENCIES				DECEMBER 17, 1997, MEETING MINUTES, SITE 24 PILOT TEST UPDATE	ADMIN RECORD	GW MTG MINS WELLS	024 OU 2A	IRON MOUNTAIN 37041253 IMAGED
M60050 / 002671 NONE LTR NONE 0001	05-28-2002 12-19-1997 NONE	05-28-2002 12-19-1997 NONE	US EPA - SAN FRANCISCO G. KISTNER MCAS EL TORO J. JOYCE				REQUEST FOR EXTENSION FOR COMMENTS ON THE DRAFT FINAL PHASE II GROUNDWATER FEASIBILITY STUDY REPORT FOR THE VOC SOURCE AREA (SEE AR #2041 - FS REPORT)	ADMIN RECORD BASE	COMMENTS FFA FS GW VOC	024 OU 2A	SOUTHWEST DIVISION
M60050 / 002061 CTO-0142/0160 MM N68711-92-D-4670 0005	01-30-1998 12-30-1997 00142 10.4	01-30-1998 12-30-1997 00142 10.4	BECHTEL NATIONAL, INC. D.TEDALDI VARIOUS AGENCIES				MEETING MINUTES, SITE 24 PILOT TEST UPDATE	ADMIN RECORD	GW MTG MINS WELLS	024 OU 2A	IRON MOUNTAIN 37041253 IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prct. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contrl./Guid. No.	CTO No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002068	01-30-1998	12-30-1997	MCAS EL TORO			J. JOYCE	REQUEST FOR CHANGES TO THE FEDERAL FACILITIES AGREEMENT APPENDIX A SCHEDULE FOR PRIMARY DOCUMENTS (SEE AR #2672 - RESPONSE TO THIS REQUEST)	ADMIN RECORD	FFA GW NFA	001 002 003 005 007 008 011 012 014 016 017 018 024 OU 1 OU 2A OU 2B OU 2C OU 3	IRON MOUNTAIN 37041253 IMAGED
LTR NONE 0032	NONE 01.6		VARIOUS AGENCIES								
M60050 / 002269	09-23-1998	01-05-1998	JACOBS ENGINEERING			J. DOLEGOWSKI	RESPONSE TO COMMENTS REGARDING DRAFT FINAL OU-1 INTERIM-ACTION FEASIBILITY STUDY REPORT (SEE AR #2678 - EPA COMMENT EXTENSION REQUEST, #2680 - EPA COMMENTS & #2681 - DTSC COMMENTS)	ADMIN RECORD INFO REPOSITORY	COMMENTS FS RESPONSE	018 OU 1	SOUTHWEST DIVISION SW01013108
MISC N68711-89-D-9296 0350	00145 10.1		NAVFAC - SOUTHWEST DIVISION								
M60050 / 002066	01-30-1998	01-06-1998	BECHTEL NATIONAL, INC.			D. TEDALDI	DRAFT SOIL VAPOR EXTRACTION SYSTEM DESIGN WORK PLAN FOR THE VOC SOURCE AREA, DATED JANUARY 1998 (SEE AR #2674 - CRWQCB COMMENT, #2675 - EPA COMMENTS & #2679 - DTSC COMMENTS)	ADMIN RECORD	IRP SOIL SVE VOC WORK PLAN	024 OU 2A	IRON MOUNTAIN 37041253 IMAGED
CTO-0142/0155 PLAN N68711-92-D-4670 0044	00142 03.3		VARIOUS AGENCIES								
M60050 / 002060	01-29-1998	01-07-1998	BECHTEL NATIONAL, INC.			D. TEDALDI	REPLACEMENT PAGE, FIGURE 1-5, DRAFT FINAL PHASE II GROUNDWATER FEASIBILITY STUDY REPORT, OPERABLE UNIT 2A VOC SOURCE AREA, DECEMBER 1997 (SEE AR #2041 - FS REPORT)	ADMIN RECORD INFO REPOSITORY	FS GW VOC	024 OU 2A	IRON MOUNTAIN 37041253 IMAGED
CTO-0073/0370 MISC N68711-92-D-4670 0002	00073 04.2		VARIOUS AGENCIES								

UIC No. / Rec. No.	Doc. Control No.	Pr. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002067	CTO-0142/0171	01-30-1998	BECHTEL NATIONAL, INC.	MM	01-07-1998	D. TEDALDI							MINUTES OF 7 JANUARY 1998, MEETING REGARDING THE VOC SOURCE AREA PILOT TEST UPDATE	ADMIN RECORD	GW MTG MINS	024 OU 2A	IRON MOUNTAIN 37041253 IMAGED
N68711-92-D-4670 0005		10.4	VARIOUS AGENCIES														
M60050 / 002672	NONE	05-29-2002	CRWQCB - RIVERSIDE	LTR	01-07-1998	L. VITALE							RESPONSE TO REQUEST FOR CHANGES TO THE FEDERAL FACILITIES AGREEMENT REGARDING A SCHEDULE FOR PRIMARY DOCUMENTS - RWQCB CONCURS WITH PROPOSED EXTENSION DATES (SEE AR #2068 - REQUEST)	ADMIN RECORD BASE	FFA	001 002 003 005 007 008 011 012 014 016 017 018 024 OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION
NONE	LTR	NONE	MCAS EL TORO	NONE		J. JOYCE											
M60050 / 002673	NONE	05-29-2002	DTSC - LONG BEACH	LTR	01-13-1998	T. MAHMOUD							COMMENTS ON THE DRAFT SOIL VAPOR EXTRACTION PILOT TEST SUMMARY REPORT FOR THE VOC SOURCE AREA (SEE AR #2040 - SUMMARY REPORT)	ADMIN RECORD BASE	COMMENTS DCE PCE SOIL SOIL BORING SVE TCE VOC WELLS	024 OU 2A	SOUTHWEST DIVISION
NONE	LTR	NONE	MCAS EL TORO	0002		J. JOYCE											

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location
Constr./Guid. No.	CTO No.	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location	Box No.	
Approx. # Pages	EPA Cat. #	Recipient	Recipient	Subject	Classification	Keywords	Sites	Location	Box No.	
M60050 / 002065	01-30-1998	BECHTEL NATIONAL, INC.	BECHTEL NATIONAL, INC.	DRAFT TECHNICAL MEMORANDUM IN-WELL AIR STRIPPING EVALUATION AT THE VOC SOURCE AREA (SEE AR #2677 - DTSC COMMENTS)	ADMIN RECORD	EVALUATION	024	IRON MOUNTAIN		
CTO-142/0147	01-14-1998	G.P. BROOKS	G.P. BROOKS		INFO REPOSITORY	GW	OU 2A	37041253		
MEMO	00142	VARIOUS AGENCIES	VARIOUS AGENCIES			TECH MEMO		IMAGED		
N68711-92-D-4670	01.1					VOC				
0019						WELLS				
M60050 / 002270	09-23-1998	MCAS EL TORO	MCAS EL TORO	RESPONSE TO COMMENTS REGARDING AUGUST 9, 1996 DRAFT FINAL OU-1 INTERIM-ACTION FEASIBILITY STUDY REPORT (SEE AR #2678 - EPA COMMENT EXTENSION REQUEST, #2680 - EPA COMMENTS & #2681 - DTSC COMMENTS)	ADMIN RECORD	FS	018	SOUTHWEST		
	01-15-1998	J. JOYCE	J. JOYCE		INFO REPOSITORY	GW	OU 1	DIVISION		
MISC	NONE	VARIOUS AGENCIES	VARIOUS AGENCIES							
NONE	10.1									
0001										
M60050 / 002057	01-29-1998	EPA SAN FRANCISCO	EPA SAN FRANCISCO	REQUEST FOR EXTENSION FOR SUBMITTING REVIEW COMMENTS ON DRAFT FINAL PHASE II GROUNDWATER FEASIBILITY STUDY REPORT OPERABLE UNIT 2A VOC SOURCE AREA AND TO RESPOND TO THE NAVY RESPONSE TO AGENCY COMMENTS ON THE OPERABLE UNIT 1 FEASIBILITY STUDY REPORT	ADMIN RECORD	COMMENTS	018	IRON MOUNTAIN		
	01-16-1998	G. KISTNER	G. KISTNER			FS	024	37041253		
LTR	NONE	MCAS EL TORO	MCAS EL TORO			GW	OU 1	IMAGED		
NONE	01.6	J. JOYCE	J. JOYCE				OU 2A			
0001										
M60050 / 002674	05-29-2002	CRWQCB - RIVERSIDE	CRWQCB - RIVERSIDE	COMMENTS ON THE DRAFT SOIL VAPOR EXTRACTION SYSTEM DESIGN WORK PLAN FOR THE VOC SOURCE AREA, DATED JANUARY 1998 (SEE AR #2066 - SVE WORK PLAN)	ADMIN RECORD	COMMENTS	024	SOUTHWEST		
	01-16-1998	L. VITALE	L. VITALE		BASE	RD	OU 2A	DIVISION		
LTR	NONE	MCAS EL TORO	MCAS EL TORO			SVE				
NONE		J. JOYCE	J. JOYCE			VOC				
0001						WELLS				
						WORK PLAN				

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002148	03-30-1998	MCAS EL TORO								PUBLIC INFORMATION MATERIALS	ADMIN RECORD	BRAC	001	SOUTHWEST
	01-28-1998									INCLUDES: JANUARY 28, 1998 AGENDA,	INFO	CLEANUP	002	DIVISION
MM	NONE	PUBLIC								PUBLIC NOTICE, DECEMBER 3, 1997 FINAL	REPOSITORY	COMMENTS	003	SW01013105
NONE	10.4									MTG. MINS., SIGN-IN SHEETS, MISC.		IR	004	
0050										AGENCIES COMMENTS		MTG MINS	005	
												PUB. PARTICIPAT	008	
												RAB	011	
												RESULTS	012	
												ROD	017	
													024	
													OU 2A	
													OU 2B	
													OU 2C	
													OU 3A	
													TANK 398	
M60050 / 002675	05-29-2002	US EPA - SAN FRANCISCO								COMMENTS ON THE DRAFT SOIL VAPOR	ADMIN RECORD	ARAR	024	SOUTHWEST
NONE	02-03-1998	G. KISTNER								EXTRACTION SYSTEM DESIGN WORK	BASE	COMMENTS	OU 2A	DIVISION
LTR	NONE	MCAS EL TORO								PLAN FOR THE VOC SOURCE AREA,		HAZ WASTE		
NONE		J. JOYCE								DATED JANUARY 1998 (SEE AR #2066 - SVE		ROD		
0003										WORK PLAN)		SOIL		
												VOC		
												WELLS		
M60050 / 002676	05-29-2002	DEPT OF HEALTH SERVICES								COMMENTS ON THE DRAFT WORK PLAN	ADMIN RECORD	COMMENTS	OU 1	SOUTHWEST
NONE	02-13-1998	D. BAILEY								RADIOLOGICAL STATUS SURVEY REPORT	BASE	DQO	OU 2A	DIVISION
LTR	NONE	NAVFAC - SOUTHWEST DIVISION										RADIATION	OU 2B	
NONE		T. JOHNIKEN										WORK PLAN	OU 2C	
0005													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prd. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guld. No.	CTO No.	EPA Cat. #	Recipient	Approx. # Pages								
M60050 / 002677	05-29-2002	DTSC - LONG BEACH	COMMENTS ON THE DRAFT TECHNICAL MEMORANDUM, IN-WELL AIR STRIPPING EVALUATION AT THE VOC SOURCE AREA - DTSC CONCURS WITH RECOMMENDATION NOT TO CONSIDER CONDUCTING AN IN-WELL PILOT TEST (SEE AR #2065 - TECH MEMO)	ADMIN RECORD	AIR	024	SOUTHWEST DIVISION					
NONE	02-13-1998	T. MAHMOUD		BASE	COMMENTS	OU 2A						
LTR	NONE	MCAS EL TORO			GW							
NONE		J. JOYCE			TCE							
0003					TECH MEMO							
					VOC							
					WELLS							
M60050 / 002678	05-29-2002	US EPA - SAN FRANCISCO	ADDITIONAL EXTENSION REQUEST TO SUBMIT COMMENTS ON THE DRAFT FINAL PHASE II GROUNDWATER FEASIBILITY STUDY REPORT AND TO RESPOND TO NAVY RESPONSES TO COMMENTS ON THE DRAFT FINAL OU 1 INTERIM-ACTION FEASIBILITY STUDY REPORT	ADMIN RECORD	COMMENTS	018	SOUTHWEST DIVISION					
NONE	02-23-1998	G. KISTNER		BASE	FFA	024						
LTR	NONE	MCAS EL TORO			FS	OU 1						
NONE		J. JOYCE			GW	OU 2A						
0001					RESPONSE							
M60050 / 002224	07-30-1998	BRAC CLEANUP TEAM	FINAL BASE REALIGNMENT AND CLOSURE CLEANUP PLAN (BCP)	ADMIN RECORD	BCP	OU 1	SOUTHWEST DIVISION					
	03-01-1998	T. MAHMOUD		INFO	BCT	OU 2						
PLAN	NONE	MCAS EL TORO		REPOSITORY	BRAC	OU 3	SW01013107					
NONE	01.1				CLOSURE							
3000					NFA							
M60050 / 002077	03-23-1998	CDM FEDERAL PROGRAMS	GROUNDWATER MONITORING REPORT FOR OCTOBER 1997 - SAMPLING ROUND 7 (SEE AR #2683 - DTSC COMMENTS & #2684 - DHS COMMENTS)	ADMIN RECORD	FS	OU 1	SOUTHWEST DIVISION					
	03-02-1998	L. DAVIDSON		INFO	GW	OU 2A						
RPT	DO 005	VARIOUS AGENCIES		REPOSITORY	MOA	OU 2B	SW01013104					
N68711-96-D-2029	01.2				MW	OU 2C						
1000					NFA	OU 3						
					RI							
					VOC							
					WELLS							
M60050 / 002145	03-30-1998	BECHTEL NATIONAL	FEBRUARY 4, 1998, MEETING MINUTES FOR SITE 24 PILOT TEST UPDATE	ADMIN RECORD	MTG MINS	024	SOUTHWEST DIVISION					
	03-05-1998	D. TEDALDI		INFO	PUB. PARTICIPAT	OU 2A						
XMTL	00142	SOUTHWEST DIVISION		REPOSITORY			SW01013105					
N6871192D487000	10.4	R. SELBY										
0003												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Recipient						
M60050 / 002679 NONE LTR NONE 0005	05-29-2002 03-06-1998 NONE	DTSC - LONG BEACH T. MAHMOUD MCAS EL TORO J. JOYCE	COMMENTS ON THE DRAFT SOIL VAPOR EXTRACTION SYSTEM DESIGN WORK PLAN FOR THE VOC SOURCE AREA, DATED JANUARY 1998 (SEE AR #2066 - SVE WORK PLAN)	ADMIN RECORD BASE	MW PCE SVE TCE VOC WELLS WORK PLAN	024 OU 2A	SOUTHWEST DIVISION					
M60050 / 002142 XMTL N6871192D467000 0004	03-30-1998 03-09-1998 00142 10.4	BECHTEL NATIONAL D. TEDALDI SOUTHWEST DIVISION R. SELBY	MARCH 4, 1998, MEETING MINUTES FOR SITE 24 PILOT TEST UPDATE	ADMIN RECORD	MTG MINS PUB. PARTICIPAT	024 OU 2A	SOUTHWEST DIVISION SW01013105					
M60050 / 002143 XMTL N6871192D467000 0006	03-30-1998 03-09-1998 00142 10.4	BECHTEL NATIONAL D. TEDALDI SOUTHWEST DIVISION R. SELBY	FEBRUARY 25, 1998, MEETING MINUTES FOR SITE 24 PILOT TEST UPDATE	ADMIN RECORD	MTG MINS PUB. PARTICIPAT	024 OU 2A	SOUTHWEST DIVISION SW01013105					
M60050 / 002680 NONE LTR NONE 0002	05-29-2002 03-23-1998 NONE	US EPA - SAN FRANCISCO G. KISTNER MCAS EL TORO J. JOYCE	COMMENTS ON THE DRAFT FINAL PHASE II GROUNDWATER FEASIBILITY STUDY REPORT AND A RESPONSE TO RESPONSES TO COMMENTS ON THE DRAFT FINAL OU 1 INTERIM-ACTION FEASIBILITY STUDY REPORT (SEE AR #2041 - PHASE II GW FS, #2269 & #2270 - RESPONSES TO COMMENTS)	ADMIN RECORD BASE	ARAR COMMENTS FS GW MW SOIL WELLS	016 024 OU 1 OU 2A	SOUTHWEST DIVISION					
M60050 / 002193 MISC NONE 0059	05-07-1998 03-25-1998 NONE 10.6	MCAS EL TORO RAB MEMBERS	PUBLIC INFORMATION MATERIALS/HANDOUTS INCLUDES: RAB MTG. AGENDA, PUBLIC NOTICE, JANUARY 28, 1998 MTG. MIN.MISC. PRESENTATIONS, AGCY. COMMENTS (MAILER IN CONFID.)	ADMIN RECORD CONFIDENTIAL DOC INFO REPOSITORY	COMMENTS EVALUATION LANDFILL MTG MINS PUB. PARTICIPAT RAB TECH/GUID DOC. VOC	002 003 005 017 024 OU 1 OU 2A OU 3A	SOUTHWEST DIVISION SW01013106					

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002188		05-07-1998	BECHTEL		04-02-1998	NATIONAL							MARCH 11, 1998, MEETING MINUTES ON SITE 24 PILOT TEST UPDATE	ADMIN RECORD	MTG MINS TCE WELLS	009 024 OU 2A OU 3A	SOUTHWEST DIVISION SW01013106
XMTL		00142	D.TEDALDI														
N6871192D467000		10.4	VARIOUS														
0004			AGENCIES														
M60050 / 002189		05-07-1998	BECHTEL		04-02-1998	NATIONAL							MARCH 18, 1998, MEETING MINUTES ON SITE 24 PILOT TEST UPDATE	ADMIN RECORD	GW MTG MINS SOIL TCE	024	SOUTHWEST DIVISION SW01013106
XMTL		00142	D.TEDALDI														
N6871192D467000		10.4	VARIOUS														
0008			AGENCIES														
M60050 / 002190		05-07-1998	BECHTEL		04-02-1998	NATIONAL							MARCH 25, 1998, MEETING MINUTES ON SITE 24 PILOT TEST UPDATE	ADMIN RECORD	EVALUATION MTG MINS	024	SOUTHWEST DIVISION SW01013106
XMTL		00142	D.TEDALDI														
N6871192D467000		10.4	VARIOUS														
0006			AGENCIES														
M60050 / 002681		05-30-2002	DTSC - CYPRESS		04-06-1998	J. SCANDURA							REVIEW OF AND COMMENTS ON THE RESPONSE TO COMMENTS ON THE DRAFT FINAL OU-1 INTERIM-ACTION FEASIBILITY STUDY REPORT AND THE PHASE II GROUNDWATER FEASIBILITY STUDY REPORT - REPORTS ARE APPROVED IF THE JOINT PROJECT WITH OCWD IS SELECTED AS CLEANUP REMEDY	ADMIN RECORD BASE	COMMENTS GW MONITORING MW RESPONSE ROD VOC WELLS	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
NONE			J. SCANDURA														
LTR		NONE	MCAS EL TORO														
NONE			J. JOYCE														
0002																	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002192		05-07-1998	DTSC CYPRESS										REQUEST FOR EXTENSION TO THE FEDERAL FACILITY AGREEMENT (FFA) SCHEDULES	ADMIN RECORD	FFA	002	SOUTHWEST DIVISION
		04-08-1998	J. SCANDURA												GW	003	SW01013106
LTR		NONE	VARIOUS												LANDFILL	005	
NONE		01.6	AGENCIES												NFA	008	
0003															REQUEST	011	
															ROD	012	
															TECH/GUID DOC.	017	
																018	
																024	
																OU 1	
																OU 2A	
																OU 3	
M60050 / 002682		05-30-2002	DTSC - CYPRESS										REQUEST FOR ACCESS TO BASE TO OVERSEE GROUNDWATER REMEDIATION PILOT TEST WORK AT VOC SOURCE AREA ON 30 APRIL 1998	ADMIN RECORD	GW	024	SOUTHWEST DIVISION
NONE		04-23-1998	T. MAHMOUD											BASE	REMEDIAL ACTIO	OU 2A	
LTR		NONE	MCAS EL TORO												VOC		
NONE			J. JOYCE														
0001																	
M60050 / 002195		05-07-1998	BECHTEL NATIONAL										APRIL 22, 1998, MEETING MINUTES ON SITE 24 PILOT TEST UPDATE	ADMIN RECORD	GW	024	SOUTHWEST DIVISION
		04-30-1998	D. TEDALDI												MONITORING	OU 2A	SW01013106
XMTL		00142	VARIOUS												MTG MINS		
N6871192D467000		10.4	AGENCIES												TCE		
0018																	
M60050 / 002196		05-07-1998	BECHTEL NATIONAL										APRIL 15, 1998, MEETING MINUTES ON SITE 24 PILOT TEST UPDATE	ADMIN RECORD	BACKGROUND	024	SOUTHWEST DIVISION
		04-30-1998	D. TEDALDI												MTG MINS	OU 2A	SW01013106
XMTL		00142	VARIOUS												TECH/GUID DOC.		
N6871192D467000		10.4	AGENCIES												WATER		
0011															WELLS		
M60050 / 002197		05-07-1998	BECHTEL NATIONAL										APRIL 8, 1998, MEETING MINUTES ON SITE 24 PILOT TEST UPDATE	ADMIN RECORD	GW	024	SOUTHWEST DIVISION
		04-30-1998	D. TEDALDI												MONITORING	OU 2A	SW01013106
XMTL		00142	VARIOUS												MTG MINS		
N6871192D467000		10.4	AGENCIES												TCE		
0009																	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Contr./Guid. No.	CTO No.	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #														
M60050 / 002198		05-07-1998	BECHTEL								APRIL 29, 1998, MEETING MINUTES ON SITE 24 PILOT TEST UPDATE	ADMIN RECORD	MTG MINS	024	SOUTHWEST DIVISION
		04-30-1998	NATIONAL										WATER	OU 2A	SW01013106
XMTL		00142	D. TEDALDI												
N6871192D467000		10.4	VARIOUS												
0003			AGENCIES												
M60050 / 002683		05-30-2002	DTSC - CYPRESS								COMMENTS ON THE ROUND 7 GROUNDWATER MONITORING REPORT FOR OCTOBER 1997 SAMPLING (SEE AR #2077 - MONITORING REPORT)	ADMIN RECORD	COMMENTS	OU 1	SOUTHWEST DIVISION
NONE		05-04-1998	T. MAHMOUD									BASE	GW	OU 2A	
LTR		NONE	MCAS EL TORO										MONITORING	OU 2B	
NONE			J. JOYCE										MW	OU 2C	
0003													WELLS	OU 3	
M60050 / 002684		05-30-2002	DEPT OF HEALTH SERVICES								COMMENTS ON THE ROUND 7 GROUNDWATER MONITORING REPORT FOR OCTOBER 1997 SAMPLING (SEE AR #2077 - MONITORING REPORT)	ADMIN RECORD	COMMENTS	OU 1	SOUTHWEST DIVISION
NONE		05-05-1998	D. BAILEY									BASE	GW	OU 2A	
LTR		NONE	MCAS EL TORO										MONITORING	OU 2B	
NONE			J. JOYCE										MW	OU 2C	
0005													RADIONUCLIDES	OU 3	
													WELLS		
M60050 / 002209		05-11-1998	BECHTEL								RESPONSE TO COMMENTS ON DRAFT VAPOR EXTRACTION SYSTEM DESIGN WORK PLAN (VARIOUS DATES) (SEE AR #2211 - VAPOR EXTRACTION SYSTEM WORK PLAN)	ADMIN RECORD	COMMENTS	024	SOUTHWEST DIVISION
CTO-0142/0378		05-07-1998	NATIONAL, INC.									INFO	RESPONSE	OU 2A	
XMTL		00142	D. TEDALDI									REPOSITORY	WORK PLAN		SW01013106
N68711-92-D-4670		10.1	VARIOUS												
0008			AGENCIES												
M60050 / 002685		05-30-2002	DTSC - CYPRESS								RESPONSE TO DEADLINE EXTENSION REQUEST, DATED 6 MAY 1998, FOR THE DRAFT REMEDIAL DESIGN AND DRAFT CONSTRUCTION QUALITY ASSURANCE/ QUALITY CONTROL PLAN - DTSC STATES THAT BRAC CLEANUP TEAM SHOULD MEET BEFORE FINAL DATE IS SET (SEE AR #2283 - CQA/QC PLAN)	ADMIN RECORD	BCT	024	SOUTHWEST DIVISION
NONE		05-07-1998	J. SCANDURA									BASE	BRAC	OU 2A	
LTR		NONE	MCAS EL TORO										FFA		
NONE			J. JOYCE										GW		
0002													QA		
													QC		
													RD		

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Recipient						
M60050 / 002686 NONE LTR NONE 0002	05-30-2002 05-08-1998 NONE	05-30-2002 05-08-1998 NONE	US EPA - SAN FRANCISCO G. KISTNER MCAS EL TORO J. JOYCE					RESPONSE TO DEADLINE EXTENSION REQUEST, DATED 6 MAY 1998, FOR DESIGN DOCUMENTS - EPA STATES THAT BRAC CLEANUP TEAM SHOULD MEET BEFORE FINAL DATE IS SET BECAUSE SEVERAL OTHER DOCUMENTS ARE DUE IN SAME TIME FRAME AS EXTENSION (SEE AR #2283 - CQA/QC PLAN)	ADMIN RECORD BASE	BCT BRAC FFA GW RD ROD SVE	024 OU 2A	SOUTHWEST DIVISION
M60050 / 002211 CTO-142/0377 & 0370 PLAN N68711-92-D-4670 0063	05-11-1998 05-11-1998 00142 03.3	05-11-1998 05-11-1998 00142 03.3	BECHTEL NATIONAL, INC. D. TEDALDI VARIOUS AGENCIES					TRANSMITTAL OF DRAFT FINAL SOIL VAPOR EXTRACTION SYSTEM DESIGN WORK PLAN FOR THE VOC SOURCE AREA - INCLUDES REPLACEMENT PAGES DATED MAY 15, 1998 (SEE AR #2689 - DTSC COMMENTS)	ADMIN RECORD INFO REPOSITORY	SOIL SVE VOC WORK PLAN	024 OU 2A	SOUTHWEST DIVISION SW01013106
M60050 / 000239 SW5301 RPT N68711-93-D-1459 0065	12-28-1999 05-12-1998 DO111 03.4	12-28-1999 05-12-1998 DO111 03.4	OHM REMEDIATION SERVICES W. SEDLAK NAVFAC - SOUTHWEST DIVISION B. LINDSEY					CPT DATA FOR FINAL SITE 24 POINTS, GROUNDWATER REMEDIATION PILOT TEST	ADMIN RECORD	CPT DATA GW REMEDIAL ACTIO	024	SOUTHWEST DIVISION SW02051701
M60050 / 002687 NONE LTR NONE 0004	05-30-2002 05-14-1998 NONE	05-30-2002 05-14-1998 NONE	DEPT OF HEALTH SERVICES D. BAILEY MCAS EL TORO J. JOYCE					COMMENTS ON THE DRAFT FINAL RADIOLOGICAL STATUS SURVEY (SEE AR #2724 - COMMENTS ON RESPONSE TO COMMENTS)	ADMIN RECORD BASE	COMMENTS RADIATION	HANGAR 296 HANGAR 297 OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION
M60050 / 002465 SW5430 DATA N68711-93-D-1459 0150	08-13-2001 05-18-1998 DO 65	08-13-2001 05-18-1998 DO 65	OHM REMEDIATION W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER					SOIL VAPOR EXTRACTION (SVE) ANALYTICAL RESULTS, FOR THE 24SVE-11 TESTS	ADMIN RECORD BASE	AIR DATA GC/MS MONITORING SOIL SVE VOC WELLS	024 OU 2A	BECHTEL NATIONAL SW02052001

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location	
Contr./Guid. No.	CTO No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject			Box No.	
M60050 / 002688	05-30-2002	05-30-2002	DEPT OF HEALTH SERVICES	NONE	05-26-1998	D. BAILEY	REQUEST THAT ACTIVITY PROVIDE A HISTORICAL RADIATION ASSESSMENT (HRA) FOR ENTIRE BASE WITH ENCLOSURES OF GUIDANCE MATERIAL AND FLOWCHART FOR PREPARATION OF DOCUMENTS FOR SUBMITTAL	ADMIN RECORD BASE	BCT BRAC CLOSURE GUID GW HRA RADIATION SOIL	BLDG. 296 BLDG. 297 OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION
LTR NONE 0009		NONE	MCAS EL TORO J. MATTHEWS								
M60050 / 002689	05-30-2002	05-30-2002	DTSC - CYPRESS	NONE	06-03-1998	S. FAIR	COMMENTS ON THE DRAFT FINAL SOIL VAPOR EXTRACTION SYSTEM DESIGN WORK PLAN FOR THE VOC SOURCE AREA VADOSE ZONE - COMMENTS ON THE DRAFT HAVE BEEN ADEQUATELY ADDRESSED (SEE AR #2211 - WORK PLAN)	ADMIN RECORD BASE	COMMENTS REMEDIAL ACTIO SOIL SVE VOC	024 OU 2A	SOUTHWEST DIVISION
LTR NONE 0003		NONE	MCAS EL TORO J. JOYCE								
M60050 / 002408	05-19-1999	05-19-1999	BNI	CTO-153/0065	07-15-1998	P. WIEGAND	DRAFT - CERCLA GROUNDWATER MONITORING PLAN - VOLUMES 1 AND 2	ADMIN RECORD	GW LANDFILL METALS MONITORING NFA PLAN VOC	002 003 005 017 018 024 OU 1 OU 2A OU 2B OU 2C	SOUTHWEST DIVISION SW01011006
PLAN N68711-92-D-4670 1200		03.3	SWDIV								
M60050 / 002287	09-21-1998	07-21-1998	BECHTEL NATIONAL	MISC	00142	D. TEDALDI	CHAIN OF CUSTODY RECORDS, GROUNDWATER PILOT TEST AND SOIL VAPOR EXTRACTION SYSTEM DEVELOPMENT	ADMIN RECORD	GW SOIL SVEI	024 OU 2A	SOUTHWEST DIVISION SW01013108
N68711-92-D-4670 0011		03.2	SOUTHWEST DIVISION C. POTTER								
M60050 / 002290	10-06-1998	07-21-1998	BECHTEL NATIONAL, INC.	MISC	00142	D. TEDALDI	CHAIN OF CUSTODY RECORDS, GROUNDWATER REMEDIATION PILOT TESTING AND SOIL VAPOR EXTRACTION SYSTEM DEVELOPMENT	ADMIN RECORD	GW SVEI	024 OU 2A	SOUTHWEST DIVISION SW01013109
N68711-92-D-4670 0310		03.2	NAVFAC - SOUTHWEST DIVISION								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Recipient						
M60050 / 000717		03-22-2001	NAVFAC - SOUTHWEST DIVISION	NONE	07-23-1998			SUMMARY REPORT - REPAIRS TO VEHICLE WASHRACK, SOLID WASTE MANAGEMENT UNIT (SWMU) - PETROLEUM CORRECTIVE ACTION PROGRAM (SEE AR #635 - CRWQCB CONCURRENCE)	ADMIN RECORD	GW RFA TCE TRPH VOC	024 BLDG. 388 SWMU 201	SOUTHWEST DIVISION SW01033001
			NAVFAC - SOUTHWEST DIVISION	0030								
M60050 / 002252		08-31-1998	MCAS EL TORO		08-03-1998	J. JOYCE		REQUEST FOR CHANGE TO MCAS EL TORO FEDERAL FACILITY AGREEMENT (FFA)	ADMIN RECORD	FFA LANDFILL OU	002 003 005 017 OU 2A OU 2B	SOUTHWEST DIVISION SW01013107
			VARIOUS AGENCIES	NONE	01.6							
M60050 / 002282		10-06-1998	BECHTEL NATIONAL, INC.		08-10-1998	D. TEDALDI		DRAFT OPERATIONS AND MAINTENANCE MANUAL, VADOSE ZONE REMEDIATION (SEE AR #2693 - EPA COMMENTS, #2694 - DTSC COMMENTS, & #2695 - CRWQCB COMMENTS, & #2714 - EPA APPROVAL)	ADMIN RECORD	PCE SOIL SOLVENTS SVEI TCE VOC	024 OU 2A	BECHTEL NATIONAL
			VARIOUS AGENCIES	RPT	00162							
				N68711-92-D-4670	01.1							
				1000								
M60050 / 002283		10-06-1998	BECHTEL NATIONAL, INC.		08-10-1998	D. TEDALDI		DRAFT CONSTRUCTION QUALITY ASSURANCE/QUALITY CONTROL PLAN, VADOSE ZONE REMEDIATION (SEE AR #2693 - EPA COMMENTS, #2694 - DTSC COMMENTS, & #2695 - CRWQCB COMMENTS, & #2714 - EPA APPROVAL)	ADMIN RECORD	QA QC SOIL SVEI VOC	024 OU 2A	SOUTHWEST DIVISION SW01013109
			VARIOUS AGENCIES	PLAN	00162							
				N68711-92-D-4670	01.1							
				0300								
M60050 / 002284		10-06-1998	BECHTEL NATIONAL, INC.		08-10-1998	D. TEDALDI		DRAFT CONTINGENCY PLAN, VADOSE ZONE REMEDIATION (SEE AR #2693 - EPA COMMENTS, #2694 - DTSC COMMENTS, & #2695 - CRWQCB COMMENTS, & #2714 - EPA APPROVAL)	ADMIN RECORD	PCE SOIL SVEI TCE VOC	024 OU 2A	SOUTHWEST DIVISION SW01011006
			VARIOUS AGENCIES	PLAN	00162							
				N68711-92-D-4670	01.1							
				0030								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002470	SW5737	08-13-2001	OHM	DATA	08-17-1998	REMEDATION	N68711-93-D-1459	DO 65	NAVFAC - SOUTHWEST DIVISION	0400			TRANSMITTAL OF SOIL VAPOR EXTRACTION (SVE) ANALYTICAL RESULTS, 24SVE01, 24SVE05, 24SVE09, 24SVE11 TESTS; REMOVAL AND REMEDIAL ACTIONS AT IRP SITES	ADMIN RECORD BASE	BTEX GC/MS MTBE SOIL SVE VOC WELLS	024 OU 2A	CHOICE MICROGRAPHICS SW02052301
M60050 / 002259	LTR NONE 0012	08-31-1998 08-20-1998	MCAS EL TORO J. JOYCE	NONE	NONE	VARIOUS AGENCIES		01.6					REQUEST FOR CHANGES IN THE FEDERAL FACILITY AGREEMENT APPENDIX A SCHEDULE FOR PRIMARY DOCUMENTS (SEE AR #2690 - EPA APPROVAL, #2691 - DTSC APPROVAL, & #2692 - CRWQCB APPROVAL)	ADMIN RECORD BASE	FFA GW LF PROPOSED PLAN ROD VOC	002 003 005 007 014 016 017 018 024 OU 1 OU 2A OU 3	SOUTHWEST DIVISION SW01013107
M60050 / 002690	NONE LTR NONE 0001	05-30-2002 08-24-1998	US EPA - SAN FRANCISCO G. KISTNER MCAS EL TORO J. JOYCE	NONE	NONE								EPA APPROVAL OF REQUEST FOR CHANGES IN THE FEDERAL FACILITY AGREEMENT SCHEDULE, BY THREE MONTHS, FOR THE DRAFT PROPOSED PLAN AND RECORD OF DECISION (SEE AR #2259 - REQUEST)	ADMIN RECORD BASE	FFA GW PROPOSED PLAN ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 002691	NONE LTR NONE 0002	05-30-2002 08-25-1998	DTSC - CYPRESS J. SCANDURA MCAS EL TORO J. JOYCE	NONE	NONE								DTSC APPROVAL OF REQUEST FOR CHANGES IN THE FEDERAL FACILITY AGREEMENT SCHEDULE, BY THREE MONTHS, FOR THE DRAFT PROPOSED PLAN AND RECORD OF DECISION (SEE AR #2259 - REQUEST)	ADMIN RECORD BASE	FFA GW PROPOSED PLAN ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 002692	NONE LTR NONE 0001	05-30-2002 08-27-1998	CRWQCB - RIVERSIDE P. HANNON MCAS EL TORO J. JOYCE	NONE	NONE								CRWQCB APPROVAL OF REQUEST FOR CHANGES IN THE FEDERAL FACILITY AGREEMENT SCHEDULE, BY THREE MONTHS, FOR THE DRAFT PROPOSED PLAN AND RECORD OF DECISION (SEE AR #2259 - REQUEST)	ADMIN RECORD BASE	FFA GW PROPOSED PLAN ROD VOC	016 024 OU 1 OU 2A	SOUTHWEST DIVISION

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTD No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000240 SW5846 DWG N68711-93-D-1459 0004	12-28-1999 09-19-1998 DO111 01.1	OHM REMEDIAION SERVICES W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER	FINAL SITE 24 WELL AND CPT LOCATIONS MAP, GROUNDWATER REMEDIATION PILOT TEST	ADMIN RECORD	CPT GW REMEDIAL ACTIO	024	SOUTHWEST DIVISION SW01011003							
M60050 / 000174 CTO-0162/0071 MEMO N68711-92-D-4670 0018	09-21-1999 09-22-1998 00162 01.1	BECHTEL NATIONAL, INC. D. TEDALDI NAVFAC - SOUTHWEST DIVISION	TECHNICAL MEMORANDUM ENGINEERING COST ESTIMATE FOR SOIL VAPOR EXTRACTION SYSTEM	ADMIN RECORD	COST SOIL SVE TECH MEMO	024 OU 2A	SOUTHWEST DIVISION SW01011002							
M60050 / 002516 SW5237 RPT N68711-93-D-1459 0300	09-18-2001 09-29-1998 DO 70	OHM REMEDIAION D. RAWAL NAVFAC - SOUTHWEST DIVISION	TANK REMOVAL AND SITE CLOSURE REPORT - UNDERGROUND STORAGE TANKS 314A, 314B, AND 314D	ADMIN RECORD BASE	BRAC BTEX CLOSURE GW LUFT MTBE MW PCB REMOVAL RFA RI SOIL SOIL BORING SOLVENTS SWMU TANK TCE TPH TRPH UST VOC WELLS	024 BLDG. 314 OU 2A UST 314A UST 314B UST 314D	BECHTEL NATIONAL SW02052005							

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002293	11-17-1998	BECHTEL NATIONAL			10-12-1998	D. TEDALDI			SOUTHWEST DIVISION	SUMMARY OF THE SITE CLOSURE ROUNDTABLE DISCUSSION, USEPA REGION 9 HEADQUARTERS, OCTOBER 8, 1998, SAN FRANCISCO, CA	ADMIN RECORD INFO REPOSITORY	CLOSURE GW MONITORING SOIL WELLS	024	SOUTHWEST DIVISION SW01013109
MISC N6871192D467000 0003	00162 01.1	SOUTHWEST DIVISION G. STEINWAY												
M60050 / 002693	05-31-2002	US EPA - SAN FRANCISCO			10-13-1998	G. KISTNER			SOUTHWEST DIVISION	COMMENTS ON THE DRAFT FINAL ENGINEERING DESIGN REPORT, DRAFT CONTINGENCY PLAN, DRAFT CONSTRUCTION QUALITY ASSURANCE/QUALITY CONTROL PLAN, AND DRAFT OPERATIONS AND MAINTENANCE MANUAL, VADOSE ZONE REMEDIATION FOR THE VOC SOURCE AREA	ADMIN RECORD BASE	COMMENTS GW MW QC RD REMEDIAL ACTIO SOP SVE VOC WELLS	024 OU 2A	SOUTHWEST DIVISION
NONE LTR NONE 0010	NONE	G. KISTNER MCAS EL TORO J. JOYCE												
M60050 / 002694	05-31-2002	DTSC - CYPRESS			10-13-1998	T. MAHMOUD			SOUTHWEST DIVISION	COMMENTS ON THE DRAFT FINAL ENGINEERING DESIGN REPORT, DRAFT CONTINGENCY PLAN, DRAFT CONSTRUCTION QUALITY ASSURANCE/QUALITY CONTROL PLAN, AND DRAFT OPERATIONS AND MAINTENANCE MANUAL, VADOSE ZONE REMEDIATION FOR THE VOC SOURCE AREA	ADMIN RECORD BASE	COMMENTS GW MW PID QA QC RD REMEDIAL ACTIO SOIL SVE TCE VOC WELLS	024 OU 2A	SOUTHWEST DIVISION
NONE LTR NONE 0012	NONE	T. MAHMOUD MCAS EL TORO J. JOYCE												

UIC No. / Rec. No.	Doc. Control No.	Pr. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002695 NONE LTR NONE 0002	05-31-2002 10-14-1998 NONE	GRWQCB - RIVERSIDE P. HANNON MCAS EL TORO J. JOYCE	COMMENTS ON THE DRAFT FINAL ENGINEERING DESIGN REPORT, DRAFT CONTINGENCY PLAN, DRAFT CONSTRUCTION QUALITY ASSURANCE/QUALITY CONTROL PLAN, AND DRAFT OPERATIONS AND MAINTENANCE MANUAL, VADOSE ZONE REMEDATION FOR THE VOC SOURCE AREA	ADMIN RECORD BASE	COMMENTS GW MW QA QC RD REMEDIAL ACTIO SOIL SVE VOC WELLS	024 OU 2A	SOUTHWEST DIVISION							
M60050 / 000574 SW5990 DWG N68711-93-D-1459 0011	11-22-2000 10-22-1998 DO075	OHM REMEDATION W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER	TRANSMITTAL OF AS BUILT DRAWINGS FOR GROUNDWATER PUMP AND VAPOR ENHANCED TEST FOR TESTING WELLS 24EX3 AND 24EX4	ADMIN RECORD BASE	GW VAPOR WELLS	024	SOUTHWEST DIVISION SW01013103							

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002295		11-17-1998	MCAS EL TORO										FEDERAL FACILITY AGREEMENT (FFA)	ADMIN RECORD	FFA	001	SOUTHWEST
		11-03-1998	J. JOYCE										APPENDIX A SCHEDULE EXTENSION		FFSRA	002	DIVISION
MISC		NONE	VARIOUS										REQUEST FOR DRAFT RECORD OF		LF	003	SW01013109
NONE		01.1	AGENCIES										DECISION, OPERABLE UNIT 2C, LANDFILL		ROD	004	
0012													SITES 3 AND 5			005	
																006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																018	
																019	
																020	
																021	
																022	
																024	
																OU 1	
																OU 2A	
																OU 2B	
																OU 2C	
																OU 3	
M60050 / 002297		11-25-1998	BECHTEL										DRAFT PROPOSED PLAN FOR	ADMIN RECORD	ARAR	018	SOUTHWEST
CTO-0155/0341		11-23-1998	NATIONAL, INC.										GROUNDWATER REMEDIATION AT		GW	024	DIVISION
PLAN		155-2	D. TEDALDI										OPERABLE UNIT 1 SITE 18 AND OPERABLE		OU	OU 1	SW01013109
N68711-92-D-4670		03.3	VARIOUS										UNIT 2A SITE 24 (SEE AR #2319 - EPA		TCE	OU 2A	
0023			AGENCIES										COMMENTS, #2371 - DTSC COMMENTS, &		VOC		
													#2698 - CRWQCB COMMENTS)				

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002300		12-22-1998	MCAS EL TORO		11-25-1998	J. JOYCE							SOME ASPECTS OF THE DRAFT PROPOSED PLAN FOR GROUND WATER REMEDIATION AT OU-1 AND OU-2A (SUBMITTED ON NOVEMBER 24, 1998) TO ASSIST WITH AGENCY REVIEW	ADMIN RECORD	ARAR GW	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01013109
LTR NONE 0002		NONE 01.1	VARIOUS AGENCIES														
M60050 / 002696		05-31-2002	US EPA - SAN FRANCISCO		12-10-1998	G. KISTNER							EPA CONCURRENCE ON THE USE OF PREVIOUSLY APPROVED PLANNING DOCUMENTS DURING THE TESTING PHASE OF THE SOIL VAPOR EXTRACTION SYSTEM IN LIEU OF SUBMITTING "NEW" DOCUMENTS AS THE NAVY WILL BE PERFORMING ACTIVITIES WHICH HAVE ALREADY BEEN APPROVED	ADMIN RECORD BASE	SVE VOC	024 OU 2A	SOUTHWEST DIVISION
NONE LTR NONE 0001		NONE	MCAS EL TORO J. JOYCE														
M60050 / 002304		12-22-1998	BECHTEL NATIONAL, INC.		12-11-1998	D. TEDALDI							DRAFT FINAL CONTINGENCY PLAN, VADOSE ZONE REMEDIATION	ADMIN RECORD	GW MONITORING PCE SOIL SVEI TCE VOC WELLS	024 OU 2A	SOUTHWEST DIVISION SW01011006
PLAN N68711-92-D-4670 0025		00162 03.3	VARIOUS AGENCIES														
M60050 / 002305		12-22-1998	BECHTEL NATIONAL, INC.		12-11-1998	D. TEDALDI							INSERT PAGES FOR DRAFT FINAL CONSTRUCTION QUALITY ASSURANCE/QUALITY CONTROL PLAN, VADOSE ZONE REMEDIATION (SEE AR #2304)	ADMIN RECORD	QA QC SOIL SVEI VOC	024 OU 2A	SOUTHWEST DIVISION SW01013110
MISC N68711-92-D-4670 0025		00162 03.6	VARIOUS AGENCIES														
M60050 / 002468		08-13-2001	OHM REMEDIATION		12-11-1998	W. SEDLAK							TRANSMITTAL OF THE SOIL VAPOR EXTRACTION (SVE) ANALYTICAL RESULTS FOR THE SVE TESTING AT WELLS 24SVE104B, 24SVE107, & 24SVE161	ADMIN RECORD BASE	AIR DATA GC/MS MTBE SOIL SVE VOC WELLS	024 OU 2A	CHOICE MICROGRAPHICS SW02052301
SW6143 DATA N68711-93-D-1459 0150		DO 65	NAVFAC - SOUTHWEST DIVISION L. HORNECKER														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	EPA Cat. #	Recipient	Approx. # Pages								
M60050 / 002281	10-06-1998	BECHTEL	DRAFT FINAL ENGINEERING DESIGN	ADMIN RECORD	PCE	024	SOUTHWEST					
CTO-0162/0023 & 0085	12-14-1998	NATIONAL, INC.	REPORT, VADOSE ZONE REMEDIATION - VOLS. I - IV. (THE DRAFT DATED 8/10/98 BECAME THE DRAFT FINAL (CTO-0162/0085) - INCLUDES REVISED VOLUME I AND REPLACEMENT PAGES FOR VOLUMES II - IV) (SEE AR #2306 - RESPONSE TO COMMENTS)		SOIL	OU 2A	DIVISION					
RPT	01.1	G. BROOKS			SOLVENTS		SW01013109					
N68711-92-D-4670		VARIOUS			SVEI							
1800		AGENCIES			TCE							
					VOC							
					WELLS							
M60050 / 002306	12-22-1998	BECHTEL	RESPONSE TO U.S. EPA, CAL-EPA AND	ADMIN RECORD	COMMENTS	024	SOUTHWEST					
CTO-0162/0102	12-15-1998	NATIONAL, INC.	CRWQCB COMMENTS ON THE DRAFT		SVEI	OU 2A	DIVISION					
MISC	00162	D. TEDALDI	ENGINEERING DESIGN REPORT VADOSE				SW01013110					
N68711-92-D-4670	10.1	VARIOUS	ZONE REMEDIATION (SEE AR #2281 -									
0028		AGENCIES	DRAFT FINAL ENGINEERING DESIGN									
			REPORT, AR #2693 - EPA COMMENTS,									
			#2694 - DTSC COMMENTS, & #2695 -									
			CRWQCB COMMENTS)									
M60050 / 002313	01-25-1999	OHM	TECHNICAL MEMORANDUM: PROGRESS	ADMIN RECORD	BRAC	024	SOUTHWEST					
SW6188	12-15-1998	REMEDATION	REPORT - PHASE I VADOSE ZONE		PCE	OU 2A	DIVISION					
MISC	DO 65		REMEDATION ACTIVITIES, VOC SOURCE		SOIL		SW01013110					
N68711-93-D-1459	03.6	VARIOUS	AREA (SEE AR #250 - DTSC COMMENTS)		SVE							
0001		AGENCIES			TCE							
					TECH MEMO							
					VOC							
					WELLS							
M60050 / 002309	12-22-1998	BECHTEL	TECHNICAL MEMORANDUM SUMMARY OF	ADMIN RECORD	GW	024	SOUTHWEST					
CTO-142/0542	12-17-1998	NATIONAL, INC.	PERCHLORATE TEST RESULTS FOR THE		MONITORING	OU 2A	DIVISION					
MISC	00142	D. TEDALDI	VOC SOURCE AREA (SEE AR #2716 - DTSC		TECH MEMO		SW01013110					
N68711-92-D-4670	03.6	VARIOUS	COMMENTS)		VOC							
0070		AGENCIES			WELLS							
M60050 / 002312	01-25-1999	DTSC CYPRESS	AGENCY CONCURRENCE ON UTILIZATION	ADMIN RECORD	SVE	024	SOUTHWEST					
	12-17-1998	T. MAHMOUD	OF EXISTING PLANNING DOCUMENTS FOR		VOC	OU 2A	DIVISION					
LTR	NONE	NAVFAC -	TESTING AND START-UP OF SOIL VAPOR				SW01013110					
NONE	03.6	SOUTHWEST	EXTRACTION SYSTEM, OU-2A SITE 24									
0002		DIVISION										
		J. JOYCE										

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002314	CTO-142/0213	01-25-1999	BECHTEL NATIONAL, INC.	RPT	12-24-1998	D. TEDALDI			VARIOUS AGENCIES	2200	03.4		DRAFT GROUNDWATER REMEDIATION PILOT TEST REPORT VOC SOURCE AREA (VOLUMES 1-3) (SEE AR #2700 - DTSC COMMENTS & #2703 - CRWQCB COMMENTS)	ADMIN RECORD	GW SOIL SVEI TCE VOC WELLS	024 OU 2A	SOUTHWEST DIVISION SW01013110
M60050 / 002315	MISC	01-25-1999	BECHTEL NATIONAL, INC.		12-24-1998	D. TEDALDI			VARIOUS AGENCIES	0105	03.4		REPLACEMENT PAGES THROUGHOUT THE DRAFT FINAL PHASE II GROUNDWATER FEASIBILITY STUDY REPORT (SEE AR #2041 - DRAFT FINAL GW FS)	ADMIN RECORD	FS GW	024 OU 2A	SOUTHWEST DIVISION SW01013110
M60050 / 002466	SW6207	08-13-2001	OHM REMEDIATION	DATA	12-29-1998	W. SEDLAK			NAVFAAC - SOUTHWEST DIVISION	0200	DO 65	L. HORNECKER	UPDATE OF SOIL VAPOR EXTRACTION (SVE) ANALYTICAL RESULTS FOR THE SVE TESTING AT WELLS 24 SVE10, 24 SVE116, 24 SVE161, & 24 SVE13	ADMIN RECORD BASE	AIR DATA DCE GC/MS SOIL SVE TCE VOC WELLS	024 OU 2A	CHOICE MICROGRAPHICS SW02052301
M60050 / 002388	CTO-0155/0411	04-13-1999	SWDIV	FACT	01-01-1999	G. TINKER			VARIOUS AGENCIES	0050	10.6		FINAL FACT SHEET MARINE CORPS TO PROCEED WITH INTERIM REMEDIAL ACTION DATED JANUARY 1999 (MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD INFO REPOSITORY	FACTSHEET IR REMEDIAL ACTIO SVE VOC	024	SOUTHWEST DIVISION SW01013112
M60050 / 002319	LTR	04-06-1999	EPA SAN FRANCISCO	NONE	01-13-1999	G. KISTNER			MCAS EL TORO	0002	10.1	J. JOYCE	US EPA COMMENTS ON DRAFT PROPOSED PLAN FOR GROUNDWATER REMEDIATION, VOC SOURCE AREA (SEE AR #2297 - PLAN)	ADMIN RECORD	COMMENTS GW PROPOSED PLAN TCE	024 OU 2A	SOUTHWEST DIVISION SW01013110

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002697 NONE LTR NONE 0004	05-31-2002 01-13-1999 NONE	DTSC - CYPRESS J. SCANDURA MCAS EL TORO J. JOYCE	DTSC APPROVAL OF THE DRAFT FINAL ENGINEERING DESIGN REPORT, DRAFT CONTINGENCY PLAN, DRAFT CONSTRUCTION QUALITY ASSURANCE/QUALITY CONTROL PLAN, AND DRAFT OPERATIONS AND MAINTENANCE MANUAL, VADOSE ZONE REMEDIATION FOR THE VOC SOURCE AREA	ADMIN RECORD BASE	COMMENTS QA QC REMEDIAL ACTIO RESPONSE SOIL SVE VOC	024 OU 2A	SOUTHWEST DIVISION							
M60050 / 002373 MISC NONE 0001	04-12-1999 01-16-1999 NONE 10.6	ORANGE COUNTY RE ORANGE COUNTY RE PUBLIC PUBLIC	PUBLIC NOTICE INTERIM REMEDIAL ACTION AT INSTALLATION RESTORATION SITE 24		PRESS REL. PUB. PARTICIPAT	024	SOUTHWEST DIVISION SW01013111							
M60050 / 002374 MISC NONE 0001	04-12-1999 01-16-1999 NONE 10.6	LA TIMES LA TIMES PUBLIC PUBLIC	PUBLIC NOTICE INTERIM REMEDIAL ACTION AT INSTALLATION RESTORATION SITE 24		PRESS REL PUB. PARTICIPAT	024	SOUTHWEST DIVISION SW01013111							
M60050 / 002462 SW6306 DATA N68711-93-D-1459 0300	08-10-2001 01-19-1999 DO 65	OHM REMEDATION W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER	UPDATE OF THE SOIL VAPOR EXTRACTION ANALYTICAL RESULTS FOR THE SVE TESTING AT 12 SVE WELLS	ADMIN RECORD BASE	DATA MTBE SOIL SVE WELLS	024 OU 2A	BECHTEL NATIONAL SW02052001							
M60050 / 002714 NONE LTR NONE 0001	06-03-2002 01-20-1999 NONE	US EPA - SAN FRANCISCO G. KISTNER MCAS EL TORO J. JOYCE	APPROVAL OF THE DRAFT FINAL ENGINEERING DESIGN REPORT, DRAFT CONTINGENCY PLAN, DRAFT CONSTRUCTION QUALITY ASSURANCE/QUALITY CONTROL PLAN, AND DRAFT OPERATIONS AND MAINTENANCE MANUAL, VADOSE ZONE REMEDIATION FOR THE VOC SOURCE AREA	ADMIN RECORD BASE	COMMENTS GW QA QC VOC	024 OU 2A	SOUTHWEST DIVISION							

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Recipient						
M60050 / 002370		04-12-1999 01-21-1999	DTSC CYPRESS, M. MINGAY	PLAN NONE 0011	NONE 03.3	DTSC CYPRESS T. MAHMOUD		COMMENTS ON PROPOSED PLAN FOR GROUNDWATER REMEDIATION AT OU-1, SITE 18 AND OU-2A, SITE 24 (SEE AR #2297 - PLAN)	ADMIN RECORD	COMMENTS GW	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01013111
M60050 / 002371		04-12-1999 01-22-1999	DTSC - CYPRESS T. MAHMOUD	LTR NONE 0003	NONE 10.1	MCAS EL TORO J. JOYCE		COMMENTS ON DRAFT PROPOSED PLAN FOR GROUNDWATER REMEDIATION (SEE AR #2297 - DRAFT PROPOSED PLAN)	ADMIN RECORD	COMMENTS GW PROPOSED PLAN REMEDIAL ACTIO VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01013111
M60050 / 002696		05-31-2002 01-22-1999	CRWQCB - RIVERSIDE P. HANNON	NONE LTR NONE 0001	NONE	MCAS EL TORO J. JOYCE		WATER BOARD HAS NO SIGNIFICANT COMMENTS ON THE DRAFT PROPOSED PLAN FOR GROUNDWATER REMEDIATION AT OPERABLE UNIT 1 SITE 18 AND OPERABLE UNIT 2A SITE 24 (SEE AR #2297 - PLAN)	ADMIN RECORD BASE	COMMENTS PROPOSED PLAN	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 002715		06-03-2002 01-22-1999	CRWQCB - RIVERSIDE P. HANNON	NONE LTR NONE 0001	NONE	MCAS EL TORO J. JOYCE		WATER BOARD HAS NO SIGNIFICANT COMMENTS ON THE TECHNICAL MEMORANDUM SUMMARY OF PERCHLORATE TEST RESULTS FOR THE VOC SOURCE AREA (SEE AR #2309 - TECH MEMO)	ADMIN RECORD BASE	COMMENTS DATA PERCHLORATE TECH MEMO VOC	024 OU 2A	SOUTHWEST DIVISION
M60050 / 002457	SW6316 DATA N68711-93-D-1459 0125	08-10-2001 01-27-1999	OHM REMEDATION D. RAWAL		DO 65	NAVFAC - SOUTHWEST DIVISION L. HORNECKER		UPDATE OF THE SOIL VAPOR EXTRACTION ANALYTICAL RESULTS FOR THE TESTING AT 6 SVE WELLS	ADMIN RECORD BASE	DATA GC/MS MTBE SOIL SVE VOC WELLS	024 OU 2A	CHOICE MICROGRAPHICS SW02052301
M60050 / 002716		06-04-2002 01-27-1999	DTSC - CYPRESS T. MAHMOUD	NONE LTR NONE 0003	NONE	MCAS EL TORO J. JOYCE		COMMENTS ON THE TECHNICAL MEMORANDUM SUMMARY OF PERCHLORATE TEST RESULTS FOR THE VOC SOURCE AREA (SEE AR #2309 - TECH MEMO)	ADMIN RECORD BASE	COMMENTS GW MW PERCHLORATE TECH MEMO VOC WELLS	024 OU 2A	SOUTHWEST DIVISION

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	EPA Cat. #	Recipient	Approx. # Pages								
M60050 / 002476 SW6317 DATA N68711-93-D-1459 0150	08-13-2001 02-02-1999 DO 65	OHM REMEDIAION W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER	UPDATE OF SOIL VAPOR EXTRACTION ANALYTICAL RESULTS FOR THE SVE TESTING AT 4 SVE WELLS	ADMIN RECORD BASE	DATA DCE MTBE PCE SOIL SVE TCE VOC WELLS	024 OU 2B	BECHTEL NATIONAL SW02052002					
M60050 / 002581 NONE RPT NONE 0150	12-11-2001 02-04-1999 NONE	NAVFAC - SOUTHWEST DIVISION L. HORNECKER MCAS EL TORO	SUMMARY REPORT AND SUPPLEMENTARY TECHNICAL INFORMATION, REPAIRS TO VEHICLE WASHRACK AT BUILDING 386, SOLID WASTE MANAGEMENT UNIT (SWMU) 110 - PETROLEUM CORRECTIVE ACTION PROGRAM (SEE AR #2575 - REPORT)	ADMIN RECORD BASE INFO REPOSITORY	GW NFA RFA SOIL SOIL BORING SOLVENTS SWMU TCE TPH TRPH VOC WELLS	024 BLDG. 386 OU 1 OU 2A SWMU 110	BECHTEL NATIONAL SW02052007					
M60050 / 002475 SW6318 DATA N68711-93-D-1459 0225	08-13-2001 02-10-1999 DO 65	OHM REMEDIAION D. RAWAL NAVFAC - SOUTHWEST DIVISION L. HORNECKER	UPDATE OF SOIL VAPOR EXTRACTION ANALYTICAL RESULTS FOR THE SVE WELL TESTING AT SITE 24	ADMIN RECORD BASE	DATA DCE MTBE PCE SOIL SVE TCE VOC WELLS	024 OU 2A	CHOICE MICROGRAPHICS SW02052301					

UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002455 SW6409 RPT N68711-93-D-1459 0025	08-10-2001 02-12-1999 DO 65	OHM REMEDIAION W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER	TECHNICAL MEMORANDUM - PROGRESS REPORT OF THE PHASE I VADOSE ZONE REMEDIAION ACTIVITIES AT THE VOLATILE ORGANIC COMPOUND SOURCE AREA (SEE AR #250 - DTSC COMMENTS)	ADMIN RECORD BASE	GW PUBNOT REMEDIAL ACTIO SVE TCE TECH MEMO VOC WATER WELLS	024 BLDG. 296 BLDG. 297 OU 2A	CHOICE MICROGRAPHICS SW02052301
M60050 / 002386 RPT N68711-93-D-1459 0025	04-13-1999 02-16-1999 DO065 03.4	NAVFAC - SOUTHWEST DIVISION B. DEMAREE VARIOUS AGENDIES	FEBRUARY 1999 PROGRESS REPORT, PHASE I VADOSE ZONE REMEDIAION, REMOVAL AND REMEDIAL ACTIONS AT IRP SITES	ADMIN RECORD	RA REMOVAL	024	SOUTHWEST DIVISION SW01013111
M60050 / 000293 SW6360 RPT N68711-93-D-1459 0080	04-04-2000 02-18-1999 DO 59	OHM REMEDIAION W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER	CONE PENETRATION TESTING (CPT) SOIL GAS LOGS FOR PHASE I AND PHASE II SOIL GAS SAMPLING POINTS	ADMIN RECORD	CPT GAS SOIL SVE	024	SOUTHWEST DIVISION SW01011004
M60050 / 002454 SW6416 DWG N68711-93-D-1459 0006	08-10-2001 02-18-1999 DO 65	OHM REMEDIAION W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER	TRANSMITTAL OF CENTRAL SOIL VAPOR EXTRACTION SYSTEM, COOLING WATER UTILITY DRAWINGS - REMOVAL AND REMEDIAL ACTIONS AT IRP SITES	ADMIN RECORD BASE	SOIL SVE WATER	024 OU 2A	CHOICE MICROGRAPHICS SW02052301
M60050 / 002459 SW6361 MISC N68711-93-D-1459 0022	08-10-2001 02-18-1999 DO 65	OHM REMEDIAION W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER	SOIL VAPOR EXTRACTION (SVE) GEOLOGIC BORING LOGS AND WELL CONSTRUCTION LOGS	ADMIN RECORD BASE	SOIL SOIL BORING SVE WELLS	024 OU 2A	CHOICE MICROGRAPHICS SW02052301

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002464	SW6433	08-13-2001	OHM	DATA	02-23-1999	REMEDIAION	N68711-93-D-1459	DO 65	W. SEDLAK	0250		NAVFAC - SOUTHWEST DIVISION L. HORNECKER	UPDATE OF SOIL VAPOR EXTRACTION (SVE) SOIL GAS ANALYTICAL RESULTS FOR SITE 24	ADMIN RECORD BASE	BTEX DATA MTBE SOIL SVE WELLS	024 OU 2A	BECHTEL NATIONAL SW02052001
M60050 / 002472	SW6442	08-13-2001	OHM	DATA	02-23-1999	REMEDIAION	N68711-93-D-1459	DO 65	W. SEDLAK	0040		NAVFAC - SOUTHWEST DIVISION L. HORNECKER	SOIL GAS DATA COLLECTED IN DECEMBER 1998	ADMIN RECORD BASE	AAQS DATA SOIL VOC	024 OU 2A	CHOICE MICROGRAPHICS SW02052301
M60050 / 002474	SW6432	08-13-2001	OHM	DATA	02-24-1999	REMEDIAION	N68711-93-D-1459	DO 65	W. SEDLAK	0200		NAVFAC - SOUTHWEST DIVISION L. HORNECKER	UPDATE OF SOIL VAPOR EXTRACTION ANALYTICAL RESULTS FOR THE SVE WELL TESTING AT SITE 24	ADMIN RECORD BASE	AIR DATA DCE GC/MS MTBE PCE SOIL SVE TCE VOC WELLS	024 OU 2A	CHOICE MICROGRAPHICS SW02052301
M60050 / 002458	SW6446	08-10-2001	OHM	DATA	02-25-1999	REMEDIAION	N68711-93-D-1459	DO 65	W. SEDLAK	0150		NAVFAC - SOUTHWEST DIVISION L. HORNECKER	RADIUS OF INFLUENCE DATA FROM SVE PILOT TESTS AT IRP SITE 24	ADMIN RECORD BASE	DATA SVE VOC WELLS	024 OU 2A	CHOICE MICROGRAPHICS SW02052301

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Data	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guld. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000068 NONE RPT N62742-94-D-0048 0040	08-04-1999 03-01-1999 00068 03.4	08-04-1999 03-01-1999 00068 03.4	EARTH TECH, INC.  NAVFAC - SOUTHWEST DIVISION				SOIL VAPOR EXTRACTION SYSTEM EVALUATION AND OPTIMIZATION REPORT, VADOSE ZONE REMEDIATION FOR THE VOC SOURCE AREA (SEE AR #2709 - DTSC COMMENTS)	ADMIN RECORD BASE	BRAC CERCLA CLEAN IRP PCE QAPP QC RCRA TCE TPH VOC	024 OU 2A	BECHTEL NATIONAL
M60050 / 002529 SW6455 DATA N68711-93-D-1459 0010	09-19-2001 03-03-1999 DO 65	09-19-2001 03-03-1999 DO 65	OHM REMEDIAION W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER				FEBRUARY 1999 GROUNDWATER ELEVATION DATA FROM THE VOC SOURCE AREA	ADMIN RECORD BASE	DATA GW VOC	024 OU 2A	CHOICE MICROGRAPHICS SW02052302
M60050 / 002463 SW6457 MISC N68711-93-D-1459 0006	08-10-2001 03-05-1999 DO 65	08-10-2001 03-05-1999 DO 65	OHM REMEDIAION W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER				SOIL VAPOR EXTRACTION OPERATION LOGS FOR THE SVE SYSTEM WELLS	ADMIN RECORD BASE	SOIL SVE WELLS	024 OU 2A	CHOICE MICROGRAPHICS SW02052301
M60050 / 002699 NONE LTR NONE 0004	05-31-2002 03-10-1999 NONE	05-31-2002 03-10-1999 NONE	DTSC - CYPRESS T. MAHMOUD MCAS EL TORO J. JOYCE				COMMENTS ON THE OPERATION AND MAINTENANCE MANUAL, SOIL VAPOR EXTRACTION SYSTEM DEMONSTRATION, DATED 12/23/98	ADMIN RECORD BASE	COMMENTS PID SVE WELLS	024 OU 2A	SOUTHWEST DIVISION
M60050 / 000250 NONE MISC NONE 0004	12-28-1999 03-15-1999 NONE 10.1	12-28-1999 03-15-1999 NONE 10.1	DTSC CYPRESS T. MAHMOUD MCAS EL TORO J. JOYCE				COMMENTS ON TECHNICAL MEMORANDUM PROGRESS REPORT, PHASE I VADOSE ZONE REMEDIATION ACTIVITIES (SEE AR #2455 - TECH MEMO & #2723 - RESPONSE TO COMMENTS)	ADMIN RECORD	COMMENTS REMEDIAION SOIL SVE TCE TECH MEMO	024 OU 2A	CHOICE MICROGRAPHICS SW01011004

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #							
M60050 / 002473 SW6526 MEMO N68711-93-D-1459 0100	08-13-2001 03-15-1999 DO 65		OHM REMEDATION W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER					TECHNICAL MEMORANDUM - PROGRESS REPORT PHASE I VADOSE ZONE REMEDATION ACTIVITES FOR THE VOLATILE ORGANIC COMPOUND SOURCE AREA (SEE AR #2704 - DTSC COMMENTS)	ADMIN RECORD BASE	DATA DCE PCE REMEDIAL ACTIO SOIL SVE TCE TECH MEMO VOC WELLS	024 BLDG. 297 OU 2A	CHOICE MICROGRAPHICS SW02052301
M60050 / 002394 RPT N68711-93-D-1459 0020	04-13-1999 03-16-1999 DO065 03.4		NAVFAC - SOUTHWEST DIVISION B. DEMAREE VARIOUS AGENCIES					MARCH 1999 PROGRESS REPORT, PHASE I VADOSE ZONE REMEDIATION - REMOVAL AND REMEDIAL ACTIONS AT IRP SITES	ADMIN RECORD	GW IRP REMEDIAL ACTIO REMOVAL VOC	024 OU 2A	SOUTHWEST DIVISION SW01013112
M60050 / 002700 NONE LTR NONE 0003	06-03-2002 03-18-1999 NONE		DTSC - CYPRESS T. MAHMOUD MCAS EL TORO J. JOYCE					COMMENTS ON THE DRAFT GROUNDWATER REMEDIATION PILOT TEST REPORT FOR THE VOC SOURCE AREA (SEE AR #2314 - PILOT TEST REPORT)	ADMIN RECORD BASE	COMMENTS GW REMEDIAL ACTIO VOC WELLS	024 OU 2A	SOUTHWEST DIVISION
M60050 / 002720 CERT MAIL NO P115386420 LTR NONE 0002	06-04-2002 03-23-1999 NONE		MCAS EL TORO J. JOYCE US EPA - SAN FRANCISCO G. KISTNER					REQUEST FOR CHANGES TO FEDERAL FACILITIES AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS, SCHEDULE FOR OPERABLE UNIT 1 AND 2A REQUIRES REVISED DELIVERABLE DATE FOR THE DRAFT FINAL PROPOSED PLAN FOR GROUNDWATER REMEDIATION (SEE AR #2701 - EPA RESPONSE)	ADMIN RECORD BASE	ARAR FFA GW PROPOSED PLAN VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 002721 CERT MAIL NO. P115386421 LTR NONE 0002	06-04-2002 03-23-1999 NONE		MCAS EL TORO J. JOYCE DTSC - CYPRESS J. SCANDURA					REQUEST FOR CHANGES TO FEDERAL FACILITIES AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS, SCHEDULE FOR OPERABLE UNIT 1 & 2A REQUIRES A REVISED DELIVERABLE DATE FOR THE DRAFT FINAL PROPOSED PLAN FOR GROUNDWATER REMEDIATION (SEE AR #2702 - DTSC RESPONSE)	ADMIN RECORD BASE	ARAR FFA GW PROPOSED PLAN VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Box No.
M60050 / 002722	06-04-2002	MCAS EL TORO	REQUEST FOR CHANGES TO FEDERAL FACILITIES AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS, SCHEDULE FOR OPERABLE UNIT 1 & 2A REQUIRES A REVISED DELIVERABLE DATE FOR THE DRAFT FINAL PROPOSED PLAN FOR GROUNDWATER REMEDIATION	ADMIN RECORD	ARAR	018	SOUTHWEST DIVISION				
CERT MAIL NO. P115386422	03-23-1999	J. JOYCE		BASE	FFA	024					
LTR	NONE	CRWQCB - RIVERSIDE			GW	OU 1					
NONE		P. HANNON			PROPOSED PLAN	OU 2A					
0002					VOC						
M60050 / 002701	06-03-2002	US EPA - SAN FRANCISCO	APPROVAL OF REQUEST FOR CHANGES TO FEDERAL FACILITIES AGREEMENT SCHEDULE - EPA GRANTS THIRTY DAY EXTENSION PROVIDED NAVY SCHEDULE MEETINGS TO RESOLVE REGULATORY AGENCY COMMENTS AND NEGOTIATIONS WITH WATER DISTRICTS ON GROUNDWATER CLEANUP	ADMIN RECORD	FFA	018	SOUTHWEST DIVISION				
NONE	03-26-1999	G. KISTNER		BASE	GW	024					
LTR	NONE	MCAS EL TORO			PROPOSED PLAN	OU 1					
NONE		J. JOYCE				OU 2A					
0002											
M60050 / 000071	06-04-1999	BECHTEL NATIONAL, INC.	DRAFT TECHNICAL MEMORANDUM ON ADDITIONAL SOIL VAPOR EXTRACTION PILOT TESTING	ADMIN RECORD	PCE	024	SOUTHWEST DIVISION				
CTO-0142/0566	03-30-1999	P. BROOKS			SOIL	OU 2A	SW01011001				
RPT	00142	NAVFAC - SOUTHWEST DIVISION			SVE						
N68711-92-D-4670	03.4				TCE						
0110					TECH MEMO						
					VOC						
M60050 / 002702	06-03-2002	DTSC - CYPRESS	APPROVAL OF REQUEST FOR CHANGES TO FEDERAL FACILITIES AGREEMENT SCHEDULE - DTSC GRANTS THIRTY DAY EXTENSION PROVIDED NAVY SCHEDULE MEETINGS TO RESOLVE REGULATORY AGENCY COMMENTS (SEE AR #2297 - DRAFT PROPOSED PLAN & #2721 - EXTENSION REQUEST)	ADMIN RECORD	COMMENTS	018	SOUTHWEST DIVISION				
NONE	03-30-1999	J. SCANDURA		BASE	FFA	024					
LTR	NONE	MCAS EL TORO			GW	OU 1					
NONE		J. JOYCE			PROPOSED PLAN	OU 2A					
0002											
M60050 / 002703	06-03-2002	CRWQCB - RIVERSIDE	COMMENTS ON THE DRAFT GROUNDWATER REMEDIATION PILOT TEST REPORT FOR THE VOC SOURCE AREA (SEE AR #2314 - PILOT TEST REPORT)	ADMIN RECORD	COMMENTS	024	SOUTHWEST DIVISION				
NONE	04-01-1999	P. HANNON		BASE	GW	OU 2A					
LTR	NONE	MCAS EL TORO			REMEDIAL ACTIO						
NONE		J. JOYCE			VOC						
0001											

UIC No. / Rec. No.	Doc. Control No.	Prct. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002530 SW6566 DATA N68711-93-D-1459 0200	09-19-2001 04-02-1999 DO 65	OHM REMEDATION W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER	UPDATE OF ANALYTICAL RESULTS FOR THE SOIL/VAPOR EXTRACTION WELL TESTING AT THE VOC SOURCE AREA	ADMIN RECORD BASE	DATA GC/MS MTBE SOIL SVE VOC WELLS	024 OU 2A	BECHTEL NATIONAL SW02052006										
M60050 / 000258 NONE LTR NONE 0001	12-29-1999 04-03-1999 NONE 01.6	MCAS EL TORO J. JOYCE DTSC CYPRESS T. MAHMOUD	ACKNOWLEDGEMENT OF COMMENTS ON THE PROGRESS REPORT FOR PHASE I VADOSE ZONE REMEDIATION ACTIVITIES	ADMIN RECORD	COMMENTS	024 OU 2A	CHOICE MICROGRAPHICS SW01011004										
M60050 / 002723 EL TORO SER 6284 1AU LTR NONE 0001	06-04-2002 04-06-1999 NONE	MCAS EL TORO J. JOYCE DTSC - CYPRESS T. MAHMOUD	RESPONSE TO COMMENTS ON TECHNICAL MEMORANDUM PROGRESS REPORT, PHASE I VADOSE ZONE REMEDIATION ACTIVITIES, WITH ASSURANCE THAT SUBSEQUENT MONTHLY PROGRESS REPORTS WILL CONTAIN INFORMATION REQUESTED (SEE AR #2455 - TECH MEMO & #250 - DTSC COMMENTS)	ADMIN RECORD BASE	COMMENTS GW RESPONSE TECH MEMO VOC	024 OU 2A	SOUTHWEST DIVISION										
M60050 / 002399 RPT N68711-93-D-1459 0023	04-23-1999 04-15-1999 DO 65 03.4	NAVFAC - SOUTHWEST DIVISION D. DEMARS VARIOUS AGENCIES	TECHNICAL MEMORANDUM - PROGRESS REPORT ON PHASE I VADOSE ZONE REMEDATION ACTIVITIES FOR THE VOC SOURCE AREA (SEE AR #2706 - DTSC COMMENTS)	ADMIN RECORD	SOIL SVE TCE TECH MEMO VOC WELLS	024 OU 2A	SOUTHWEST DIVISION SW01013112										
M60050 / 002704 NONE LTR NONE 0003	06-03-2002 04-15-1999 NONE	DTSC - CYPRESS T. MAHMOUD MCAS EL TORO J. JOYCE	COMMENTS ON THE TECHNICAL MEMORANDUM - PROGRESS REPORT PHASE I VADOSE ZONE REMEDIATION ACTIVITIES FOR THE VOLATILE ORGANIC COMPOUND SOURCE AREA (SEE AR #2473 - TECH MEMO)	ADMIN RECORD BASE	COMMENTS GW MONITORING TECH MEMO VOC	024 BLDG. 297 OU 2A	SOUTHWEST DIVISION										

UIC No. / Rec. No.	Doc. Control No.	Prd. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002403	CTO-0170/0140	05-03-1999	BECHTEL NATIONAL, INC.	RPT	04-16-1999	J. WIEGAND	N68711-92-D-4670	01.4	NAVFAC - SOUTHWEST DIVISION	0220			DRAFT EVALUATION OF PERCHLORATE IN GROUNDWATER (SEE AR #32 - EPA COMMENTS, #2707 - DTSC COMMENTS, #2708 - CRWQCB COMMENTS, & #57 - RESPONSE TO COMMENTS)	ADMIN RECORD	GW MONITORING PERCHLORATE VOC WELLS	001 002 003 005 017 018 024	SOUTHWEST DIVISION SW01011006
M60050 / 002724	NONE	06-04-2002	DTSC & DEPT OF HEALTH SERVICES	LTR	04-27-1999	T. MAHMOUD & D. BAILEY		NONE	MCAS EL TORO				TRANSMITTAL OF COMMENTS ON THE RESPONSE TO REGULATOR COMMENTS ON THE DRAFT FINAL RADIOLOGICAL STATUS SURVEY (SEE AR #2687 - DHS COMMENTS)	ADMIN RECORD BASE	COMMENTS HRA RADIATION RESPONSE	HANGAR 296 HANGAR 297 OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION
M60050 / 000489	NONE	07-24-2000	BL ASSOCIATES	LTR	04-29-1999	C. BENNETT		NONE	U.S. EPA, SAN FRANCISCO				COMMENTS ON THE DRAFT PHASE II REMEDIAL INVESTIGATION REPORT DATED FEBRUARY 1996 (SEE AR #1269 - RI REPORT)	ADMIN RECORD	COMMENTS GW PCE SOIL TCE TPH TPHD VOC	024 025 BLDG. 800	SOUTHWEST DIVISION SW01011006

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002406		05-03-1999	MCAS EL TORO		04-29-1999	J. JOYCE							REQUEST FOR CHANGES IN FEDERAL FACILITY AGREEMENT SCHEDULE - THIRTY DAY EXTENSION FOR SUBMITTAL OF THE DRAFT FINAL PROPOSED PLAN FOR OPERABLE UNITS 1 AND 2A GROUNDWATER REMEDIATION (SEE AR #2705 - DTSC RESPONSE)	ADMIN RECORD	FFA GW PROPOSED PLAN	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 024 025 OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION SW01013112
LTR NONE 0004		NONE 03.6	VARIOUS AGENCIES														
M60050 / 002705		06-03-2002	DTSC - CYPRESS		05-04-1999	J. SCANDURA							RESPONSE TO REQUEST FOR THIRTY DAY EXTENSION FOR THE SUBMITTAL OF THE DRAFT FINAL PROPOSED PLAN FOR GROUNDWATER REMEDIATION AT OPERABLE UNITS 1 AND 2A - DTSC GRANTS REQUEST (SEE AR #2406 - REQUEST)	ADMIN RECORD BASE	FFA GW PROPOSED PLAN REMEDIAL ACTIO	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
LTR NONE 0003		NONE	MCAS EL TORO J. JOYCE														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #							
M60050 / 002411	05-19-1999	05-07-1999	OHM REMEDIAION	MISC	DO 50	E. BOND	NAVFAC - SOUTHWEST DIVISION	REGULATORY CLOSURE DOCUMENTATION FOR VARIOUS ENVIRONMENTAL LOCATIONS OF CONCERN	ADMIN RECORD	CLOSURE SWMU UST	024 OU 2A SWMU 273 UST 224 UST 380B UST 672 UST 672B	SOUTHWEST DIVISION SW01013112
N68711-93-D-1459 0030	01.1		B. DEMAREE									
M60050 / 002706	06-03-2002	05-13-1999	DTSC - CYPRESS T. MAHMOUD	NONE	NONE	MCAS EL TORO	J. JOYCE	DTSC HAS NO NEW COMMENTS ON THE TECHNICAL MEMORANDUM - PROGRESS REPORT ON PHASE I VADOSE ZONE REMEDIAION ACTIVITIES FOR THE VOC SOURCE AREA (SEE AR #2399 - TECH MEMO)	ADMIN RECORD BASE	COMMENTS GW MONITORING SVE TECH MEMO VOC	024 OU 2A	SOUTHWEST DIVISION
LTR NONE 0002												
M60050 / 002707	06-03-2002	05-18-1999	DTSC - CYPRESS T. MAHMOUD	NONE	NONE	MCAS EL TORO	J. JOYCE	COMMENTS ON DRAFT REPORT EVALUATION OF PERCHLORATE IN GROUNDWATER (SEE AR #2403 - EVALUATION & #57 - RESPONSE TO COMMENTS)	ADMIN RECORD BASE	COMMENTS GW LF MONITORING MW PERCHLORATE WELLS	001 002 003 005 017 OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION
LTR NONE 0003												
M60050 / 002708	06-03-2002	05-20-1999	CRWQCB - RIVERSIDE P. HANNON	NONE	NONE	MCAS EL TORO	J. JOYCE	WATER BOARD CONCURS WITH DRAFT EVALUATION OF PERCHLORATE IN GROUNDWATER BUT REQUESTS FURTHER INVESTIGATION AT THE EXPLOSIVE ORDNANCE DISPOSAL RANGE (SEE AR #2403 - EVALUATION & #57 - RESPONSE TO COMMENTS)	ADMIN RECORD BASE	COMMENTS GW MONITORING MW PERCHLORATE WATER WELLS	001 002 003 005 017 OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION
LTR NONE 0001												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Constr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #							
M60050 / 000032	08-04-1999	08-04-1999	US EPA REGION IX	NONE	06-03-1999	G. KISTNER	MCAS EL TORO	COMMENTS ON DRAFT EVALUATION OF PERCHLORATE IN GROUNDWATER (SEE AR #2403 - EVALUATION & #57 - RESPONSE TO COMMENTS)	ADMIN RECORD	COMMENTS GW PERCHLORATE	003 016 018	SOUTHWEST DIVISION SW01013101
NONE				LTR	NONE	J. JOYCE						
NONE				NONE	10.1							
0003												
M60050 / 000028	08-04-1999	08-04-1999	DTSC CYPRESS	NONE	06-04-1999	J. SCANDURA	MCAS EL TORO	DTSC AGREEMENT TO 30 DAY EXTENSION OF THE FEDERAL FACILITIES AGREEMENT SCHEDULE FOR SUBMITTAL OF A DRAFT FINAL PROPOSED PLAN	ADMIN RECORD	FFA GW	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01011001
NONE				LTR	NONE	J. JOYCE						
NONE				NONE	03.6							
0003												
M60050 / 000374	04-17-2000	06-04-1999	U.S. EPA SAN FRANCISCO	NONE	06-04-1999	G. KISTNER	NAVFAC - SOUTHWEST DIVISION	RESPONSE TO 5/28/89 NAVY REQUEST FOR FEDERAL FACILITY AGREEMENT (FFA) EXTENSION FOR AN ADDITIONAL 30 DAYS TO SUBMIT THE DRAFT FINAL PROPOSED PLAN	ADMIN RECORD	FFA GW PROPOSED PLAN	018 024 OU 1 OU 2A	BECHTEL NATIONAL
NONE				LTR	NONE	J. JOYCE						
NONE				NONE								
0002												
M60050 / 000021	08-03-1999	06-07-1999	BECHTEL NATIONAL, INC.	CTO-0153/0160	00153	D. TEDALDI	NAVFAC - SOUTHWEST DIVISION	RESPONSE TO AGENCY COMMENTS ON THE DRAFT CERCLA GROUNDWATER MONITORING PLAN (SEE AR #2408)	ADMIN RECORD	CERCLA COMMENTS GW MONITORING RESPONSE	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01011001
NONE				LTR	03.6	R. SELBY						
N68711-92-D-4670				NONE								
0020												
M60050 / 000077	08-04-1999	06-07-1999	BECHTEL NATIONAL, INC.	CTO-0153/0135	00153	J. WIEGAND	NAVFAC - SOUTHWEST DIVISION	DRAFT FINAL CERCLA GROUNDWATER MONITORING PLAN, VOLUMES 1 AND 2	ADMIN RECORD	DMP GW IDWMP LF METALS MONITORING PCB QAPP SAP SSH VOC WELLS	002 003 005 017 018 024 OU 1 OU 2 OU 3	SOUTHWEST DIVISION SW01013101
NONE				RPT	03.4							
N68711-92-D-4670				NONE								
1200												

UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002460 SW6817 DATA N68711-93-D-1459 0200	08-10-2001 06-07-1999 DO 65	OHM REMEDATION D. RAWAL NAVFAC - SOUTHWEST DIVISION L. HORNECKER	UPDATE OF SOIL VAPOR EXTRACTION ANALYTICAL RESULTS FOR THE SVE WELL TESTING AT SITE 24	ADMIN RECORD BASE	AIR MEK MTBE SOIL SVE WELLS	024 OU 2A	BECHTEL NATIONAL SW02052001
M60050 / 000332 NONE LTR NONE 0001	04-12-2000 06-08-1999 NONE	DTSC-CYPRESS, CA J. SCANDURA NAVFAC - SOUTHWEST DIVISION J. JOYCE	LETTER APPROVING OPERATION AND MAINTENANCE MANUAL, SOIL VAPOR EXTRACTION SYSTEM DEMONSTRATION, DATED 12/23/98	ADMIN RECORD	COMMENTS SVE	024 OU 2A	SOUTHWEST DIVISION SW01011005
M60050 / 002456 SW6818 DATA N68711-93-D-1459 0100	08-10-2001 06-08-1999 DO 65	OHM REMEDATION D. RAWAL NAVFAC - SOUTHWEST DIVISION L. HORNECKER	UPDATE OF SOIL GAS ANALYTICAL RESULTS - REMOVAL AND REMEDIAL ACTIONS AT IRP SITES	ADMIN RECORD BASE	DATA REMEDIAL ACTIO REMOVAL SOIL	024 OU 2A	CHOICE MICROGRAPHICS SW02052301
M60050 / 002709 NONE LTR NONE 0003	06-03-2002 06-16-1999 NONE	DTSC - CYPRESS T. MAHMOUD MCAS EL TORO' J. JOYCE	COMMENTS ON THE DRAFT SOIL VAPOR EXTRACTION SYSTEM EVALUATION AND OPTIMIZATION REPORT, VADOSE ZONE REMEDATION FOR THE VOC SOURCE AREA (SEE AR #68 - REPORT)	ADMIN RECORD BASE	COMMENTS SOIL SVE TCE VOC WELLS	024 OU 2A	SOUTHWEST DIVISION
M60050 / 000570 SW6922 PLAN N68711-93-D-1459 0005	11-22-2000 06-23-1999 DO075	OHM REMEDATION W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER	PLANS FOR PRELIMINARY SITE VERIFICATION	ADMIN RECORD	CPT DATA EOD GW MONITORING MW ORDNANCE PERCHLORATE VOC	001 002 017 024	SOUTHWEST DIVISION SW01013103

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location
Contr./Guid. No.	CTO No.	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location	Box No.	
Approx. # Pages	EPA Cat. #	Recipient	Recipient	Subject	Classification	Keywords	Sites	Location	Box No.	
M60050 / 002725	06-04-2002	MCAS EL TORO	MCAS EL TORO	REQUEST FOR CHANGES TO FEDERAL FACILITIES AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS, SCHEDULE FOR OPERABLE UNIT 1 & 2A REQUIRES A REVISED DELIVERABLE DATE FOR THE DRAFT FINAL PROPOSED PLAN AND THE DRAFT RECORD OF DECISION	ADMIN RECORD BASE	BCT BRAC FFA GW PROPOSED PLAN REMEDIAL ACTIO ROD VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION		
CERT MAIL NO. Z 288 008 967 LTR NONE 0005	06-29-1999 NONE	J. JOYCE US EPA - SAN FRANCISCO G. KISTNER	J. JOYCE US EPA - SAN FRANCISCO G. KISTNER							
M60050 / 000070	08-04-1999	BECHTEL	BECHTEL	DRAFT FINAL EVALUATION OF PERCHLORATE IN GROUNDWATER (SEE AR #404 - EPA COMMENTS)	ADMIN RECORD	GW LF MONITORING PERCHLORATE VOC	001 002 003 005 017 018 024	SOUTHWEST DIVISION SW01011001		
CTO-0171/0217 RPT N68711-92-D-4670 0120	07-01-1999 00171 03.4	NATIONAL, INC. J. WIEGAND NAVFAC - SOUTHWEST DIVISION	NATIONAL, INC. J. WIEGAND NAVFAC - SOUTHWEST DIVISION							
M60050 / 002467	08-13-2001	OHM	OHM	UPDATE OF SOIL VAPOR EXTRACTION (SVE) ANALYTICAL RESULTS FOR THE SVE WELL TESTING AT SITE 24	ADMIN RECORD BASE	BTEX DATA MTBE SOIL SVE WELLS	024 OU 2A	BECHTEL NATIONAL SW02052002		
SW6942 DATA N68711-93-D-1459 0175	07-01-1999 DO 65	REMEDIAION W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER	REMEDIAION W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER							
M60050 / 000100	09-08-1999	US EPA REGION IX	US EPA REGION IX	US EPA CONCERNS AND COMMENTS ON DRAFT SAMPLING, ANALYSIS AND QUALITY ASSURANCE PLAN FOR SITE 24 VADOSE ZONE REMEDIATION	ADMIN RECORD	COMMENTS DATA QA SAP VOC	024 OU 2A	SOUTHWEST DIVISION SW01011001		
NONE MISC NONE 0006	07-07-1999 NONE 10.1	G. KISTNER NAVFAC - SOUTHWEST DIVISION	G. KISTNER NAVFAC - SOUTHWEST DIVISION							
M60050 / 000372	04-17-2000	U.S. EPA, SAN FRANCISCO, CA	U.S. EPA, SAN FRANCISCO, CA	EPA CONCURRENCE ON FEDERAL FACILITY AGREEMENT (FFA) EXTENSION REQUEST DATED 8/29/99 (SEE #369, & #2725 - REQUEST)	ADMIN RECORD	FFA OU ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01011005		
NONE LTR NONE 0002	07-07-1999 NONE	G. KISTNER NAVFAC - SOUTHWEST DIVISION J. JOYCE	G. KISTNER NAVFAC - SOUTHWEST DIVISION J. JOYCE							

UIC No. / Rec. No.	Doc. Control No.	Prct. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	Recpt. Affil.	Recipient	Subject	Classification	Keywords	Sites	Location Box No.			
Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.				
M60050 / 002710 NONE LTR NONE 0001	06-03-2002 07-07-1999 NONE	CRWQCB - RIVERSIDE P. HANNON MCAS EL TORO J. JOYCE	CRWQCB CONCURRENCE ON FEDERAL FACILITY AGREEMENT (FFA) EXTENSION REQUEST DATED 6/29/99 - EXTENSION REQUEST IS GRANTED (SEE AR #2725 - REQUEST)	ADMIN RECORD BASE	ARAR COST FFA FS GW PROPOSED PLAN ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION				
M60050 / 002469 SW6944 DATA N68711-93-D-1459 0040	08-13-2001 07-08-1999 DO 65	OHM REMEDIATION W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER	GROUNDWATER ELEVATION DATA THROUGH JUNE 17, 1999	ADMIN RECORD BASE	DATA GW QC WELLS	024 OU 2A	CHOICE MICROGRAPHICS SW02052301				
M60050 / 002711 NONE LTR NONE 0002	06-03-2002 07-08-1999 NONE	DTSC - CYPRESS J. SCANDURA MCAS EL TORO J. JOYCE	RESPONSE TO FEDERAL FACILITY AGREEMENT (FFA) EXTENSION REQUEST DATED 6/29/99 - EXTENSION REQUEST IS DENIED (SEE AR #2725 - REQUEST)	ADMIN RECORD BASE	ARAR COST FFA FS GW PROPOSED PLAN ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION				
M60050 / 002727 NONE LTR NONE 0001	06-04-2002 07-12-1999 NONE	LOCAL REDEVELOPMENT AUTHORITY C. WIERCIOCH MCAS EL TORO J. JOYCE	QUESTIONS REGARDING REQUEST FOR SEVEN MONTH EXTENSION FOR OPERABLE UNIT 1 & 2A DRAFT FINAL PROPOSED PLAN AND THE DRAFT RECORD OF DECISION (SEE AR #2725 - REQUEST)	ADMIN RECORD BASE	FFA GW PROPOSED PLAN ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION				
M60050 / 000399 NONE LTR NONE 0003	04-18-2000 07-13-1999 NONE	DTSC, CYPRESS, CA J. SCANDURA NAVFAC - SOUTHWEST DIVISION J. JOYCE	CLARIFICATION FOR DENIAL OF REQUEST FOR EXTENSIONS TO THE FEDERAL FACILITY AGREEMENT (FFA) SCHEDULE (SEE AR #2713 - ADDITIONAL DTSC CORRESPONDENCE & #2729 - RESPONSE TO THIS LETTER)	ADMIN RECORD	ARAR FFA OU PP ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01011005				

UIC No. / Rec. No.	Doc. Control No.	Prct. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Subject	Classification	Keywords	Sites	Keywords	Sites	Location Box No.	
Approx. # Pages	EPA Cat. #	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Keywords	Sites	Location Box No.	
M60050 / 002728 NONE MEMO NONE 0005	06-04-2002 07-15-1999 NONE	06-04-2002 07-15-1999 NONE	DEPT OF HEALTH SERVICES D. BAILEY DTSC - CYPRESS T. MAHMOUD	TRANSMITTAL OF COMMENTS ON THE TECHNICAL MEMORANDUM, RADIONUCLIDES IN GROUNDWATER, DATED JUNE 1998 [DOCUMENT NOT IN DATABASE]	ADMIN RECORD BASE	COMMENTS GW LF RADIATION	002 003 005 017 OU 1 OU 2A OU 2B OU 2C OU 3			SOUTHWEST DIVISION	
M60050 / 002729 SWDIV SER 5BME.JJ/0368 LTR NONE 0004	06-04-2002 07-19-1999 NONE	06-04-2002 07-19-1999 NONE	NAVFAC - SOUTHWEST DIVISION J. JOYCE DTSC - CYPRESS J. SCANDURA	RESPONSE TO LETTER OF 13 JULY 1999 WITH COMPROMISE TO EXTENSION SCHEDULE DIFFERENCES FOR THE SUBMITTAL OF THE DRAFT GROUNDWATER PROPOSED PLAN AND THE DRAFT RECORD OF DECISION (SEE AR #399 - 13 JULY LETTER)	ADMIN RECORD BASE	FFA GW PROPOSED PLAN ROD	018 024 OU 1 OU 2A			SOUTHWEST DIVISION	
M60050 / 002712 NONE LTR NONE 0002	06-03-2002 07-20-1999 NONE	06-03-2002 07-20-1999 NONE	DTSC - CYPRESS T. MAHMOUD MCAS EL TORO J. JOYCE	COMMENTS ON THE TECHNICAL MEMORANDUM PROGRESS REPORT, PHASE I VADOSE ZONE REMEDIATION ACTIVITIES FOR THE VOC SOURCE AREA, DATED JUNE 1999	ADMIN RECORD BASE	GW REMEDIAL ACTIO TECH MEMO VOC	024 OU 2A			SOUTHWEST DIVISION	
M60050 / 002461 SW7002 DATA N68711-93-D-1459 0250	08-10-2001 07-22-1999 DO 65	08-10-2001 07-22-1999 DO 65	OHM REMEDIATION W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER	UPDATE OF SOIL VAPOR EXTRACTION ANALYTICAL RESULTS FOR THE SVE WELL TESTING AT SITE 24	ADMIN RECORD BASE	DATA MTBE SOIL SVE WELLS	024 OU 2A			BECHTEL NATIONAL SW02052001	
M60050 / 000576 SW7051 MISC N68711-93-D-1459 0030	11-22-2000 07-28-1999 DO075	11-22-2000 07-28-1999 DO075	OHM REMEDIATION W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER	CONE PENETRATION TESTING LOGS AND SAMPLE RESULTS FOR THE PERCHLORATE & EPA 8270 SAMPLES	ADMIN RECORD BASE	DATA PERCHLORATE SOIL	001 002 017 024			SOUTHWEST DIVISION SW01013103	

UIC No. / Rec. No.	Doc. Control No.	Pr. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000137 CTO-0155/0563 MM N68711-92-D-4670 0018	09-09-1999 08-04-1999 00155 10.4	BECHTEL NATIONAL INC T. HEIRONIMUS VARIOUS AGENCIES	RESTORATION ADVISORY BOARD SUBCOMMITTEE MEETING MINUTES AND RAB MEMBER DOCUMENT COMMENTS PRESENTED AT THE 7/28/99 RAB MEETING	ADMIN RECORD	COMMENTS MTG MINS RAB	001 002 003 005 008 012 017 018 024	SOUTHWEST DIVISION SW01011001							
M60050 / 000398 NONE LTR NONE 0007	04-18-2000 08-04-1999 NONE	U.S. EPA, SAN FRANCISCO, CA G. KISTNER NAVFAC - SOUTHWEST DIVISION J. JOYCE	COMMENTS ON THE DRAFT SAMPLING & QUALITY ASSURANCE PLAN, VADOSE ZONE REMEDIATION (WITH ATTACHMENT)	ADMIN RECORD	COMMENTS QAPP SAP SVE VOC	024 BLDG. 296	SOUTHWEST DIVISION							
M60050 / 000173 SW7073 RPT N68711-93-D-1459 0018	09-21-1999 08-06-1999 DO 65 03.4	OHM S. BORNHOFT SOUTHWEST DIV B. DEMAREE	SVE WELL CONSTRUCTION AND BORING LOGS - REMOVAL AND REMEDIAL ACTION	ADMIN RECORD	RA SOIL BORING	024	SOUTHWEST DIVISION SW01011002							
M60050 / 002730 NONE LTR NONE 0003	06-04-2002 08-12-1999 NONE	DTSC - CYPRESS T. MAHMOUD MCAS EL TORO D. GOULD	COMMENTS ON THE TECHNICAL MEMORANDUM PROGRESS REPORT, PHASE I VADOSE ZONE REMEDIATION ACTIVITIES FOR THE VOC SOURCE AREA, DATED JULY 1999	ADMIN RECORD BASE	COMMENTS GW REMEDIAL ACTIO SVE TECH MEMO VOC WELLS	024 OU 2A	SOUTHWEST DIVISION							
M60050 / 002713 NONE LTR NONE 0003	08-03-2002 08-16-1999 NONE	DTSC - CYPRESS J. SCANDURA MCAS EL TORO D. GOULD	NOTIFICATION THAT SINCE THERE HAS BEEN NO RESPONSE TO OR DISPUTE INVOKED REGARDING THE 13 JULY 1999 LETTER, CLARIFYING THE DENIAL OF THE FEDERAL FACILITIES AGREEMENT EXTENSION REQUEST DATED 6/29/99, THE DEADLINES SET IN THAT LETTER PREVAIL	ADMIN RECORD BASE	FFA GW PROPOSED PLAN ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION							

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Subject	Classification	Keywords	Sites	Keywords	Sites	Location Box No.	
Approx. # Pages	EPA Cat. #	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Keywords	Sites	Location Box No.	
M60050 / 002507 SW7535 MISC N68711-93-D-1459 0010	09-17-2001 08-18-1999 DO 112	09-17-2001 08-18-1999 DO 112	NAVFAC - SOUTHWEST DIVISION L. HORNECKER US EPA, DTSC, RWQCB KISTNER, MAHMOUD, HANNON	SUPPLEMENTAL INFORMATION ANOMALY AREA 3 (ALSO KNOWN AS MSC R1) [POSSIBLE REFUSE AREA] FOR THE PLANNED SITE VISIT OF 25 AUGUST 1999	ADMIN RECORD BASE	APHO DISPOSAL FOST GW PERCHLORATE SOIL SV SVE	001 024 ANOMALY AF BLDG. 368 OU 2A OU 3			BECHTEL NATIONAL SW02052004	
M60050 / 000369 NONE LTR NONE 0002	04-14-2000 08-20-1999 NONE	04-14-2000 08-20-1999 NONE	DTSC, CYPRESS, CA J. SCANDURA NAVFAC - SOUTHWEST DIVISION D. GOULD	RESPONSE TO REQUEST FOR EXTENSIONS TO THE FEDERAL FACILITY AGREEMENT (FFA) SCHEDULE DATED 6/29/99 & 7/19/99 (SEE #372, & #2725 - REQUEST)	ADMIN RECORD	FFA OU ROD	018 024 OU 1 OU 2A			SOUTHWEST DIVISION SW01011005	
M60050 / 000404 NONE LTR NONE 0002	04-18-2000 08-23-1999 NONE	04-18-2000 08-23-1999 NONE	U.S. EPA, SAN FRANCISCO, CA G. KISTNER NAVFAC - SOUTHWEST DIVISION D. GOULD	COMMENTS ON THE DRAFT FINAL EVALUATION OF PERCHLORATE IN GROUNDWATER DATED JULY 1999 (SEE AR #70 - EVALUATION)	ADMIN RECORD	COMMENTS GW MONITORING PERCHLORATE WELLS	001 002 003 005 017 018 024			SOUTHWEST DIVISION SW01011005	
M60050 / 000179 SW5980 DATA N68711-93-D-1459 0028	10-08-1999 09-10-1999 DO 65 03.4	10-08-1999 09-10-1999 DO 65 03.4	OHM REMEDATION CORP W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER	GEOLOGIC BORING AND WELL CONSTRUCTION LOGS FROM SOIL VAPOR EXTRACTION WELLS AT SITE 24	ADMIN RECORD	SOIL BORING SVE WELLS	024 OU 2A			SOUTHWEST DIVISION SW01011002	
M60050 / 000175 SW7075.1 MAP N68711-93-D-1459 0075	09-21-1999 09-13-1999 DO 65 01.4	09-21-1999 09-13-1999 DO 65 01.4	OHM REMEDATION S. BORNHOFT NAVFAC - SOUTHWEST DIVISION B. DEMAREE	REMOVAL AND REMEDIAL ACTIONS - ADDITIONAL COPIES OF SPECIAL MAP PACKAGES FOR RESTORATION ADVISORY BOARD SUB-COMMITTEE	ADMIN RECORD	PIM RAB REMEDIAL ACTIO REMOVAL	024 OU 2A			SOUTHWEST DIVISION SW01011002	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Recipient						
M60050 / 000366 NONE LTR NONE 0002	04-14-2000 09-15-1999 NONE	DTSC, CYPRESS, CA A. GIMENO NAVFAC - SOUTHWEST DIVISION D. GOULD	COMMENTS ON THE PROGRESS REPORT, VADOSE ZONE REMEDIATION, VOLATILE ORGANIC COMPOUND (VOC) SOURCE AREA	ADMIN RECORD	COMMENTS SVE VOC	024 OU 2A	SOUTHWEST DIVISION					
M60050 / 000314 SW6814 RPT N68711-93-D-1459 0300	04-10-2000 09-16-1999 DO 70	OHM REMEDATION D. RAWAL NAVFAC - SOUTHWEST DIVISION	SITE ASSESSMENT REPORT - OIL/WATER SEPARATOR	ADMIN RECORD	BTEX MTBE OWS PETROLEUM SWMU TPH UST VOC	024 OWS 672A	SOUTHWEST DIVISION SW01013101					
M60050 / 000236 SW7301 MISC N68711-93-D-1459 0045	12-27-1999 10-18-1999 DO 65 01.1	OHM REMEDATION SERVICES S. BORNHOFT NAVFAC - SOUTHWEST DIVISION L. HORNECKER	SOIL VAPOR EXTRACTION (SVE) GEOLOGIC BORING LOGS AND WELL CONSTRUCTION LOGS FOR SITE 24	ADMIN RECORD	SVE WELLS	024	SOUTHWEST DIVISION SW01011003					
M60050 / 000235 SW7256 RPT N68711-93-D-1459 0075	12-27-1999 10-19-1999 DO 70 01.1	OHM REMEDATION SERVICES S. BORNHOFT NAVFAC - SOUTHWEST DIVISION L. HORNECKER	TANK CLOSURE REPORT FOR UNDERGROUND STORAGE TANK 155	ADMIN RECORD	BTX&E CLOSURE MTBE TANK TPH UST	024 UST 155	SOUTHWEST DIVISION SW01011003					
M60050 / 000364 NONE LTR NONE 0002	04-14-2000 10-25-1999 NONE	DTSC, CYPRESS, CA A. GIMENO NAVFAC - SOUTHWEST DIVISION D. GOULD	COMMENTS ON TWO (2) PROGRESS REPORTS (SEPTEMBER AND OCTOBER), VADOSE ZONE REMEDIATION VOLATILE ORGANIC COMPOUND (VOC) SOURCE AREA	ADMIN RECORD	COMMENTS VOC	024 OU 2A	SOUTHWEST DIVISION					

UIC No. / Rec. No.	Doc. Control No.	Prd. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Subject	Classification	Keywords	Sites	Location Box No.	
M60050 / 000247	12-28-1999	OHM	UPDATE OF SVE ANALYTICAL RESULTS FOR THE SVE WELL TESTING AT SITE 24	ADMIN RECORD	DATA	024	SOUTHWEST DIVISION				
SW7410	10-28-1999	REMEDIAION SERVICES			SOIL		SW02051701				
DATA	DO 85	W. SEDLAK			SVE						
N68711-93-D-1459	01.1	NAVFAC - SOUTHWEST DIVISION			WELLS						
1500		L. HORNECKER									
M60050 / 000270	03-10-2000	EARTH TECH, INC	IMPLEMENTATION STRATEGY - DEMONSTRATION OF TCE OXIDATION USING POTASSIUM PERMANGANATE (LETTER TO VARIOUS AGENCIES & COMMENTS BY DTSC CAN BE REFERENCED AT REF. #272 & #279, SEE AR #762 - COMMENTS BY CRWQCB) - SEE AR #699 FOR ADDITIONAL COMMENTS BY DTSC	ADMIN RECORD	GW	024	CHOICE MICROGRAPHICS				
NONE	12-01-1999			INFO REPOSITORY	REMEDIAION	OU 2A	SW01011004				
RPT	00068	NAVFAC - SOUTHWEST DIVISION			TCE						
N62742-94-D-0048											
0020											
M60050 / 000271	03-10-2000	NAVFAC - SOUTHWEST DIVISION	GROUNDWATER MODELING RESULTS FOR ALTERNATIVE 8A	ADMIN RECORD	GW	018	CHOICE MICROGRAPHICS				
NONE	12-01-1999				OU	OU 1	SW01011004				
LTR	NONE	D. GOULD			TCE						
NONE		VARIOUS REGULATORS			VOC						
0024											
M60050 / 001405	04-17-2001	NAVFAC - SOUTHWEST DIVISION	SUMMARY REPORT - FORMER ABOVE-GROUND STORAGE TANK (AST) SITE 753 (SEE AR #737 - ADDENDUM TO THIS REPORT; #629 - CRWQCB CONCURRENCE; #657 - DTSC CONCURRENCE)	ADMIN RECORD	AST	024	SOUTHWEST DIVISION				
NONE	12-03-1999			BASE	BCP	AST 753	SW01053002				
RPT	NONE	L. HORNECKER			DISPOSAL	BLDG. 369					
NONE		NAVFAC - SOUTHWEST DIVISION			EBS	BLDG. 753					
0050					GW						
					PESTICIDES						
					STORMWATER						
					TCE						
					VOC						
					WELLS						

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000233		12-27-1999	MCAS EL TORO										DRAFT BASE REALIGNMENT AND CLOSURE BUSINESS PLAN (REFERENCE AR #296 COMMENTS ON DRAFT BRAC BUSINESS PLAN; AR #311 - FINAL BRAC BUSINESS PLAN; AR #313 RESPONSE TO COMMENTS ON DRAFT BRAC BUSINESS PLAN)	ADMIN RECORD	BCT	001	SOUTHWEST
NONE		12-14-1999	BCT												BRAC	002	DIVISION
PLAN		NONE													CLOSURE	003	SW01033001
NONE		03.3	VARIOUS AGENCIES													004	
0090																005	
																006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																018	
																019	
																020	
																021	
																022	
																024	
																025	
M60050 / 000272		03-15-2000	NAVFAC -										DEMONSTRATION OF TCE OXIDATION USING POTASSIUM PERMANGANATE. (REPORT DATED DECEMBER 1999 & COMMENTS BY DTSC CAN BE REFERENCED AT REF. #270 & #279)	ADMIN RECORD	GW	024	CHOICE
NONE		12-15-1999	SOUTHWEST												REMEDICATION		MICROGRAPHICS
LTR		NONE	DIVISION												TCE		SW01011004
NONE			DEAN GOULD														
0015			VARIOUS AGENCIES														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	EPA Cat. #	Recipient	Approx. # Pages								
M60050 / 000273	03-15-2000	NAVFAC -	RESPONSE TO RESTORATION ADVISORY						ADMIN RECORD	APHO	001	CHOICE
NONE	12-15-1999	SOUTHWEST	BOARD (RAB) COMMITTEE CHAIRMAN						INFO	BCP	002	MICROGRAPHICS
LTR	NONE	DIVISION	COMMENTS DATED 11/2/99, TO THE BASE						REPOSITORY	COMMENTS	003	SW01011004
NONE		D. GOULD	REALIGNMENT AND CLOSURE (BRAC)							HRA	004	
0006		RAB, COMMITTEE	PLAN (REFERENCE AR #377 - COMMENTS							IRP	005	
		CHAIRMAN	BY TECHNICAL REVIEW COMMITTEE & AR							RFA	006	
		G. HURLEY	#2392 BRAC CLEANUP PLAN)							TRC	007	
										UST	008	
											009	
											010	
											011	
											012	
											013	
											014	
											015	
											016	
											017	
											018	
											019	
											020	
											021	
											022	
											024	
											025	
M60050 / 000267	03-09-2000	NAVFAC -	RESPONSES TO DTSC COMMENTS ON						ADMIN RECORD	APHO	019	SOUTHWEST
NONE	12-27-1999	SOUTHWEST	SUMMARY REPORTS FOR AERIAL						INFO	RFA	021	DIVISION
LTR	NONE	DIVISION	PHOTOGRAPH ANOMALY (APHO) WITH						REPOSITORY	SWMU	024	
NONE		D. GOULD	ENCLOSURE. (SEE AR #219, #221, #222								APHO 10	
0010		DTSC, CYPRESS,	FOR COMMENTS)								APHO 39	
		CA									APHO 40	
		T. CHESNEY									APHO 49	
											APHO 50	
											APHO 9	
											SWMU 94	

UIC No. / Rec. No.	Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000281 NONE LTR NONE 0001	03-09-2000 01-03-2000 NONE	OCHCA, SANTA ANA, CA S. DAUGHERTY NAVFAC - SOUTHWEST DIVISION D. GOULD	COMPLETION OF TANK REMOVAL PROJECT	ADMIN RECORD INFO REPOSITORY	NFA	024 UST 388B	CHOICE MICROGRAPHICS SW01011004	
M60050 / 000262 NONE LTR NONE 0001	03-09-2000 01-03-2000 NONE	OCHCA, SANTA ANA, CA S. DAUGHERTY NAVFAC - SOUTHWEST DIVISION D. GOULD	COMPLETION OF TANK REMOVAL PROJECT AND OIL/WATER SEPARATOR.	ADMIN RECORD INFO REPOSITORY	NFA	024 OWS 298-C UST 298D	CHOICE MICROGRAPHICS SW01011004	
M60050 / 000263 NONE LTR NONE 0001	03-09-2000 01-03-2000 NONE	OCHCA, SANTA ANA, CA S. DAUGHERTY NAVFAC - SOUTHWEST DIVISION D. GOULD	COMPLETION OF TANK REMOVAL PROJECT AND OIL/WATER SEPARATOR	ADMIN RECORD INFO REPOSITORY	NFA	024 OWS 758-A UST 758B	CHOICE MICROGRAPHICS SW01011004	
M60050 / 000264 NONE LTR NONE 0001	03-09-2000 01-03-2000 NONE	OCHCA, SANTA ANA, CA S. DAUGHERTY NAVFAC - SOUTHWEST DIVISION D. GOULD	COMPLETION OF TANK REMOVAL PROJECT AND OIL/WATER SEPARATOR	ADMIN RECORD INFO REPOSITORY	NFA	024 OWS 386-B UST 386C	CHOICE MICROGRAPHICS SW01011004	
M60050 / 000281 NONE LTR NONE 0006	04-03-2000 01-11-2000 NONE	DTSC, CYPRESS, CA T. CHESNEY NAVFAC - SOUTHWEST DIVISION D. GOULD	COMMENTS BY DTSC ON THE TECHNICAL MEMORANDUM FOR GROUNDWATER MODELING OF ALTERNATIVE 8A (PROPOSED PREFERRED SCENARIO) DATED 10/21/99 (WITH ATTACHMENT) [SEE AR #2731 - ADDITIONAL COMMENTS]	ADMIN RECORD INFO REPOSITORY	COMMENTS GW REMEDIATION TCE VOC	018 OU 1	SOUTHWEST DIVISION SW01011004	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000268	SW7830	03-10-2000	OHM	RPT	01-14-2000	W. SEDLAK	NAVAFAC - SOUTHWEST DIVISION	N68711-93-D-1459	DO 65	L. HORNECKER	FINAL GROUNDWATER ELEVATION DATA THROUGH DECEMBER 31, 1999, REMOVAL AND REMEDIAL ACTIONS AT IRP SITES.	ADMIN RECORD INFO REPOSITORY	DATA GW REMEDIAL ACTIO REMOVAL	024	CHOICE MICROGRAPHICS SW01011004
M60050 / 000296	NONE	04-04-2000	COUNTY OF ORANGE, SANTA ANA CA	LTR	01-19-2000	M. LAPIN	NAVAFAC - SOUTHWEST DIVISION	NONE	NONE	D. GOULD	COMMENTS ON THE DECEMBER 1999 DRAFT BASE REALIGNMENT AND CLOSURE BUSINESS PLAN (WITH ENCLOSURE) (REFERENCE AR #233 - DRAFT BRAC BUSINESS PLAN; AR #311 FINAL BRAC BUSINESS PLAN; AR #313 RESPONSE TO COMMENTS ON DRAFT BRAC BUSINESS PLAN)	ADMIN RECORD	BCP BCT BRAC COMMENTS	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 023 024 025	SOUTHWEST DIVISION SW01011004

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002731	NONE	06-04-2002	DTSC - CYPRESS	LTR	01-19-2000	T. CHESNEY			NAVFAC - SOUTHWEST DIVISION	0006	NONE	D. GOULD	TRANSMITTAL OF COMMENTS BY DTSC-GEOLOGICAL SERVICES UNIT ON THE TECHNICAL MEMORANDUM FOR GROUNDWATER MODELING OF ALTERNATIVE 8A (PROPOSED PREFERRED SCENARIO), DATED 10/21/99 WHICH WERE NOT INCLUDED WITH COMMENTS OF 11 JANUARY 2000 (SEE AR #281- COMMENTS)	ADMIN RECORD BASE	COMMENTS GW TCE TECH MEMO	018 OU 1	SOUTHWEST DIVISION
M60050 / 000321	NONE	04-10-2000	DTSC, CYPRESS, CA	LTR	01-24-2000	T. CHESNEY			NAVFAC - SOUTHWEST DIVISION	0004	NONE	D. GOULD	REVIEW OF THE DRAFT BASE REALIGNMENT AND CLOSURE (BRAC) BUSINESS PLAN DATED DECEMBER 1999	ADMIN RECORD	BUSINESS PLAN COMMENTS OU PCB ROD	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 023 024 025 OU 2A OU 2B OU 3	SOUTHWEST DIVISION SW01013101

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location
Contr./Guid. No.	CTO No.	Recipient Affil.	Recipient	Approx. # Pages	EPA Cat. #	Subject				Box No.
M60050 / 000286	04-03-2000	DTSC, CYPRESS, CA	T. CHESNEY	NONE	01-27-2000	NAVAFAC - SOUTHWEST DIVISION	ADMIN RECORD	COMMENTS REMEDICATION SVE TCE	024 OU 2A	SOUTHWEST DIVISION SW01011004
			D. GOULD	0003		COMMENTS ON TWO (2) PROGRESS REPORTS (NOVEMBER & DECEMBER) VADOSE ZONE REMEDIATION VOLATILE ORGANIC COMPOUND (VOC) SOURCE AREA (SEE AR #291 & #491 - RESPONSE TO COMMENTS)				
M60050 / 000322	04-10-2000	NAVAFAC - SOUTHWEST DIVISION	D. GOULD	NONE	01-28-2000	NAVAFAC - SOUTHWEST DIVISION	ADMIN RECORD	FFA OU	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01013101
			VARIOUS AGENCIES	0020		REQUEST FOR AN EXTENSION TO THE FEDERAL FACILITY AGREEMENT SCHEDULE (WITH ENCLOSURE) (RESPONSE TO FFA FROM DTSC CAN BE REFERENCED AT REF. #418 & RESPONSE FROM EPA AT #285)				
M60050 / 000279	03-20-2000	DTSC, CYPRESS, CA	T. CHESNEY	NONE	02-01-2000	NAVAFAC - SOUTHWEST DIVISION	ADMIN RECORD	COMMENTS GW REMEDICATION TCE	024	SOUTHWEST DIVISION SW01011004
			D. GOULD	0003		COMMENTS ON THE IMPLEMENTATION STRATEGY, DEMONSTRATION OF TCE OXIDATION USING POTASSIUM PERMANGANATE DATED DECEMBER 1999. (REPORT & LETTER CAN BE REFERENCED AT REF. #270 & #272)				
M60050 / 000285	04-03-2000	U.S EPA, SAN FRANCISCO, CA	G. KISTNER	NONE	02-02-2000	NAVAFAC - SOUTHWEST DIVISION	ADMIN RECORD INFO REPOSITORY	FFA	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01011004
			D. GOULD	0002		RESPONSE TO LETTER DATED 1/28/00, DEPARTMENT OF NAVY (DON) FEDERAL FACILITY AGREEMENT (FAA) SCHEDULE EXTENSION REQUEST (REFERENCE ORIGINAL LETTER AT AR #322 AND RESPONSE FROM DTSC AT AR #418)				
M60050 / 000416	04-19-2000	DTSC, CYPRESS, CA	T. CHESNEY	NONE	02-03-2000	NAVAFAC - SOUTHWEST DIVISION	ADMIN RECORD	COMMENTS SVE VOC	024 OU 2A	SOUTHWEST DIVISION
			D. GOULD	0001		COMMENTS ON THE JANUARY PROGRESS REPORT, VADOSE ZONE REMEDIATION VOLATILE ORGANIC COMPOUND (VOC) SOURCE AREA				

UIC No. / Rec. No.	Doc. Control No.	Pr. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000418	NONE	04-19-2000	DTSC, CYPRESS, CA	LTR	02-07-2000	J. SCANDURA			NAVFAC - SOUTHWEST DIVISION	0002	NONE	D. GOULD	RESPONSE TO JANUARY 28, 2000 FEDERAL FACILITY AGREEMENT (FFA) SCHEDULE EXTENSION REQUEST (NAVY EXTENSION REQUEST CAN BE REFERENCED AT REF. #322 & RESPONSE FROM EPA AT #285)	ADMIN RECORD	FFA PP ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01011005
M60050 / 000313	NONE	04-07-2000	NAVFAC - SOUTHWEST DIVISION	LTR	02-18-2000	D. GOULD			CRWQCB - RIVERSIDE	0011	NONE	P. HANNON	RESPONSES TO COMMENTS ON THE DRAFT BASE REALIGNMENT AND CLOSURE (BRAC) PLAN OF DECEMBER 1999 (REFERENCE AR #233 - 12/99 DRAFT BRAC BUSINESS PLAN; AR #296 - COMMENTS ON 12/99 DRAFT BRAC BUSINESS PLAN; & AR #311 - FINAL BRAC BUSINESS PLAN)	ADMIN RECORD	BCP BRAC FS IRP LOC PCB ROD	002 003 005 017 025 OU 2A OU 2B	SOUTHWEST DIVISION SW01013101

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000311	SW8053	04-06-2000	OHM	REMEDATION	03-01-2000	NAVFAC - SOUTHWEST DIVISION	N68711-93-D-1459	DO 65		0190			BASE REALIGNMENT AND CLOSURE (BRAC) BUSINESS PLAN (REFERENCE AR #233 - DRAFT BRAC BUSINESS PLAN; AR #296 - COMMENTS ON DRAFT BRAC BUSINESS PLAN; AR #313 - RESPONSE TO COMMENTS ON DRAFT BRAC BUSINESS PLAN)	ADMIN RECORD	BRAC CLOSURE DISPOSAL FOSL HRA PCB PCE RCRA ROD SVE TCE UST VOC	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 024 025 BLDG. 656 BLDG. 791 BLDG. 83 BLDG. 839 BLDG. 873 OU 1 OU 2 OU 2A OU 2B OU 2C	SOUTHWEST DIVISION SW01013101

UIC No. / Rec. No.	Doc. Control No.	Prd. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000331	CTO-0178/0107	04-12-2000	BECHTEL NATIONAL INC.	RPT	03-07-2000	J. SCHOLFIELD	N68711-92-D-4670	00178	NAVFAC - SOUTHWEST DIVISION	0380		R. SELBY	FINAL PHASE II REMEDIAL INVESTIGATION REPORT ATTACHMENTS O & P (VOLS. II & III, WERE NOT REVISED AND ARE CONSIDERED "FINAL" AS OF 3/7/00, SEE AR #143 - DRAFT RI REPORT; INCLUDES TRANSMIT LETTERS TO DTSC, CRWQCB, & EPA) - SEE AR #667 FOR COMMENTS	ADMIN RECORD INFO REPOSITORY	AOC BCT DDD DDE DDT DQO FS IRP PAH PCB PRG RCRA RFA RI SOW SVOC SWMU TPH TRPH VOC	007 014 024 025 BLDG. 295 BLDG. 296 BLDG. 297 OU 38	SOUTHWEST DIVISION SW01011005
M60050 / 000291	NONE	04-03-2000	NAVFAC - SOUTHWEST DIVISION	LTR	03-10-2000	D. GOULD	NONE		DTSC, CYPRESS, CA	0006		T. CHESNEY	RESPONSE TO 1/27/00 COMMENTS BY DTSC ADDRESSING THE NOVEMBER AND DECEMBER 1999 PROGRESS REPORTS. (WITH ENCLOSURE) (SEE AR #286 & 491 - COMMENTS & RESPONSE TO COMMENTS)	ADMIN RECORD	COMMENTS SVE TCE	024 OU 2A	SOUTHWEST DIVISION SW01011004

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Subject	Classification	Keywords	Sites	Keywords	Sites	Location Box No.	
Approx. # Pages	EPA Cat. #	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Keywords	Sites	Location Box No.	
M60050 / 000310 CTO-0200/0057 & 57-1 PLAN N68711-92-D-4670 0023	04-06-2000 04-01-2000 00200	04-06-2000 04-01-2000 00200	BECHTEL NATIONAL, INC. T. HEIRONIMUS NAVFAC - SOUTHWEST DIVISION	DRAFT PROPOSED PLAN FOR FINAL SOIL AND GROUNDWATER CLEANUP (INCLUDES TRANSMITTAL LETTERS TO US EPA, DTSC, & CRWQCB) (SEE AR #488 - COMMENTS BY DTSC)	ADMIN RECORD INFO REPOSITORY	DCE FS GW OU PCE RI ROD SOIL TCE VOC	018 024 OU 1 OU 2A			SOUTHWEST DIVISION SW01013101	
M60050 / 000427 SW8255.01 DATA N68711-93-D-1459 0050	04-20-2000 04-03-2000 DO 65	04-20-2000 04-03-2000 DO 65	OHM REMEDATION W. SEDLAK NAVFAC - SOUTHWEST DIVISION L. HORNECKER	SVE WELL CONSTRUCTION AND BORING LOGS - REMOVAL AND REMEDIAL ACTIONS (REVISION 1 IS TO CORRECT THE TRANSMITTAL LETTER SENT ON 3/23/00 & TO ADD ADMINISTRATIVE RECORDS TO DISTRIBUTION)	ADMIN RECORD INFO REPOSITORY	DATA REMEDIAL ACTIO REMOVAL SVE WELLS	024			SOUTHWEST DIVISION SW01013102	
M60050 / 002732 NONE MEMO NONE 0005	06-04-2002 04-20-2000 NONE	06-04-2002 04-20-2000 NONE	DEPT. OF HEALTH SERVICES D. DEMENT DTSC - CYPRESS T. CHESNEY	COMMENTS ON THE DRAFT TECHNICAL MEMORANDUM EVALUATION OF RADIONUCLIDES IN GROUNDWATER AT FORMER LANDFILL SITES AND THE EXPLOSIVE ORDNANCE DISPOSAL (EOD) RANGE (SEE AR #304 - TECH MEMO)	ADMIN RECORD BASE	COMMENTS EOD GW LF ORDNANCE RADIATION TECH MEMO WELLS	001 002 003 005 017 OU 1 OU 2A OU 2B OU 2C			SOUTHWEST DIVISION	
M60050 / 000491 NONE LTR NONE 0004	07-24-2000 05-02-2000 NONE	07-24-2000 05-02-2000 NONE	DTSC, CYPRESS, CA T. CHESNEY NAVFAC - SOUTHWEST DIVISION D. GOULD	COMMENTS ON FEBRUARY PROGRESS REPORT & RESPONSE TO 1/27/00 DTSC LETTER REGARDING NOV. & DEC. 1999 PROGRESS REPORTS, VADOSE ZONE REMEDATION VOLATILE ORGANIC COMPOUND SOURCE AREA (SEE AR #286 & #291- PROGRESS REPORT & RESPONSE TO COMMENTS)	ADMIN RECORD INFO REPOSITORY	COMMENTS VADOSE ZONE VOC	024 OU 2A			SOUTHWEST DIVISION SW01011006	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Pages	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient													
M60050 / 000488 NONE LTR NONE 0005	07-14-2000 05-03-2000 NONE	DTSC - CYPRESS, CA. T. CHESNEY NAVFAC - SOUTHWEST DIVISION D. GOULD	COMMENTS BY DTSC ON DRAFT PROPOSED PLAN FOR FINAL SOIL AND GROUNDWATER CLEANUP (SEE AR #310 - DRAFT PROPOSED PLAN)	ADMIN RECORD INFO REPOSITORY	COMMENTS GW RAB ROD SOIL TCE VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01011006								
M60050 / 000492 SWDIV SER 06CC.DG/356 LTR NONE 0012	07-24-2000 05-15-2000 NONE	NAVFAC - SOUTHWEST DIVISION D. GOULD OCWD, FOUNTAIN VALLEY, CA S. CONKLIN	DEPT. OF THE NAVY (DON) REQUIREMENTS TO GET ACCESS TO CONDUCT ROUTINE SAMPLING AT SIX (6) OF THE 10 ORANGE COUNTY WATER DISTRICT (OCWD) MONITORING WELLS IN LATE JUNE OR JULY 2000 AS PART OF THE BASEWIDE GROUNDWATER SAMPLING ACTIVITIES (WITH ENCLOSURE)	ADMIN RECORD	GW MONITORING WELLS	018 OU 1	SOUTHWEST DIVISION SW01011006								
M60050 / 000822 CTO-0200/0182 MM N68711-92-D-4670 0025	01-10-2001 05-22-2000 00200	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	FINAL MEETING MINUTES FROM THE BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM MEETING INCLUDES: VARIOUS ATTACHMENTS	ADMIN RECORD BASE	BCT BRAC COMMENTS DQO EOD FS GW LF MTG MINS PCE RAB TCE TECH MEMO VOC WATER	001 002 018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01013104								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000654 GS-10F-0227J RPT N68711-00-F-0102 0500	02-15-2001 05-24-2000 NONE	CDM FEDERAL PROGRAMS P. BERTUCCI NAVFAC - SOUTHWEST DIVISION	FINAL GROUNDWATER MONITORING DATA SUMMARY REPORT, OCTOBER-NOVEMBER 1998, ROUND 8 SAMPLING (SEE AR #655 - EPA COMMENTS & AR #758 - DTSC COMMENTS) - PORTION OF MAILING LIST IS CONFIDENTIAL	ADMIN RECORD BASE CONFIDENTIAL	DATA DCA DCE DQO GW MONITORING MTBE MW PCE PERCHLORATE QA QC RI TCA TCE TOC VOC WELLS	OU 1	SOUTHWEST DIVISION SW01053001							
M60050 / 002733 NONE LTR NONE 0003	06-04-2002 06-02-2000 NONE	DTSC - CYPRESS T. CHESNEY MCAS EL TORO D. GOULD	APPROVAL OF AND COMMENTS ON THE PROPOSAL TO INSTALL FOUR NEW GROUNDWATER MONITORING WELLS AT THE VOC SOURCE AREA	ADMIN RECORD BASE	COMMENTS GW MW VOC WELLS	024 OU 2A	SOUTHWEST DIVISION							
M60050 / 000541 NONE LTR NONE 0003	10-04-2000 06-07-2000 NONE	CRWQCB - RIVERSIDE P. HANNON NAVFAC - SOUTHWEST DIVISION D. GOULD	REVIEW OF SITE ASSESSMENT REPORT, UNDERGROUND STORAGE TANK SITE 529; NON-CONCURRENCE WITH RECOMMENDATION FOR CLOSURE	ADMIN RECORD INFO REPOSITORY	CLOSURE COMMENTS GW SOIL UST	024 UST 529	SOUTHWEST DIVISION SW01013103							
M60050 / 000525 NONE XMTL NONE 0002	09-06-2000 06-12-2000 NONE	NAVFAC - SOUTHWEST DIVISION L. HORNECKER VARIOUS BCT MEMBERS	PROPOSED WELL CONSTRUCTION PROCEDURES FOR REPLACEMENT MONITORING WELLS	ADMIN RECORD	GW MW UST WATER WELLS	003 005 012 024	SOUTHWEST DIVISION SW01013102							

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000711	03-05-2001	CDM FEDERAL	PROGRAMS	GROUNDWATER MONITORING DATA	ADMIN RECORD	DATA							002	SOUTHWEST
GS-10F-0227J	06-30-2000	CORP.		SUMMARY REPORT - 1999 MONITORING	BASE	DCA							003	DIVISION
RPT	NONE	D. BJOSTAD		ROUNDS 9, 10, & 11 (SEE AR #655 - EPA		DCE							005	SW01053002
N68711-00-F-0102		NAVFAC -		COMMENTS, #656 - CRWQCB COMMENTS,		DQO							018	
0600		SOUTHWEST		& #758 - DTSC COMMENTS)		GW							024	
		DIVISION				MONITORING								
						MTBE								
						MW								
						PCE								
						PERCHLORATE								
						QA								
						QC								
						RI								
						TCA								
						TCE								
						TOC								
						VOC								
						WATER								
						WELLS								
M60050 / 002734	06-04-2002	DTSC - CYPRESS		COMMENTS ON THE PERMANGANATE	ADMIN RECORD	DATA							024	SOUTHWEST
NONE	07-06-2000	T. CHESNEY		DEMONSTRATION PROJECT REVISED	BASE	METALS							OU 2A	DIVISION
LTR	NONE	MCAS EL TORO		SUMMARY TABLE AND BENCH-SCALE		PERMANGANATE								
NONE		D. GOULD		TEST RESULTS FOR THE VOC SOURCE		SOIL								
0003				AREA, DATED 24 APRIL 2000										

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	EPA Cat. #	Recipient	Approx. # Pages								
M60050 / 000544	10-04-2000	NAVAFAC - SOUTHWEST DIVISION	LETTER TO VARIOUS REGULATORS SUMMARIZING THE PROPOSED VERIFICATION SAMPLING STRATEGY FOR THE VADOSE ZONE REMEDIATION (SEE AR #549 - LETTER FROM CRWQCB)	ADMIN RECORD	CLOSURE	024	SOUTHWEST DIVISION					
SWDIV SER 08CC.DG/577	07-26-2000	D. GOULD CRWQCB, DTSC, & US EPA REGULATORS		INFO REPOSITORY	GW							
LTR NONE 0015	NONE				PCE					REMEDIAL ACTIO		
					ROD					SOIL		
					SVE					TCE		
					VADOSE					VOC		
					WELLS							
M60050 / 000590	12-05-2000	BECHTEL NATIONAL, INC.	FINAL MEETING MINUTES OF THE 7/26/00 BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM MEETING (INCLUDES VARIOUS HANDOUTS)	ADMIN RECORD	BCP	001	SOUTHWEST DIVISION					
CTO-0200/156-1	07-26-2000			BASE	BRAC	003						
MM N68711-92-D-4670	00200	NAVAFAC - SOUTHWEST DIVISION			FFA	005						
0045					FOSL	007						
					GW	014						
					LF	016						
					METALS	018						
					MTBE	024						
					MTG MINS	OU 1						
					MW	OU 2						
					ORDNANCE							
					PCB							
					PESTICIDES							
					SEDIMENTS							
					SOIL							
					SVOC							
					TCE							
					UXO							
					VOC							
					WELLS							

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000500 NONE LTR NONE 0003	08-07-2000 07-28-2000 NONE	DTSC - CYPRESS J. SCANDURA NAVFAC - SOUTHWEST DIVISION D. GOULD	DTSC RESPONSE TO NAVY'S REQUEST FOR A THREE WEEK EXTENSION TO THE DRAFT FINAL PROPOSED PLAN AND DRAFT RECORD OF DECISION	ADMIN RECORD BASE INFO REPOSITORY	FFA IRP OU ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01013102							
M60050 / 000518 CTO-0200-0104 PLAN N68711-92-D-4670 0032	08-14-2000 08-01-2000 00200	BECHTEL NATIONAL INC.  NAVFAC - SOUTHWEST DIVISION	PRELIMINARY DRAFT FINAL PROPOSED PLAN FOR THE REGIONAL GROUNDWATER PLUME AND THE VOC SOURCE AREA (SEE AR #645 - EPA COMMENTS, #760 - LRA COMMENTS, & #2736 - DTSC COMMENTS)	ADMIN RECORD INFO REPOSITORY	BCT BRAC FFA FS GW MW OU PCE PUBNOT RA RI ROD SOIL TCE VOC WATER WELLS	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01013102							
M60050 / 002735 NONE LTR NONE 0002	06-04-2002 08-01-2000 NONE	US EPA - SAN FRANCISCO G. KISTNER MCAS EL TORO D. GOULD	RESPONSE TO REQUEST FOR THREE WEEK EXTENSION TO SUBMIT A PRELIMINARY DRAFT FINAL PROPOSED PLAN AND A DRAFT RECORD OF DECISION FOR OU 1 & 2A - EPA GRANTS REQUEST	ADMIN RECORD BASE	FFA GW PROPOSED PLAN ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION							

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000517	08-14-2000	FOSTER	DRAFT PROJECT WORK PLAN - PRE-	ADMIN RECORD	AOC	001	SOUTHWEST										
FWSD-RAC-00-0743	08-04-2000	WHEELER	DESIGN ACTIVITIES AND DEBRIS	INFO	ARSENIC	003	DIVISION										
PLAN	00022	ENVIRONMENTAL	DISPOSAL, REVISION 1 {SEE AR #552 -	REPOSITORY	BCT	005	SW01013102										
N68711-98-D-5713		H.	RESPONSE TO REGULATOR COMMENTS		BRAC	024											
0170		HAMPARSUMIAN	BY FOSTER WHEELER; #658 FOR DHS		EM	BLDG. 296											
		NAVFAC -	COMMENTS; #649 FOR CRWQCB		EOD												
		SOUTHWEST	RESPONSE TO COMMENTS; #1013 - CIWMB		FFA												
		DIVISION	COMMENTS}		GW												
					HDPE												
					HERBICIDE												
					IAS												
					LF												
					METALS												
					ORDNANCE												
					PESTICIDES												
					PVC												
					QA												
					RCRA												
					RI												
					SB												
					SOIL												
					SSHPP												
					SVE												
					SVOC												
					SWAT												
					TCA												
					TCE												
					TPH												
					TRPH												
					UXO												
					VOC												
					WATER												
					WELLS												
					WMP												
					WORK PLAN												

UIC No. / Rec. No.	Doc. Control No.	Prs. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	EPA Cat. #	Recipient	Approx. # Pages								
M60050 / 000523	09-06-2000	08-14-2000	DTSC - CYPRESS, CA.	NONE	08-14-2000	T. CHESNEY	DTSC REVIEW OF AND CONCURRENCE WITH VERIFICATION SAMPLING STRATEGY FOR VADOSE ZONE REMEDIATION	ADMIN RECORD INFO REPOSITORY	GW VADOSE ZONE VOC	024		SOUTHWEST DIVISION SW01013102
LTR		NONE	NAVFAC - SOUTHWEST DIVISION			D. GOULD						
NONE				0003								
M60050 / 000524	09-06-2000	08-14-2000	CRWQCB - RIVERSIDE, CA.	NONE	08-14-2000	J. BRODERICK	REVIEW OF FINAL GROUNDWATER MONITORING REPORT, OCTOBER-NOVEMBER 1998, ROUND 8 (SEE AR #654 - MONITORING REPORT)	ADMIN RECORD	GW MONITORING VOC WATER	024	OU 2A	SOUTHWEST DIVISION SW01013102
LTR		NONE	NAVFAC - SOUTHWEST DIVISION			D. GOULD						
NONE				0001								
M60050 / 002736	06-04-2002	08-21-2000	DTSC - CYPRESS	NONE	08-21-2000	T. CHESNEY	COMMENTS ON THE PRELIMINARY DRAFT FINAL PROPOSED PLAN FOR THE REGIONAL GROUNDWATER PLUME AND THE VOC SOURCE AREA (SEE AR #518 - PLAN)	ADMIN RECORD BASE	COMMENTS GW PROPOSED PLAN TCE VOC	018 024	OU 1 OU 2A	SOUTHWEST DIVISION
LTR		NONE	MCAS EL TORO			D. GOULD						
NONE				0003								
M60050 / 000645	02-15-2001	08-22-2000	CRWQCB SANTA ANA REGION	NONE	08-22-2000	J. BRODERICK	EPA HAS COMPLETED REVIEW OF PRELIMINARY DRAFT FINAL PROPOSED PLAN AND HAS NO SIGNIFICANT COMMENTS (SEE AR #518 - PROPOSED PLAN)	ADMIN RECORD BASE	COMMENTS PROPOSED PLAN	018 024	OU 1 OU 2A	SOUTHWEST DIVISION SW01053001
LTR		NONE	MCAS EL TORO			D. GOULD						
NONE				0001								
M60050 / 000547	10-04-2000	08-30-2000	DTSC - CYPRESS, CA.	NONE	08-30-2000	T. CHESNEY	DTSC LETTER STATING THAT COMMENTS ON THE PROPOSED WELL CONSTRUCTION PROCEDURES FOR REPLACEMENT MONITORING WELLS HAVE BEEN ADEQUATELY ADDRESSED AND THEY AGREE WITH THE CONSTRUCTION OF THE 15 NEW WELLS IDENTIFIED IN PREVIOUS TRANSMITTALS	ADMIN RECORD INFO REPOSITORY	COMMENTS GW MONITORING MW VOC WELLS	003 005 024	OU 1 OU 2C	SOUTHWEST DIVISION SW01013103
LTR		NONE	NAVFAC - SOUTHWEST DIVISION			D. GOULD						
NONE				0004								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000548	NONE	10-04-2000	DTSC - CYPRESS, CA.	LTR	08-30-2000	T. CHESNEY			DTSC AGREES WITH PROPOSAL TO REPLACE TEN GROUNDWATER MONITORING WELLS, IN ACCORDANCE WITH TRANSMITTAL OF 5/19/00	0004	NONE	NAVFAC - SOUTHWEST DIVISION D. GOULD		ADMIN RECORD INFO REPOSITORY	GW LF MW OU VOC WATER WELLS	003 005 024 OU 1 OU 2C	SOUTHWEST DIVISION SW01013103
M60050 / 002737	NONE	06-04-2002	LOCAL REDEVELOPMENT AUTHORITY	LTR	08-31-2000	R. RICHARDSON			COMMENTS ON THE DRAFT RADIOLOGICAL SURVEY PLAN (SEE AR #551 - PLAN)	0014	NONE	MCAS EL TORO D. GOULD		ADMIN RECORD BASE	BACKGROUND COMMENTS EOD HRA LF RADIATION SOIL	001 002 003 005 017 BLDG. 296 BLDG. 297 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION
M60050 / 002417	SWDIV SER 08CC.DG/595	06-01-2001	NAVFAC - SOUTHWEST DIVISION	LTR	09-06-2000	D. GOULD			RESPONSE TO COMMENTS ON THE FINAL WORK PLAN MPE PILOT STUDY FOR THE CRASH CREW PIT NO. 2 (SEE AR #759 - CRWQCB COMMENTS)	0003	NONE	CRWQCB - RIVERSIDE J. BRODERICK		ADMIN RECORD BASE	BCT COMMENTS GW MW RESPONSE TCE TPH VOC WELLS WORK PLAN	016 024 OU 3	CHOICE MICROGRAPHICS SW01080901

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Box No.
M60050 / 002738	06-04-2002	06-04-2002	ORANGE COUNTY WATER DISTRICT	NONE	09-08-2000	R. HERNDON	REQUEST THAT DEPARTMENT OF NAVY PROVIDE ACCESS TO AND NECESSARY LABOR/EQUIPMENT TO PURGE AND SAMPLE MONITORING WELLS FOR RADIONUCLIDE ANALYSIS BY LAWRENCE LIVERMORE NATIONAL LABORATORY	ADMIN RECORD BASE	DATA MW RADIATION WELLS	018 024 OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION
LTR	NONE	NONE	NAVAC - SOUTHWEST DIVISION	0002		D. GOULD					
M60050 / 000539	10-04-2000	10-04-2000	CRWQCB - RIVERSIDE	NONE	09-11-2000	J. BRODERICK	COMMENTS ON SUMMARY REPORT, UNDERGROUND STORAGE TANK SITE 655B, NON-CONCURRENCE WITH RECOMMENDATION FOR CLOSURE	ADMIN RECORD INFO REPOSITORY	CLOSURE COMMENTS SOIL TRPH UST	024 UST 655B	SOUTHWEST DIVISION SW01013103
LTR	NONE	NONE	NAVAC - SOUTHWEST DIVISION	0001		D. GOULD					
M60050 / 000549	10-04-2000	10-04-2000	CRWQCB - RIVERSIDE, CA.	NONE	09-11-2000	J. BRODERICK	REGIONAL WATER BOARD HAS REVIEWED AND HAS NO SIGNIFICANT COMMENTS ON THE PROPOSED VERIFICATION SAMPLING FOR VADOSE ZONE REMEDIATION (SEE AR #544 - ORIGINAL LETTER)	ADMIN RECORD INFO REPOSITORY	COMMENTS REMEDIAL ACTIO VADOSE	024	SOUTHWEST DIVISION SW01013103
LTR	NONE	NONE	NAVAC - SOUTHWEST DIVISION	0002		D. GOULD					

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000760	NONE	03-26-2001	LOCAL REDEVELOPMENT AUTHORITY	LTR	09-11-2000	R. RICHARDSON			MCAS EL TORO	0006	NONE	D. GOULD	COMMENTS ON THE PRELIMINARY DRAFT FINAL PROPOSED PLAN FOR FINAL SOIL CLEANUP AND JOINT TREATMENT FACILITY FOR GROUNDWATER (SEE AR #518 - PROPOSED PLAN)	ADMIN RECORD BASE INFO REPOSITORY	AST CLOSURE COMMENTS FUEL GW LUST MONITORING MW REMEDIAL ACTIO RI ROD SOIL TCE UST VOC WELLS	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01053002
M60050 / 000656	NONE	02-15-2001	CRWQCB - SANTA ANA REGION	LTR	09-18-2000	J. BRODERICK			MCAS EL TORO	0002	NONE	D. GOULD	CRWQCB COMMENTS ON THE GROUNDWATER MONITORING DATA SUMMARY REPORT, 1999 MONITORING ROUNDS 9, 10, & 11 (SEE AR #711 - GROUNDWATER REPORT)	ADMIN RECORD BASE	CHAR COC DATA GW MONITORING MTBE WATER	002 003 005 017 018 024	SOUTHWEST DIVISION SW01053001

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000589	12-05-2000	BECHTEL								FINAL MEETING MINUTES OF THE 9/27/00	ADMIN RECORD	ASBESTOS	001	SOUTHWEST
CTO-0200/155-1	09-27-2000	NATIONAL, INC.								BASE REALIGNMENT AND CLOSURE	BASE	BCP	003	DIVISION
MM	00200									(BRAC) CLEANUP TEAM MEETING		BRAC	005	SW01013103
N68711-92-D-4670		NAVFAC -								(INCLUDES VARIOUS HANDOUTS)		COMMENTS	007	
0045		SOUTHWEST										DCE	014	
		DIVISION										FOST	016	
												FS	017	
												GW	018	
												METALS	024	
												MONITORING	BLDG. 360	
												MTG MINS	OU 1	
												MW	OU 2	
												PAH		
												PCE		
												RAB		
												RESPONSE		
												RI		
												ROD		
												SOIL		
												SOLVENTS		
												SVOC		
												TCE		
												VOC		
												WELLS		
M60050 / 000564	11-02-2000	CRWQCB, SANTA								CLOSURE OF UNDERGROUND STORAGE	ADMIN RECORD	NFA	024	SOUTHWEST
NONE	10-19-2000	ANA REGION								TANK (UST) CASE, FORMER	BASE	SITE	UST 335	DIVISION
LTR	NONE	G. THIBEAULT								UNDERGROUND STORAGE TANK SITE 335	INFO	UST		SW01013103
NONE		NAVFAC -								(CASE NO. 083003780T)	REPOSITORY			
0005		SOUTHWEST												
		DIVISION												
		D. GOULD												



UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000586	11-27-2000	BECHTEL								DRAFT RECORD OF DECISION FOR THE	ADMIN RECORD	AOC	007	SOUTHWEST
CTO-0164/0197	11-01-2000	NATIONAL, INC.								TANK DROP DRAINAGE AREA NO. 2 AND	BASE	ARAR	014	DIVISION
MISC	00164									THE BATTERY ACID DISPOSAL AREA (SEE		ARSENIC	016	SW01013103
N68711-92-D-4670		NAVFAC -								AR #692 - COMMENTS BY DTSC, AR #694 -		COPC	018	
0200		SOUTHWEST								COMMENTS BY LRA, AR #1305 -		DDD	024	
		DIVISION								COMMENTS BY CRWQCB, & #1478 -		DDE	025	
										COMPILED RESPONSES)		DDT	BLDG. 245	
												DISPOSAL	OU 3B	
												DQO		
												FFA		
												FS		
												GW		
												HERBICIDE		
												IAS		
												LF		
												LUFT		
												METALS		
												MONITORING		
												MW		
												NFA		
												PAH		
												PCB		
												PCE		
												PESTICIDES		
												PUBNOT		
												RAB		
												ROD		
												SB		
												SOIL		
												SVE		
												SVOC		
												SWMU		
												TCE		
												TPH		
												TRPH		

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
															VOC WELLS		
M60050 / 000699	NONE	02-22-2001	DTSC - CYPRESS	LTR	11-21-2000	T. CHESNEY			MCAS EL TORO	0003		D. GOULD	ADDITIONAL COMMENTS ON THE PERMANGANATE DEMONSTRATION PROJECT, REVISED SUMMARY TABLE AND BENCH-SCALE TEST RESULTS (SEE AR #270 - REPORT & AR #279 - ORIGINAL COMMENTS)	ADMIN RECORD BASE INFO REPOSITORY	CANCER COMMENTS GW SOIL WATER	024	SOUTHWEST DIVISION SW01053001
M60050 / 000621	CTO-0200/0183	01-10-2001	BECHTEL NATIONAL, INC.	MM	11-29-2000				NAVFAC - SOUTHWEST DIVISION	0040			FINAL MEETING MINUTES FROM THE BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM MEETING INCLUDES: AGENDA, OVERHEAD PROJECTIONS, PHOTOGRAPHS, AND VARIOUS ATTACHMENTS	ADMIN RECORD BASE	ASBESTOS BCP BRAC CANCER DATA EBS GW MONITORING MTG MINS NFA ORDNANCE PCB RAB REMOVAL ROD SOLVENTS TANK UXO VOC WELLS	001 003 008 011 012 016 018 024	SOUTHWEST DIVISION SW01013104 ANOMALY AF BLDG. 307

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000836	03-26-2001	EARTH TECH, INC								DRAFT WORK PLAN, PHASE II EVALUATION OF RADIONUCLIDES IN GROUNDWATER AT FORMER LANDFILL SITES AND THE EXPLOSIVE ORDNANCE DISPOSAL (EOD) RANGE (SEE AR #700 & #702 - COMMENTS BY DTSC AND DTSC - ENVIRON. MGMT BRANCH & AR #1266 - COMMENTS BY CRWQCB)	ADMIN RECORD BASE	BCT COPC DQO EOD GW LF NCP NPL ORDNANCE RAB RADIONUCLIDES RI SAP SARA TCE WELLS WORK PLAN	001 002 003 005 017 024	SOUTHWEST DIVISION SW01053002
NONE	12-01-2000	C. WANYOIKE												
PLAN	00072	NAVFAC - SOUTHWEST DIVISION												
N62742-94-D-0048 0040														
M60050 / 001110	03-29-2001	DTSC - HERD - CYPRESS								REVIEW OF THE RESPONSE TO COMMENTS ON THE DRAFT PROJECT WORK PLAN - PRE-DESIGN ACTIVITIES AND DEBRIS DISPOSAL, REVISION 1 (SEE AR #517 - DOCUMENT & #552- RESPONSE TO COMMENTS)	ADMIN RECORD BASE	AIR COMMENTS DISPOSAL EOD LF OHS RESPONSE SOIL SOLVENTS SVE VOC WORK PLAN	001 003 005 024 OU 2A OU 2C OU 3	CHOICE MICROGRAPHICS SW01061401
NONE	12-01-2000	T. CHESNEY & J. KIM												
LTR	NONE	MCAS EL TORO D. GOULD												
NONE														
0008														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contrl/Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Subject	Classification	Keywords	Sites	Location Box No.	
M60050 / 000606 SWDIV SER 06CC.DG/1006 LTR NONE 0003	12-27-2000 12-12-2000 NONE	NAVFAC - SOUTHWEST DIVISION K. KESLER NAVFAC - SOUTHWEST DIVISION P. HERSH	RESPONSE TO CITY OF IRVINE LETTER DATED NOVEMBER 6, 2000 INQUIRING ABOUT THREE SEPARATE ISSUES; THE NAVY RESPONSE TO THE IRVINE SOLVENT STUDY, THE NAVY RESPONSE ON LAND USE CONTROLS AND THE STATUS OF THE IRVINE DESALTER PROJECT	ADMIN RECORD BASE INFO REPOSITORY	OU RESPONSE ROD VOC	024 BLDG. 307 OU 2A	SOUTHWEST DIVISION SW01013103				
M60050 / 000607 SWDIV SER 06CC.DG/1025 LTR NONE 0004	12-27-2000 12-15-2000 NONE	NAVFAC - SOUTHWEST DIVISION D. GOULD USEPA, REGION IX G. KISTNER	REQUEST FOR AN EXTENSION TO THE FEDERAL FACILITY AGREEMENT (FFA) SCHEDULE (SEE AR #688 - RESPONSE FROM CRWQCB, #1318 - RESPONSE FROM DTSC & #2740 - EPA RESPONSE)	ADMIN RECORD BASE INFO REPOSITORY	BCT FFA OU ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01013103				
M60050 / 000737 NONE RPT NONE 0120	03-22-2001 12-15-2000 NONE	NAVFAC - SOUTHWEST DIVISION L. HORNECKER NAVFAC - SOUTHWEST DIVISION	ADDENDUM TO THE SUMMARY REPORT - FORMER ABOVE-GROUND STORAGE TANK (AST) SITE 753 (SEE AR #1405 - SUMMARY REPORT, SEE AR #629 - CRWQCB CONCURRENCE & #657 - DTSC CONCURRENCE)	ADMIN RECORD	AST DDT VOC	024 AST 753	SOUTHWEST DIVISION SW01053002				
M60050 / 001318 NONE LTR NONE 0003	03-29-2001 12-15-2000 NONE	DTSC - CYPRESS J. SCANDURA MCAS EL TORO D. GOULD	DTSC RESPONSE TO REQUEST FOR A CHANGE TO THE FEDERAL FACILITY AGREEMENT (FFA) SCHEDULE WITH A 6- MONTH EXTENSION FOR SUBMITTAL OF DRAFT RECORD OF DECISION - DTSC RELUCTANTLY GRANTS REQUEST (SEE AR #607 - ORIGINAL REQUEST)	ADMIN RECORD BASE	FFA ROD WATER	018 024 OU 1 OU 2A	CHOICE MICROGRAPHICS SW01061401				
M60050 / 002739 SWDIV SER 06CC.DG/1025 LTR NONE 0004	06-04-2002 12-15-2000 NONE	NAVFAC - SOUTHWEST DIVISION D. GOULD CRWQCB - RIVERSIDE J. BRODERICK	REQUEST FOR A CHANGE TO THE FEDERAL FACILITY AGREEMENT (FFA) SCHEDULE WITH A 6-MONTH EXTENSION FOR SUBMITTAL OF DRAFT RECORD OF DECISION (SEE AR #688 - CRWQCB RESPONSE)	ADMIN RECORD BASE	BCT BRAC FFA ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION				

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000700	02-22-2001	DTSC - CYPRESS	DTSC COMMENTS ON THE DRAFT WORK PLAN, PHASE II EVALUATION OF RADIONUCLIDES IN GROUNDWATER AT FORMER LANDFILL SITES AND THE EXPLOSIVE ORDNANCE DISPOSAL (EOD) RANGE (SEE AR #836 - DRAFT WORK PLAN)	NONE	12-21-2000	T. CHESNEY			MCAS EL TORO		ADMIN RECORD	COMMENTS	001	SOUTHWEST DIVISION
LTR	NONE	D. GOULD		NONE							BASE	DISPOSAL	002	SW01053002
NONE											INFO	EOD	003	
0004											REPOSITORY	GW	005	
												LF	017	
												METALS	024	
												ORDNANCE	OU 2A	
												RADIONUCLIDES	OU 2B	
												VOC	OU 2C	
												WELLS	OU 3	
M60050 / 002740	06-04-2002	US EPA - SAN FRANCISCO	RESPONSE TO REQUEST FOR A CHANGE TO THE FEDERAL FACILITY AGREEMENT (FFA) SCHEDULE WITH A 6-MONTH EXTENSION FOR SUBMITTAL OF DRAFT RECORD OF DECISION - EPA GRANTS EXTENSION TO 1 MAY 2001 (SEE AR #607 - REQUEST)	NONE	12-21-2000	G. KISTNER			MCAS EL TORO		ADMIN RECORD	BCT	018	SOUTHWEST DIVISION
LTR	NONE	D. GOULD		NONE							BASE	BRAC	024	
NONE												FFA	OU 1	
0002												GW	OU 2A	
												ROD		
M60050 / 000702	02-22-2001	ENVIRONMENTAL MGMT. BRANCH	DHS COMMENTS ON THE DRAFT WORK PLAN, PHASE II EVALUATION OF RADIONUCLIDES IN GROUNDWATER AT FORMER LANDFILL SITES AND THE EXPLOSIVE ORDNANCE DISPOSAL (EOD) RANGE (SEE AR #836 - DRAFT WORK PLAN)	NONE	12-22-2000	D. BAILEY			DTSC - CYPRESS		ADMIN RECORD	COMMENTS	001	SOUTHWEST DIVISION
MEMO	NONE	T. CHESNEY		NONE							BASE	EOD	002	SW01053002
NONE											INFO	GW	003	
0004											REPOSITORY	LF	005	
												METALS	017	
												MONITORING	024	
												ORDNANCE	OU 2A	
												RADIONUCLIDES	OU 2B	
												WATER	OU 2C	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000679 NONE LTR NONE 0005	02-21-2001 12-27-2000 NONE	DTSC - CYPRESS T. CHESNEY & J. CHRISTOPHER MCAS EL TORO D. GOULD	COMMENTS ON THE DRAFT WORK PLAN PHASE II REMEDIAL INVESTIGATION, EXPLOSIVE ORDNANCE DISPOSAL RANGE (SEE AR #529 - DRAFT WORK PLAN)	ADMIN RECORD BASE	COMMENTS COPC DISPOSAL EOD GW ORDNANCE PERCHLORATE PRG RI RISK SOIL WATER WORK PLAN	001 OU 1	SOUTHWEST DIVISION SW01053001							
M60050 / 000626 SW9523 MISC N68711-93-D-1459 0040	01-18-2001 01-12-2001 DO 65	OHM REMEDICATION  NAVFAC - SOUTHWEST DIVISION	FINAL BORING LOGS FOR NEW CERCLA MONITORING WELLS - REMOVAL AND REMEDIAL ACTIONS AT IRP SITES (SEE AR #956 - REVISED BORING LOGS)	ADMIN RECORD BASE INFO REPOSITORY	GW MONITORING MW SOIL SOIL BORING WELLS	024	SOUTHWEST DIVISION SW01013104							

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location Box No.		
Approx. # Pages	EPA Cat. #									
M60050 / 000637	01-24-2001	CDM FEDERAL PROGRAMS CORP.	R. CLIFFORD	DRAFT GROUNDWATER MONITORING REPORT - JUNE 2000 MONITORING ROUND 12 (SEE AR #2742 - DTSC COMMENTS & #2743 - CRWQCB COMMENTS)	ADMIN RECORD	COPC	001	SOUTHWEST DIVISION		
GS-10F-0227J	01-12-2001				BASE	DCA	002			
RPT	NONE				INFO	DCE	003			SW01033001
N68711-00-F-0102		NAVFAC - SOUTHWEST DIVISION			REPOSITORY	DQO	005			
0400						FS	007			
						GW	014			
						METALS	016			
						MONITORING	017			
						MTBE	018			
						MW	024			
						PCE	OU 1			
						PERCHLORATE	OU 2A			
						QA	OU 2B			
						QAPP	OU 2C			
						QC	OU 3B			
						REMEDIAL ACTIO				
						RFA				
						RI				
						ROD				
						SAP				
						SOP				
						SVOC				
						TCA				
						TCE				
						VOC				
						WATER				
						WELLS				
M60050 / 000629	01-24-2001	CRWQCB - RIVERSIDE	J. BRODERICK	CRWQCB CONCURS WITH RECOMMENDATION FOR NO FURTHER ACTION ON ADDENDUM TO SUMMARY REPORT, FORMER ABOVE GROUND STORAGE TANK SITE 753 (SEE AR #1405 - SUMMARY REPORT, AR #657 - DTSC CONCURRENCE & #737 - ADDENDUM)	ADMIN RECORD	AST	024	SOUTHWEST DIVISION		
NONE	01-17-2001				BASE	COMMENTS	AST 753			
LTR	NONE	MCAS EL TORO	D. GOULD		INFO	NFA				SW01033001
NONE					REPOSITORY					
0002										

UIC No. / Rec. No.	Doc. Control No.	Prct. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipent												
M60050 / 000631 NONE LTR NONE 0002	01-24-2001 01-17-2001 NONE	CRWQCB - RIVERSIDE J. BRODERICK MCAS EL TORO D. GOULD	CRWQCB HAS NO SIGNIFICANT COMMENTS AND CONCURS WITH RECOMMENDATION FOR NO FURTHER ACTION ON THE WELL CLOSURE REPORT, FORMER WATER SUPPLY WELL AW-5 {SEE AR #2504 - REPORT}	ADMIN RECORD BASE INFO REPOSITORY	COMMENTS NFA WATER WELLS	024	SOUTHWEST DIVISION SW01033001							
M60050 / 000635 NONE LTR NONE 0002	01-24-2001 01-17-2001 NONE	CRWQCB - RIVERSIDE J. BRODERICK MCAS EL TORO D. GOULD	CRWQCB HAS NO SIGNIFICANT COMMENTS AND CONCURS WITH RECOMMENDATION FOR NO FURTHER ACTION ON THE SUMMARY REPORT, REPAIRS TO VEHICLE WASHRACK AT BUILDING 388 {SEE AR #717 - SUMMARY REPORT}	ADMIN RECORD BASE INFO REPOSITORY	COMMENTS NFA RFA SWMU	024 BLDG. 388 SWMU 201	SOUTHWEST DIVISION SW01033001							
M60050 / 000692 NONE LTR NONE 0004	02-22-2001 01-22-2001 NONE	DTSC - CYPRESS T. CHESNEY MCAS EL TORO D. GOULD	COMMENTS ON THE DRAFT RECORD OF DECISION FOR THE TANK DROP DRAINAGE AREA NO. 2 AND THE BATTERY ACID DISPOSAL AREA (SEE AR #586 - DRAFT ROD)	ADMIN RECORD BASE INFO REPOSITORY	COMMENTS DISPOSAL GW MONITORING ROD SOIL TANK VOC WELLS	007 014 018 024 OU 3B	SOUTHWEST DIVISION SW01053001							

UIC No. / Rec. No.	Doc. Control No.	Pr. Date	Author Affil.	Record Type	Record Date	Author	Confr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000961	03-29-2001	DTSC - CYPRESS	DTSC COMMENTS ON THE DRAFT BASE	ADMIN RECORD	AST	002	SOUTHWEST							
NONE	01-22-2001	T. CHESNEY	REALIGNMENT AND CLOSURE (BRAC)	BASE	BRAC	005	DIVISION							
LTR	NONE	MCAS EL TORO	BUSINESS PLAN, DATED DECEMBER 2000	INFO	COMMENTS	008	SW01053002							
NONE		D. GOULD	(SEE AR #233 - BUSINESS PLAN)	REPOSITORY	FFA	016								
0005					FOSL	017								
					NPL	018								
					OU	024								
					PCB	BLDG. 1789								
					ROD	BLDG. 1803								
					SVE	BLDG. 242								
						BLDG. 243								
						BLDG. 244								
						BLDG. 787								
						OU 2A								
						OU 2B								
						OU 3								
M60050 / 000641	02-14-2001	NAVFAC -	SUMMARY REPORT - FORMER	ADMIN RECORD	DDD	007	SOUTHWEST							
NONE	01-24-2001	SOUTHWEST	ELECTRONIC EQUIPMENT STORAGE AREA	BASE	DDE	024	DIVISION							
RPT	NONE	DIVISION	PCB A2 (SEE AR #2488 - COMMENTS BY	INFO	DDT	BLDG. 324	SW01053001							
NONE		L. HORNECKER	DTSC)	REPOSITORY	METALS	BLDG. 328								
0250		NAVFAC -			PCB	PCB A2								
		SOUTHWEST			PCE	SWMU 95								
		DIVISION			PESTICIDES									
					RFA									
					SOIL									
					SOIL BORING									
					SVOC									
					SWMU									
					TCE									
					TPH									
					VOC									

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000688	NONE	02-21-2001	CRWQCB - RIVERSIDE	LTR	01-24-2001	J. BRODERICK			MCAS EL TORO	0001	NONE	D. GOULD	CRWQCB CONCURS WITH PROPOSED SCHEDULE CHANGE TO THE FEDERAL FACILITY AGREEMENT (SEE AR #2739 - REQUEST)	ADMIN RECORD BASE INFO REPOSITORY	FFA ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01053001
M60050 / 000852	SWDIV SER 06CC.DG/0140 PLAN N62742-94-D-0048 0100	03-26-2001 01-29-2001	EARTH TECH, INC. C. WANYOIKE		00072	NAVFAC - SOUTHWEST DIVISION							WORK PLAN, PHASE II EVALUATION OF RADIONUCLIDES IN GROUNDWATER AT FORMER LANDFILL SITES AND THE EXPLOSIVE ORDNANCE DISPOSAL (EOD) RANGE (INCLUDES TRANSMITTAL LETTER FROM D. GOULD)	ADMIN RECORD BASE INFO REPOSITORY	COPC DQO EOD GW LF MW ORDNANCE QA QC RAB RADIONUCLIDES SAP SARA TCE WELLS WORK PLAN	001 002 003 005 017 024	SOUTHWEST DIVISION SW01053002

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000978	CTO-0200/0208	03-29-2001	BECHTEL NATIONAL, INC.	MM	01-31-2001						00200	NAVFAC - SOUTHWEST DIVISION	JANUARY 31, 2001 BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING MINUTES	ADMIN RECORD BASE	APHO BCP BCT BRAC DISPOSAL EE/CA GW MONITORING MTG MINS MW ORDNANCE RADIONUCLIDES . ROD SOIL TCE UXO WELLS WORK PLAN	001 002 003 005 007 011 014 016 017 018 024 ANOMALY AF APHO 44	SOUTHWEST DIVISION SW01053002

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000851	NONE	03-26-2001	EARTH TECH, INC	NONE	02-01-2001								COMPILED RESPONSE TO AGENCY COMMENTS ON THE DRAFT WORK PLAN, PHASE II REMEDIAL INVESTIGATION FOR THE EXPLOSIVE ORDNANCE DISPOSAL RANGE (COMMENTS BY DTSC, DTSC - GSU, DTSC - HERD, & US EPA) (SEE AR #529 - DRAFT WORK PLAN & #679 - DTSC COMMENTS)	ADMIN RECORD BASE INFO REPOSITORY	ARAR CLOSURE COMMENTS COPC EOD GW MW NCP ORDNANCE PERCHLORATE RESPONSE SOIL SVOC TPH UXO VOC WELLS WORK PLAN	001 OU 1	SOUTHWEST DIVISION SW01053002
M60050 / 000657	NONE	02-15-2001	DTSC - CYPRESS	LTR	02-09-2001	T. CHESNEY			MCAS EL TORO			D. GOULD	DTSC CONCURS WITH RECOMMENDATION FOR NO FURTHER ACTION ON SUMMARY REPORT AND ADDENDUM TO SUMMARY REPORT, FORMER ABOVE GROUND STORAGE TANK SITE 753 (SEE AR #1405 - SUMMARY REPORT, AR #629 - CRWQCB CONCURRENCE & #737 - ADDENDUM)	ADMIN RECORD	AST COMMENTS PRG SOIL	024 AST 753	SOUTHWEST DIVISION SW01053001
M60050 / 002741	SWDIV SER 06CC.DG/191	06-05-2002	NAVFAC - SOUTHWEST DIVISION	LTR	02-20-2001	D. GOULD			DTSC - CYPRESS			T. CHESNEY	NOTIFICATION OF TESTS ON WELLS EQUIPPED WITH LOW-FLOW PUMPS TO EVALUATE IF THE SAMPLES COLLECTED USING THE EXISTING PROCEDURES ARE REPRESENTATIVE OF THE ACTUAL GROUNDWATER CONDITIONS	ADMIN RECORD BASE	BCT BRAC GW MW WATER WELLS	024 OU 2A	SOUTHWEST DIVISION

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Constr./Guld. No.	CTO No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient						
M60050 / 000762	03-26-2001	03-26-2001	CRWQCB - RIVERSIDE	NONE	02-26-2001	J. BRODERICK	MCAS EL TORO	CRWQCB COMMENTS ON THE IMPLEMENTATION STRATEGY, DEMONSTRATION OF TCE OXIDATION USING POTASSIUM PERMANGANATE DATED DECEMBER 1999 (SEE AR #270 - IMPLEMENTATION STRATEGY)	ADMIN RECORD BASE INFO REPOSITORY	COMMENTS GW METALS MONITORING TCE VOC	024	SOUTHWEST DIVISION SW01053002
M60050 / 002742	06-05-2002	02-26-2001	DTSC - CYPRESS	NONE	NONE	T. CHESNEY	MCAS EL TORO	COMMENTS ON THE DRAFT GROUNDWATER MONITORING REPORT - JUNE 2000 MONITORING ROUND 12 (SEE AR #637 - MONITORING REPORT)	ADMIN RECORD BASE	COMMENTS GW MONITORING MW TCE VOC WELLS	002 003 005 017 018 024 OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION
M60050 / 002743	06-05-2002	03-15-2001	CRWQCB - RIVERSIDE	NONE	NONE	J. BRODERICK	MCAS EL TORO	COMMENTS ON THE DRAFT GROUNDWATER MONITORING REPORT - JUNE 2000 MONITORING ROUND 12 (SEE AR #637 - MONITORING REPORT)	ADMIN RECORD BASE	BACKGROUND GW LF METALS MONITORING MW VOC WELLS	002 003 005 017 024 OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Subject	Classification	Keywords	Sites	Keywords	Sites	Location Box No.	
Approx. # Pages	EPA Cat. #	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Keywords	Sites	Location Box No.	
M60050 / 001521	04-26-2001	04-26-2001	BECHTEL NATIONAL, INC.	BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING MINUTES	ADMIN RECORD	BCP	001	CHOICE			
CTO-200/0224	03-21-2001	03-21-2001	B. COLEMAN		BASE	BCT	002	MICROGRAPHICS			
MM	00200	00200	NAVFAC - SOUTHWEST DIVISION			BRAC	003	SW01061401			
N68711-92-D-4670						CLOSURE	005				
0040						EBS	011				
						EOD	016				
						GW	017				
						LF	024				
						MTG MINS		ANOMALY AF			
						OE		BLDG. 307			
						ORDNANCE		OU 3			
						REMEDIAL ACTIO					
						ROD					
						SOIL					
						SVE					
						TCE					
						UXO					
						VOC					
M60050 / 002744	06-05-2002	06-05-2002	CRWQCB - RIVERSIDE	WATER BOARD HAS NO SIGNIFICANT COMMENTS ON THE GROUNDWATER MONITORING PROGRAM ROUND 13 POINT PAPER	ADMIN RECORD	COMMENTS	OU 1	SOUTHWEST			
NONE	03-22-2001	03-22-2001	J. BRODERICK		BASE	GW	OU 2A	DIVISION			
LTR	NONE	NONE	MCAS EL TORO			MONITORING	OU 2B				
NONE			D. GOULD				OU 2C				
0001							OU 3				
M60050 / 002575	11-27-2001	11-27-2001	DTSC - CYPRESS	COMMENTS ON THE SUMMARY REPORT AND SUPPLEMENTARY TECHNICAL INFORMATION, REPAIRS TO VEHICLE WASHRACK AT BUILDING 386, SOLID WASTE MANAGEMENT UNIT (SWMU) 110 - PETROLEUM CORRECTIVE ACTION PROGRAM (SEE AR #2581 - SUMMARY REPORT)	ADMIN RECORD	COMMENTS	024	BECHTEL			
NONE	03-30-2001	03-30-2001	T. CHESNEY		BASE	NFA	BLDG. 386	NATIONAL			
LTR	NONE	NONE	NAVFAC - SOUTHWEST DIVISION		INFO	OVS	OU 2A	SW02052007			
NONE			D. GOULD		REPOSITORY	RFA	SWMU 110				
0003						SOIL					
						SOIL BORING					
						SWMU					
						VOC					

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	Recipent Affil.	Recipent	Subject	Classification	Keywords	Sites	Location Box No.		
Approx. # Pages	EPA Cat. #									
M60050 / 002416 CTO-0161/0297 RPT N68711-92-D-4670 0075	05-04-2001 04-30-2001 00161	BECHTEL NATIONAL, INC. G. P. BROOKS NAVFAC - SOUTHWEST DIVISION	DRAFT TECHNICAL MEMORANDUM EVALUATION OF OU-1 ALTERNATIVE 8A WITH RESPECT TO NATIONAL CONTINGENCY PLAN CRITERIA DATED APRIL 2001 (SEE AR #2440 - DTSC COMMENTS & #2751 - CRWQCB COMMENTS)	ADMIN RECORD INFO REPOSITORY	NCP TCE TECH MEMO VOC	18 24 OU 1 OU 2A	CHOICE MICROGRAPHICS SW01061401			
M60050 / 001525 SWDIV SER 06CC.DG/0472 LTR NONE 0011	05-10-2001 05-01-2001 NONE	NAVFAC - SOUTHWEST DIVISION D. GOULD CRWQCB, US EPA, DTSC HANNON, MOUTOUX, SCANDURA	REQUEST FOR AN EXTENSION TO THE FEDERAL FACILITY AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS FOR THE DRAFT RECORD OF DECISION (SEE AR #1920 - DTSC RESPONSE; #2149 - CRWQCB RESPONSE; #2150 - ADDITIONAL REQUEST FOR EXTENSION)	ADMIN RECORD BASE INFO REPOSITORY	BCT BRAC FFA ROD	018 024 OU 1 OU 2A	CHOICE MICROGRAPHICS SW01061401			
M60050 / 001920 NONE LTR NONE 0002	05-17-2001 05-08-2001 NONE	DTSC - CYPRESS J. SCANDURA NAVFAC - SOUTHWEST DIVISION D. GOULD	RESPONSE TO REQUEST FOR AN EXTENSION TO THE FEDERAL FACILITY AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS FOR THE DRAFT RECORD OF DECISION - DTSC GRANTS THE EXTENSION (SEE AR #1525 - ORIGINAL REQUEST)	ADMIN RECORD BASE INFO REPOSITORY	FFA RESPONSE ROD	018 024 OU 1 OU 2A	CHOICE MICROGRAPHICS SW01061401			
M60050 / 002149 NONE LTR NONE 0001	05-17-2001 05-08-2001 NONE	CRWQCB - RIVERSIDE P. HANNON NAVFAC - SOUTHWEST DIVISION D. GOULD	RESPONSE TO REQUEST FOR AN EXTENSION TO THE FEDERAL FACILITY AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS FOR THE DRAFT RECORD OF DECISION - CRWQCB APPROVES EXTENSION (SEE AR #1525 - ORIGINAL REQUEST)	ADMIN RECORD BASE INFO REPOSITORY	FFA RESPONSE ROD	018 024 OU 1 OU 2A	CHOICE MICROGRAPHICS SW01061401			
M60050 / 002150 SWDIV SER 06CC.DG/0520 LTR NONE 0007	05-18-2001 05-15-2001 NONE	NAVFAC - SOUTHWEST DIVISION D. GOULD US EPA, CRWQCB, DTSC MOUTOUX, HANNON, SCANDURA	ADDITIONAL REQUEST FOR AN EXTENSION TO THE FEDERAL FACILITY AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS FOR THE DRAFT RECORD OF DECISION (SEE AR #619 - RESPONSE TO THIS LETTER; #525 - ORIGINAL LETTER REQUESTING EXTENSION)	ADMIN RECORD BASE INFO REPOSITORY	BCT FFA ROD	018 024 OU 1 OU 2A	CHOICE MICROGRAPHICS SW01061401			

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient						
M60050 / 002151	05-24-2001	05-24-2001	EARTH TECH, INC.	NONE	05-15-2001	C. WANYOIKE		DRAFT WORK PLAN PRELIMINARY ASSESSMENT - BUILDING 307 DATED MAY 2001 (SEE AR #2539 & #2540 - DTSC COMMENTS)	ADMIN RECORD	BCP	024	CHOICE
PLAN	00068		NAVFAC - SOUTHWEST DIVISION	NONE					BASE	BCT	BLDG. 307	MICROGRAPHICS
N62742-94-D-0048				0050					INFO	BRAC	OU 2A	SW01061401
									REPOSITORY	COPC		
										DQO		
										FFA		
										FOST		
										FS		
										GW		
										H&SP		
										NCP		
										PA		
										PCE		
										PRG		
										QA		
										QAPP		
										QC		
										RI		
										ROD		
										SOIL		
										SOP		
										SOW		
										SVE		
										SWAT		
										TCE		
										VOC		
										WORK PLAN		
M60050 / 000619	06-01-2001	06-01-2001	DTSC - CYPRESS	NONE	05-18-2001	J. SCANDURA		RESPONSE TO REQUEST FOR EXTENSION TO FEDERAL FACILITY AGREEMENT FOR A DRAFT RECORD OF DECISION - DTSC	ADMIN RECORD	FFA	018	CHOICE
LTR	NONE		MCAS EL TORO	NONE		D. GOULD		GRANTS EXTENSION (SEE AR #2150 - REQUEST)	BASE	GW	024	MICROGRAPHICS
NONE				0003					INFO	ROD	OU 1	SW01080901
									REPOSITORY		OU 2A	

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr/Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002162 NONE PLAN N62742-94-D-0048 0016	05-24-2001 05-21-2001 00068	EARTH TECH, INC. R. POLL NAVFAC - SOUTHWEST DIVISION		DRAFT ADDENDUM 2 - SOIL GAS SURVEY, BLDG. 307 HEALTH AND SAFETY PLAN - VADOSE ZONE REMEDIATION VOLATILE ORGANIC COMPOUND SOURCE AREA (SEE AR #2151 - PRELIMINARY ASSESSMENT BLDG. 307) DATED MAY 2001	ADMIN RECORD BASE INFO REPOSITORY	GW H&SP PCE RI SOIL SVE VOC WORK PLAN	024 BLDG. 307 OU 2A	BECHTEL NATIONAL SW01052901						
M60050 / 002514 SW9703 RPT N68711-93-D-1459 0250	09-17-2001 05-21-2001 DO 70	OHM REMEDATION J. ERICKSON NAVFAC - SOUTHWEST DIVISION		CLOSURE REPORT - SOLID WASTE MANAGEMENT UNIT NUMBER 88 (SWMU 88) (SEE AR #2622 - DTSC COMMENTS)	ADMIN RECORD BASE	CLOSURE GW LUFT METALS PAH PCB PRG QA QC REMEDIAL ACTIO SOIL SOIL BORING SWMU TPH VOA VOC VSI WELLS	024 OU 2A SWMU 88	CHOICE MICROGRAPHICS SW02052302						

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guld. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002438	06-25-2001	BECHTEL	BASE REALIGNMENT AND CLOSURE	ADMIN RECORD	BCP	001	CHOICE										
CTO-200/0245	05-30-2001	NATIONAL, INC.	CLEANUP TEAM MEETING MINUTES	BASE	BCT	002	MICROGRAPHICS										
MM	00200		INCLUDING VARIOUS HANDOUTS AND SITE		BRAC	003	SW01080901										
N68711-92-D-4670		NAVFAC -	UPDATES		COMMENTS	005											
0045		SOUTHWEST			EBS	008											
		DIVISION			EOD	011											
					FOST	012											
					FS	016											
					GW	017											
					LF	018											
					MAG RD LANDFIL	ANOMALY AF											
					MTG MINS	BLDG. 307											
					ORDNANCE	OU 1											
					PAH	OU 2A											
					RAB	OU 2B											
					RADIONUCLIDE	OU 2C											
					RESPONSE	OU 3											
					RI												
					SOIL												
					SVE												
					TCE												
					UST												
					UXO												
					VOC												
					WORK PLAN												
M60050 / 002745	06-05-2002	DTSC - CYPRESS	REVIEW OF THE RESPONSE TO	ADMIN RECORD	COMMENTS	OU 1	SOUTHWEST										
NONE	06-04-2001	T. CHESNEY	COMMENTS ON THE DRAFT	BASE	DATA	OU 2A	DIVISION										
LTR	NONE	MCAS EL TORO	GROUNDWATER MONITORING REPORT;		GW	OU 2B											
NONE		D. GOULD	JUNE 2000 MONITORING ROUND 12 - DTSC		MONITORING	OU 2C											
0002			IS SATISFIED THAT THEIR COMMENTS		RESPONSE	OU 3											
			WILL BE ADEQUATELY ADDRESSED IF														
			RESPONSES ARE INCORPORATED INTO														
			THE FINAL (SEE AR #2742 - DTSC														
			COMMENTS)														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002440 NONE LTR NONE 0002	06-25-2001 06-05-2001 NONE	DTSC - CYPRESS T. CHESNEY NAVFAC - SOUTHWEST DIVISION D. GOULD								COMMENTS ON THE DRAFT TECHNICAL MEMORANDUM, EVALUATION OF ALTERNATIVE 8A WITH RESPECT TO NATIONAL OIL AND HAZARDOUS SUBSTANCES POLLUTION CONTINGENCY PLAN CRITERIA (SEE AR #2416 - DRAFT TECH MEMO & #2561 - RESPONSE TO COMMENTS)	ADMIN RECORD BASE INFO REPOSITORY	COMMENTS GW NCP TCE TECH MEMO VOC	018 024 OU 1 OU 2A	CHOICE MICROGRAPHICS SW01080901
M60050 / 002436 NONE RPT N62742-94-D-0048 0250	06-20-2001 06-11-2001 00068	EARTH TECH, INC. C. WANYOIKE NAVFAC - SOUTHWEST DIVISION								DRAFT SITE CLOSURE REPORT - VADOSE ZONE REMEDIATION VOLATILE ORGANIC COMPOUNDS SOURCE AREA (INCLUDES TRANSMITTAL LETTER FROM BRAC OFFICE TO VARIOUS REGULATORS) (SEE AR #2551 - DTSC COMMENTS & AR #2592 - EPA LETTER)	ADMIN RECORD BASE INFO REPOSITORY	ARAR CLOSURE DCE GW MONITORING PCE REMEDIAL ACTIO ROD SOIL SVE TCE VOC WELLS	024 OU 2A	BECHTEL NATIONAL SW01071201
M60050 / 002448 GS812380005 RPT N68711-00-F-0115 0250	07-18-2001 06-13-2001 DO112	IT CORPORATION J. ERICKSON NAVFAC - SOUTHWEST DIVISION								SITE ASSESSMENT REPORT - OIL/WATER SEPARATOR 655C SITE ASSESSMENT	ADMIN RECORD BASE	BRAC BTEX LUFT MTBE OW/WO PRG QC SITE ASSESSME SOIL SOIL BORING SWMU TPH TRPH VOC WATER	024 BLDG. 655	BECHTEL NATIONAL SW02052001

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002746 NONE LTR NONE 0001	06-05-2002 06-13-2001 NONE	US EPA - SAN FRANCISCO N. MOUTOUX MCAS EL TORO D. GOULD	REVIEW OF THE RESPONSE TO COMMENTS ON THE DRAFT GROUNDWATER MONITORING REPORT; JUNE 2000 MONITORING ROUND 12 - EPA FINDS THE RESPONSES COMPLETE AND ARE SATISFIED THAT THEIR CONCERNS HAVE BEEN ADDRESSED	ADMIN RECORD BASE	COMMENTS GW MONITORING RESPONSE	OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION							
M60050 / 002565 GS-10F-0227J RPT N68711-00-F-0102 0350	10-30-2001 06-26-2001 NONE	CDM FEDERAL PROGRAMS R. CLIFFORD NAVFAC - SOUTHWEST DIVISION	FINAL GROUNDWATER MONITORING REPORT JUNE 2000 MONITORING ROUND 12 (INCLUDES TRANSMITTAL LETTER TO REGULATORS AND RAB MEMBER WITH ONE CONFIDENTIAL ADDRESS)	ADMIN RECORD BASE CONFIDENTIAL INFO REPOSITORY	COPC DCA DCE DQO GW MONITORING MTBE NFA PCE QA QC REMEDIAL ACTIO RFA ROD SVOC TCA TCE VOC WATER	002 003 005 017 018 024 OU 1 OU 2A OU 2B OU 2C	CHOICE MICROGRAPHICS SW02052302							
M60050 / 002539 NONE LTR NONE 0005	10-15-2001 07-02-2001 NONE	DTSC - CYPRESS T. CHESNEY NAVFAC - SOUTHWEST DIVISION D. GOULD	COMMENTS ON THE DRAFT WORK PLAN, PRELIMINARY ASSESSMENT, BUILDING 307 (SEE AR #2151 - WORK PLAN)	ADMIN RECORD BASE INFO REPOSITORY	COMMENTS COPC DCE DISPOSAL PA PCE SOIL TCE VOC WATER	024 BLDG. 307 OU 2A	BECHTEL NATIONAL SW02052006							

UIC No. / Rec. No.	Dec. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002540 NONE LTR NONE 0003	10-15-2001 07-03-2001 NONE	DTSC - CYPRESS T. CHESNEY NAVFAC - SOUTHWEST DIVISION D. GOULD	ADDITIONAL COMMENTS ON THE DRAFT WORK PLAN, PRELIMINARY ASSESSMENT, BUILDING 307 (SEE AR #2151 - WORK PLAN)	ADMIN RECORD BASE INFO REPOSITORY	COMMENTS PCE SOP VOC WORK PLAN	024 BLDG. 307 OU 2A	BECHTEL NATIONAL SW02052006							
M60050 / 002445 NONE MEMO N62742-94-D-0048 0250	07-12-2001 07-05-2001 00072	EARTH TECH, INC. D. SWENSSON NAVFAC - SOUTHWEST DIVISION	DRAFT TECHNICAL MEMORANDUM PHASE II EVALUATION OF RADIONUCLIDES IN GROUNDWATER AT FORMER LANDFILL SITES AND THE EXPLOSIVE ORDNANCE DISPOSAL (EOD) RANGE (SEE AR #2550 - DTSC COMMENTS & #2748 - EPA COMMENTS)	ADMIN RECORD BASE INFO REPOSITORY	BCT BRAC COPC EOD GW LF METALS MW ORDNANCE QA QC RADIONUCLIDES SOP TCE TECH MEMO VOC WATER WELLS	001 002 003 004 005 017 024 OU 2A OU 2B OU 2C OU 3 OU 3B	BECHTEL NATIONAL SW01071201							
M60050 / 002481 NONE LTR NONE 0003	08-15-2001 07-17-2001 NONE	DTSC - CYPRESS T. COTA NAVFAC - SOUTHWEST DIVISION D. GOULD	COMMENTS ON THE CLOSURE REPORT FOR TEMPORARY ACCUMULATION AREA (TAA) 307	ADMIN RECORD BASE	CANCER CLOSURE COMMENTS DRUMS HAZ WASTE SOIL SOIL BORING TAA	024 BLDG. 307 OU 2A TAA 307	BECHTEL NATIONAL SW02052002							

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Subject	Classification	Keywords	Sites	Keywords	Sites	Location Box No.	
Approx. # Pages	EPA Cat. #	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Keywords	Sites	Location Box No.	
M60050 / 002747	06-05-2002	06-05-2002	US EPA - SAN FRANCISCO	EPA HAS NO COMMENTS ON THE DRAFT TECHNICAL MEMORANDUM	ADMIN RECORD	COMMENTS	OU 1				SOUTHWEST DIVISION
NONE	07-19-2001	07-19-2001	N. MOUTOUX	REPLACEMENT WELL INSTALLATION AND	BASE	GW	OU 2A				
LTR	NONE	NONE	MCAS EL TORO	GROUNDWATER EVALUATION (SEE AR		TECH MEMO	OU 2B				
NONE			D. GOULD	#2435 - TECH MEMO)		WELLS	OU 2C				
0001							OU 3				
M60050 / 002492	09-04-2001	09-04-2001	BECHTEL NATIONAL, INC.	BASE REALIGNMENT AND CLOSURE	ADMIN RECORD	BCT	001				BECHTEL NATIONAL
CTO-200/0274	07-25-2001	07-25-2001	B. COLEMAN	CLEANUP TEAM MEETING MINUTES	BASE	BRAC	002				SW02052003
MM	00200	00200	NAVFAC - SOUTHWEST DIVISION			COPC	008				
N68711-92-D-4670						EOD	011				
0052						FOST	012				
						GW	017				
						LF	018				
						MTG MINS	024				
						ORDNANCE	BLDG. 307				
						PAH	BLDG. 319				
						PCE	BLDG. 360				
						RI	OU 1				
						ROD	OU 2A				
						SEDIMENTS	OU 2B				
						SOIL	OU 3				
						SOLVENTS					
						SOP					
						TCE					
						UXO					
M60050 / 002480	08-15-2001	08-15-2001	NAVFAC - SOUTHWEST DIVISION	TECHNICAL MEMORANDUM - REMOVAL OF FORMER ABOVE-GROUND STORAGE TANK (AST) 315	ADMIN RECORD	AOC	007				CHOICE MICROGRAPHICS
NONE	07-30-2001	07-30-2001	L. HORNECKER		BASE	AST	024				SW02052301
MEMO	NONE	NONE	CRWQCB - RIVERSIDE		INFO REPOSITORY	BRAC	AST 315				
NONE			P. HANNON			GW	BLDG. 315				
0033						NFA	OU 2A				
						REMOVAL	OU 3				
						SOIL	UNIT 5				
						TANK					
						UST					
						VOC					

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002536	10-05-2001	10-05-2001	EARTH TECH, INC.	NONE	08-01-2001	C. WANYOIKE	FINAL WORK PLAN PRELIMINARY ASSESSMENT - BUILDING 307	ADMIN RECORD	BCT	024	BECHTEL
MISC	00068	00068	NAVFAC - SOUTHWEST DIVISION	N62742-94-D-0048				BASE	BRAC	BLDG. 307	NATIONAL
0050								INFO REPOSITORY	COPC	OU 2A	SW02052006
									DCE		
									DQO		
									FFA		
									FOST		
									FS		
									GW		
									H&SP		
									NCP		
									NPL		
									PCE		
									PRG		
									QA		
									QC		
									ROD		
									SARA		
									SOIL		
									SVE		
									SWAT		
									TCE		
									VOC		
									WORK PLAN		
M60050 / 002537	10-05-2001	10-05-2001	EARTH TECH, INC.	NONE	08-01-2001	R. POLL	FINAL ADDENDUM 2 - PRELIMINARY ASSESSMENT, BUILDING 307, HEALTH AND SAFETY PLAN; VADOSE ZONE REMEDIATION VOLATILE ORGANIC COMPOUND SOURCE AREA	ADMIN RECORD	H&SP	024	BECHTEL
PLAN	00068	00068	NAVFAC - SOUTHWEST DIVISION	N62742-94-D-0048				BASE	IRP	OU 2A	NATIONAL
0018								INFO REPOSITORY	PCE		SW02052006
									VOC		
									WORK PLAN		

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	Recipent	Subject	Approx. # Pages	EPA Cat. #						
M60050 / 002477	08-13-2001	NAVFAC - SOUTHWEST DIVISION	REQUEST FOR EXTENSION TO FEDERAL FACILITIES AGREEMENT OF MILESTONE DELIVERABLE DATE FOR DRAFT RECORD OF DECISION FOR OPERABLE UNITS 1 & 2 (SEE AR #2547 - DTSC RESPONSE & #2549 - EPA RESPONSE)	06CC.DG/0809	NONE	D. GOULD	US EPA, DTSC, & CRWQCB	ADMIN RECORD BASE INFO REPOSITORY	BCT BRAC FFA FFSRA ROD	018 024 OU 1 OU 2A	CHOICE MICROGRAPHICS SW02052301
M60050 / 002547	10-17-2001	DTSC - CYPRESS	RESPONSE TO REQUEST FOR EXTENSION TO FEDERAL FACILITIES AGREEMENT OF MILESTONE DELIVERABLE DATE FOR DRAFT RECORD OF DECISION FOR OPERABLE UNITS 1 & 2 - DTSC GRANTS REQUEST (SEE AR #2477 - ORIGINAL LETTER)	NONE	08-07-2001	J. SCANDURA	NAVFAC - SOUTHWEST DIVISION D. GOULD	ADMIN RECORD BASE INFO REPOSITORY	FFA ROD	018 024 OU 1 OU 2A	BECHTEL NATIONAL SW02052006
M60050 / 002549	10-17-2001	US EPA - SAN FRANCISCO	RESPONSE TO EXTENSION REQUEST FOR FEDERAL FACILITIES AGREEMENT FOR RECORD OF DECISION FOR OPERABLE UNITS 1 & 2 - EPA GRANTS EXTENSION (SEE AR #2477 - REQUEST)	NONE	08-09-2001	N. MOUTOUX	NAVFAC - SOUTHWEST DIVISION D. GOULD	ADMIN RECORD BASE INFO REPOSITORY	FFA ROD	018 024 OU 1 OU 2A	BECHTEL NATIONAL SW02052006
M60050 / 002551	10-17-2001	DTSC - CYPRESS	COMMENTS ON THE DRAFT SITE CLOSURE REPORT - VADOSE ZONE REMEDIATION VOLATILE ORGANIC COMPOUNDS SOURCE AREA (SEE AR #2436 - CLOSURE REPORT)	NONE	08-13-2001	T. CHESNEY	NAVFAC - SOUTHWEST DIVISION D. GOULD	ADMIN RECORD BASE INFO REPOSITORY	CLOSURE COMMENTS GW PCE SOIL SVE TCE VOC	024 OU 2A	BECHTEL NATIONAL SW02052006

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #							
M60050 / 002748	06-05-2002	08-14-2001	US EPA - SAN FRANCISCO	NONE	NONE	N. MOUTOUX	MCAS EL TORO	COMMENTS ON THE DRAFT TECHNICAL MEMORANDUM PHASE II EVALUATION OF RADIONUCLIDES IN GROUNDWATER AT FORMER LANDFILL SITES AND THE EXPLOSIVE ORDNANCE DISPOSAL (EOD) RANGE (SEE AR #2445 - TECH MEMO)	ADMIN RECORD BASE	COMMENTS DATA DRINKING WATE EOD GW ORDNANCE RADIONUCLIDES	001 002 003 005 017 OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION
M60050 / 002749	06-06-2002	08-14-2001	US EPA - SAN FRANCISCO	NONE	NONE	N. MOUTOUX	MCAS EL TORO	COMMENTS ON THE DRAFT SITE CLOSURE REPORT - VADOSE ZONE REMEDIATION VOLATILE ORGANIC COMPOUNDS SOURCE AREA (SEE AR #2436 - SITE CLOSURE REPORT)	ADMIN RECORD BASE	BCT BRAC CLOSURE COMMENTS DCE GW PCE ROD SOIL SVE TCE VOC WELLS	024 OU 2A	SOUTHWEST DIVISION
M60050 / 002488	08-27-2001	08-20-2001	DTSC - CYPRESS	NONE	NONE	T. CHESNEY	NAVFAC - SOUTHWEST DIVISION	COMMENTS ON THE SUMMARY REPORT - FORMER ELECTRONIC EQUIPMENT STORAGE AREA PCB A2 (SEE AR #641 - SUMMARY REPORT)	ADMIN RECORD BASE INFO REPOSITORY	COMMENTS PCB RISK SWMU	024 BLDG. 324 BLDG. 326 SWMU 95	BECHTEL NATIONAL SW02052003

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location
Contr./Guid. No.	CTO No.	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Box No.		
Approx. # Pages	EPA Cat. #									
M60050 / 002750 NONE LTR NONE 0001	06-06-2002 08-20-2001 NONE	CRWQCB - RIVERSIDE P. HANNON MCAS EL TORO D. GOULD	COMMENTS ON THE DRAFT SITE CLOSURE REPORT - VADOSE ZONE REMEDIATION VOLATILE ORGANIC COMPOUNDS SOURCE AREA (SEE AR #2436 - SITE CLOSURE REPORT)	ADMIN RECORD BASE	COMMENTS GW MW SVE TCE VOC WELLS	024 OU 2A	SOUTHWEST DIVISION			
M60050 / 002582 CTO-0200/0329 MM N68711-92-D-4670 0100	12-11-2001 09-19-2001 00200	BECHTEL NATIONAL, INC.  NAVFAC - SOUTHWEST DIVISION	MINUTES FROM THE BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING WHICH INCLUDES: VARIOUS PRESENTATION MATERIALS	ADMIN RECORD BASE	BCP BCT BRAC CLOSURE GW LF MAG RD LANDFIL MTG MINS ORDNANCE ROD SOIL SVE VOC WATER WELLS	001 002 003 008 011 012 016 017 024 BLDG. 242 BLDG. 307 BLDG. 319 BLDG. 360 OU 2A OU 2B OU 2C OU 3	BECHTEL NATIONAL SW02052007			
M60050 / 002561 CTO-0161/0350 MISC N68711-92-D-4670 0005	10-19-2001 10-01-2001 00161	BECHTEL NATIONAL, INC.  NAVFAC - SOUTHWEST DIVISION	RESPONSE TO COMMENTS ON THE DRAFT TECHNICAL MEMORANDUM EVALUATION OF OU-1 ALTERNATIVE 8A WITH RESPECT TO NATIONAL CONTINGENCY PLAN CRITERIA (SEE AR #2440 - DTSC COMMENTS & #2751 - CRWQCB COMMENTS)	ADMIN RECORD BASE INFO REPOSITORY	COMMENTS GW MW NCP RESPONSE TCE TECH MEMO WELLS	018 OU 1	BECHTEL NATIONAL SW02052006			

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002563	10-30-2001	10-30-2001	BECHTEL NATIONAL, INC.				PROPOSED PLAN - GROUNDWATER CLEANUP FOR OPERABLE UNITS 1 AND 2A	ADMIN RECORD	GW	018	BECHTEL NATIONAL
CTO-0200/0313	10-01-2001	10-01-2001						BASE	MW	024	NATIONAL
PLAN		00200							ROD	OU 1	SW02052006
N68711-92-D-4670			NAVFAC - SOUTHWEST DIVISION						SVE	OU 2A	
0028									TCE		
									VOC		
									WELLS		
M60050 / 002564	10-30-2001	10-30-2001	EARTH TECH, INC.				DRAFT TECHNICAL MEMORANDUM PRELIMINARY ASSESSMENT - BUILDING 307 (SEE AR #2619 - RESPONSE TO CITY OF IRVINE COMMENTS)	ADMIN RECORD	BCT	024	BECHTEL NATIONAL
NONE	10-01-2001	10-01-2001						BASE	BRAC	BLDG. 307	NATIONAL
MEMO		00068	NAVFAC - SOUTHWEST DIVISION					INFO REPOSITORY	DCE	OU 2A	SW02052006
N62742-94-D-0048									FFA		
0250									GPR		
									GW		
									NCP		
									NPL		
									PA		
									PCE		
									PID		
									SOIL		
									SOLVENTS		
									TCE		
									TECH MEMO		
									VOC		
M60050 / 002751	06-06-2002	06-06-2002	CRWQCB - RIVERSIDE				COMMENTS ON THE DRAFT TECHNICAL MEMORANDUM, EVALUATION OF ALTERNATIVE 8A WITH RESPECT TO NATIONAL OIL AND HAZARDOUS SUBSTANCES POLLUTION CONTINGENCY PLAN CRITERIA (SEE AR #2416 - DRAFT TECH MEMO & #2561 - RESPONSE TO COMMENTS)	ADMIN RECORD	COMMENTS	018	SOUTHWEST DIVISION
NONE	10-04-2001	10-04-2001						BASE	GW	OU 1	
LTR		NONE	P. HANNON						NCP		
NONE			MCAS EL TORO						TCE		
0001			D. GOULD						TECH MEMO		

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location
Contr./Guid. No.	CTO No.	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Box No.		
Approx. # Pages	EPA Cat. #									
M60050 / 002562	10-19-2001	BECHTEL	FINAL TECHNICAL MEMORANDUM	ADMIN RECORD	ARAR	018	BECHTEL			
CTO-0161/0349	10-17-2001	NATIONAL, INC.	EVALUATION OF OU-1 ALTERNATIVE 8A	BASE	GW	OU 1	NATIONAL			
MEMO	00161	T. HEIRONIMUS	WITH RESPECT TO NATIONAL	INFO	NCP		SW02052006			
N68711-92-D-4670		NAVFAC -	CONTINGENCY PLAN CRITERIA	REPOSITORY	ROD					
0043		SOUTHWEST			TCE					
		DIVISION			TECH MEMO					
					VOC					
					WELLS					
M60050 / 002752	06-06-2002	CRWQCB -	COMMENTS ON THE DRAFT TECHNICAL	ADMIN RECORD	COMMENTS	OU 1	SOUTHWEST			
NONE	10-17-2001	RIVERSIDE	MEMORANDUM REPLACEMENT WELL	BASE	GW	OU 2A	DIVISION			
LTR	NONE	P. HANNON	INSTALLATION AND GROUNDWATER		MW	OU 2B				
NONE		MCAS EL TORO	EVALUATION (SEE AR #2435 - TECH MEMO)		TECH MEMO	OU 2C				
0001		D. GOULD			VOC	OU 3				
					WELLS					
M60050 / 002567	11-07-2001	BECHTEL	PROPOSED PLAN - GROUNDWATER	ADMIN RECORD	CANCER	018	BECHTEL			
CTO-0200/0320	11-01-2001	NATIONAL, INC.	CLEANUP FOR OPERABLE UNITS 1 AND 2A	BASE	DCE	024	NATIONAL			
PLAN	00200		(INCLUDES MAILING LIST PARTS OF	CONFIDENTIAL	GW	BLDG. 296	SW02052006			
N68711-92-D-4670		NAVFAC -	WHICH SHOULD BE CONSIDERED		MW	BLDG. 297				
0025		SOUTHWEST	CONFIDENTIAL) (SEE AR #2753 - PUBLIC		PCE	OU 1				
		DIVISION	MEMBER COMMENTS & #2754 - LOCAL		ROD	OU 2A				
			REDEVELOPMENT AUTHORITY		SOIL					
			COMMENTS)		SOLVENTS					
					SVE					
					TCE					
					VOC					
					WELLS					

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002597	CTO-0200/0342	01-16-2002	BECHTEL NATIONAL, INC.	MM	11-13-2001			00200	NAVFAC - SOUTHWEST DIVISION	0085			TRANSCRIPT OF PROPOSED PLAN PUBLIC MEETING REGARDING GROUNDWATER CLEANUP AT OPERABLE UNITS 1 AND 2A	ADMIN RECORD BASE INFO REPOSITORY	GW MTG MINS NPL PIM REMEDIAL ACTIO RI SOIL SOLVENTS TCE VOC	018 024 BLDG. 296 BLDG. 297 OU 1 OU 2A	BECHTEL NATIONAL SW02052007
M60050 / 002599	CTO-0200/0341	01-16-2002	BECHTEL NATIONAL, INC.	MISC	11-13-2001			00200	NAVFAC - SOUTHWEST DIVISION	0200			PUBLIC INFORMATION MATERIALS FOR PUBLIC MEETING REGARDING PROPOSED PLAN - GROUNDWATER CLEANUP AT OPERABLE UNITS 1 AND 2A WITH VARIOUS HANDOUTS (SEE AR #2597 - PUBLIC MEETING TRANSCRIPT)	ADMIN RECORD BASE INFO REPOSITORY	BCT BRAC GW IRP PIM RAB TCE VOC WATER	018 024 OU 1 OU 2A	BECHTEL NATIONAL SW02052008
M60050 / 002572	RPT	11-26-2001	NAVFAC - SOUTHWEST DIVISION	NONE	11-16-2001			NONE	L. HORNECKER NAVFAC - SOUTHWEST DIVISION	0250			SUMMARY REPORT - SITE 07GN1 - WITHIN THE DROP TANK DRAINAGE AREA NUMBER 2, FORMER TOTAL RECOVERABLE PETROLEUM HYDROCARBON RELEASE	ADMIN RECORD BASE INFO REPOSITORY	BCT BRAC GW MTBE ROD SOIL SOIL BORING SOLVENTS TCE TPH TRPH WELLS	007 024 07GN1 BLDG. 310 BLDG. 315 OU 2A OU 3 UNIT 5	BECHTEL NATIONAL SW02052007

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002753	06-06-2002	RW	ENVIRONMENTAL CONSULTING	NONE	11-26-2001	R. WILSON			MCAS EL TORO	COMMENTS FROM 13 NOVEMBER 2001 PUBLIC MEETING ATTENDEE ON THE PROPOSED PLAN - GROUNDWATER CLEANUP FOR OPERABLE UNITS 1 AND 2A (SEE AR #2567 - PROPOSED PLAN)	ADMIN RECORD BASE	GW MW PROPOSED PLAN SOLVENTS VOC WELLS	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
LTR	NONE	D. GOULD												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guld. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002598	CTO-0200/0340	01-16-2002	BECHTEL NATIONAL, INC.	MISC	11-28-2001			00200	NAVFAC - SOUTHWEST DIVISION				PUBLIC INFORMATION MATERIALS WHICH INCLUDES: RAB MEETING AGENDA/PUBLIC NOTICE, 19 SEPTEMBER MEETING MINUTES, & 30 MAY SUBCOMMITTEE MEETING MINUTES, RAB MEETING SCHEDULE, NOVEMBER PROPOSED PLAN FOR GROUNDWATER, VARIOUS HANDOUTS, AGENCY COMMENTS AND LETTERS	ADMIN RECORD BASE INFO REPOSITORY	AST BCP BCT BRAC COMMENTS COPC CRP EOD FOSL FOST GW MTG MINS MW NCP NPL ORDNANCE PAH PCB PCE PESTICIDES PIM PUBNOT RAB ROD SOIL SOLVENTS SVE SVOC SWAT SWMU TCE UST VOC WATER WELLS	002 004 006 008 009 010 011 012 013 016 017 018 020 021 022 024 025 OU 1 OU 2A OU 2B OU 2C OU 3	BECHTEL NATIONAL SW02052007

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002605	02-13-2002	BECHTEL								FINAL MINUTES FROM BASE	ADMIN RECORD	BCT	001	BECHTEL
CTO-0200/0357	11-28-2001	NATIONAL, INC.								REALIGNMENT AND CLOSURE CLEANUP	BASE	BRAC	002	NATIONAL
MM	00200	B. COLEMAN								TEAM MEETING		DQO	003	SW02052008
N68711-92-D-4670		NAVFAC -										EOD	005	
0040		SOUTHWEST										GW	008	
		DIVISION										LF	011	
												ORDNANCE	012	
												PA	016	
												PAH	017	
												RD	024	
												RI	BLDG. 1789	
												ROD	BLDG. 1803	
												SOIL	BLDG. 242	
												TCE	BLDG. 243	
												VOC	BLDG. 244	
												WELLS	BLDG. 307	
													BLDG. 319	
													BLDG. 360	
													BLDG. 787	
													OU 2A	
													OU 2B	
													OU 2C	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location Box No.		
Approx. # Pages	EPA Cat. #									
M60050 / 002588	12-13-2001	EARTH TECH, INC.	FINAL TECHNICAL MEMORANDUM PHASE II	ADMIN RECORD	BCT	001	BECHTEL			
NONE	12-01-2001	D. SWENSSON	EVALUATION OF RADIONUCLIDES IN	BASE	BRAC	002	NATIONAL			
MEMO	00072	NAVFAC -	GROUNDWATER AT FORMER LANDFILL	INFO	COPC	003	SW02052007			
N62742-94-D-0048		SOUTHWEST	SITES AND THE EXPLOSIVE ORDNANCE	REPOSITORY	EOD	004				
0300		DIVISION	DISPOSAL (EOD) RANGE (INCLUDES		GW	005				
			SWDIV TRANSMITTAL LETTER)		LF	017				
					MW	018				
					ORDNANCE	024				
					QA	OU 1				
					QC	OU 2B				
					RADIONUCLIDES	OU 2C				
					SARA	OU 3				
					TCE	OU 3B				
					TECH MEMO					
					VOC					
					WATER					
					WELLS					
M60050 / 002587	12-13-2001	NAVFAC -	TRANSMITTAL OF COMPILED RESPONSE	ADMIN RECORD	COMMENTS	001	BECHTEL			
SWDIV SER	12-07-2001	SOUTHWEST	TO COMMENTS ON THE DRAFT TECHNICAL	BASE	COPC	002	NATIONAL			
06CC.DG/1292	00072	DIVISION	MEMORANDUM PHASE II EVALUATION OF	INFO	EOD	003	SW02052007			
XMTL		D. GOULD	RADIONUCLIDES IN GROUNDWATER AT	REPOSITORY	GW	004				
N62742-94-D-0048		DTSC, CRWQCB,	FORMER LANDFILL SITES AND THE		LF	005				
0011		& US EPA	EXPLOSIVE ORDNANCE DISPOSAL RANGE		MW	017				
		CHESNEY,	{COMMENTS BY DHS, LRA, EPA} (SEE AR		ORDNANCE	024				
		HANNON, &	#2550 - COMMENTS)		RADIONUCLIDES	OU 2B				
		MOUTOUX			RESPONSE	OU 2C				
					WELLS	OU 3				
						OU 3B				

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	EPA Cat. #	Recipient	Approx. # Pages								
M60050 / 002754		06-06-2002	COUNTY OF					LOCAL REDEVELOPMENT AUTHORITY	ADMIN RECORD	COMMENTS	018	SOUTHWEST DIVISION
NONE		12-07-2001	ORANGE - LRA					COMMENTS ON THE PROPOSED PLAN -	BASE	DRINKING WATE	024	
LTR		NONE	G. SIMON					GROUNDWATER CLEANUP FOR		GW	OU 1	
NONE			MCAS EL TORO					OPERABLE UNITS 1 AND 2A (SEE AR		MW	OU 2A	
0010			D. GOULD					#2567 - PROPOSED PLAN)		PROPOSED PLAN		
										ROD		
										SOLVENTS		
										TCE		
										VOC		
										WELLS		
M60050 / 002589		12-13-2001	IT CORPORATION					TECHNICAL MEMORANDUM -	ADMIN RECORD	DATA	001	BECHTEL NATIONAL SW02052007
3088.0		12-10-2001	D. RAWAL					GROUNDWATER ELEVATION	BASE	GW	002	
MEMO		00073	NAVFAC -					INFORMATION FROM SELECTED WELLS	INFO	MW	005	
N62474-98-D-2078			SOUTHWEST						REPOSITORY	WATER	009	
0275			DIVISION							WELLS	017	
			L. HORNECKER								018	
											OU 1	
											OU 2B	
											OU 2C	
											OU 3	
M60050 / 002756		06-06-2002	NAVFAC -					SUMMARY REPORT - PHANTOM DRUM	ADMIN RECORD	DRUMS	015	SOUTHWEST DIVISION
NONE		12-17-2001	SOUTHWEST					STORAGE AREA SOLID WASTE	BASE	GW	025	
RPT		NONE	DIVISION					MANAGEMENT UNIT 32 [INCLUDES SWDIV	INFO	MW	BLDG. 31	
NONE			L. HORNECKER					TRANSMITTAL FROM L. HORNECKER] (SEE	REPOSITORY	STORMWATER	BLDG. 32	
0250			DTSC - CYPRESS					AR #2757 - DTSC COMMENTS)		SWMU	BLDG. 33	
			T. CHESNEY							UST	BLDG. 34	
										WELLS	BLDG. 35	
											BLDG. 36	
											BLDG. 37	
											BLDG. 38	
											OU 2A	
											OU 3	
											SWMU 32	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002592 NONE LTR NONE 0001	01-09-2002 12-20-2001 NONE	US EPA - SAN FRANCISCO N. MOUTOUX NAVFAC - SOUTHWEST DIVISION D. GOULD	US EPA - SAN FRANCISCO N. MOUTOUX NAVFAC - SOUTHWEST DIVISION D. GOULD							RESPONSE TO NAVY RESPONSE TO COMMENTS ON THE DRAFT SITE CLOSURE REPORT, VADOSE ZONE REMEDIATION VOLATILE ORGANIC COMPOUNDS SOURCE AREA - COMMENTS HAVE BEEN ADEQUATELY ADDRESSED (SEE AR #2436 - REPORT)	ADMIN RECORD BASE INFO REPOSITORY	BCT BRAC COMMENTS GW MONITORING RD RESPONSE SVE VOC WELLS	024 OU 2A	BECHTEL NATIONAL SW02052007
M60050 / 002606 NONE RPT NONE 0250	03-07-2002 12-21-2001 NONE	NAVFAC - SOUTHWEST DIVISION L. HORNECKER NAVFAC - SOUTHWEST DIVISION	NAVFAC - SOUTHWEST DIVISION L. HORNECKER NAVFAC - SOUTHWEST DIVISION							SUMMARY REPORT - PHANTOM DRUM STORAGE AREA SOLID WASTE MANAGEMENT UNIT 109 (SEE AR #2610 - DTSC COMMENTS)	ADMIN RECORD BASE INFO REPOSITORY	DRUMS HAZ MAT HAZ WASTE MW RCRA RFA ROD STORMWATER SWMU UST VOC WATER	008 024 BLDG. 314 BLDG. 379 OU 2A OU 3 SWMU 109	BECHTEL NATIONAL SW02052008

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002596	01-10-2002	BECHTEL								DRAFT RECORD OF DECISION FOR THE	ADMIN RECORD	ARAR	018	CHOICE
CTO-0164/0265	01-09-2002	NATIONAL, INC.								REGIONAL VOLATILE ORGANIC	BASE	BCT	024	MICROGRAPHICS
MISC	00164									COMPOUND GROUNDWATER PLUME AND	INFO	BRAC	BLDG. 296	SW02052302
N68711-92-D-4670		NAVFAC -								THE VOLATILE ORGANIC COMPOUND	REPOSITORY	COC	BLDG. 297	
0350		SOUTHWEST								SOURCE AREA		COPC	OU 1	
		DIVISION										DCA	OU 2A	
												DCE		
												DQO		
												FFA		
												FOST		
												GW		
												HERBICIDE		
												LUFT		
												MOA		
												NCP		
												NPL		
												PCA		
												PCB		
												PCE		
												PESTICIDES		
												PID		
												RAB		
												ROD		
												SARA		
												SEDIMENTS		
												SOLVENTS		
												SVE		
												SVOC		
												SWMU		
												TCA		
												TCE		
												TPH		
												VOA		
												VOC		
												WELLS		

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
															WQA		
M60050 / 002603	01-31-2002	BECHTEL	DRAFT RESPONSIVENESS SUMMARY FOR	ADMIN RECORD	GW	018	BECHTEL										
CTO-0164/0269	01-25-2002	NATIONAL, INC.	THE REGIONAL VOLATILE ORGANIC	BASE	RESPONSE	024	NATIONAL										
MISC	00164		COMPOUND GROUNDWATER PLUME AND	INFO	ROD	OU 1	SW02052008										
N68711-92-D-4670		NAVFAC -	THE VOC SOURCE AREA	REPOSITORY	TCE	OU 2A											
0025		SOUTHWEST			VOC												
		DIVISION			WATER												
					WELLS												
M60050 / 002611	04-03-2002	BECHTEL	MINUTES OF THE BASE REALIGNMENT	ADMIN RECORD	BCP	001	BECHTEL										
CTO-0200/0370	01-30-2002	NATIONAL, INC.	AND CLOSURE CLEANUP TEAM MEETING		BCT	002	NATIONAL										
MM	00200				BRAC	003	SW02052008										
N68711-92-D-4670		NAVFAC -			EBS	005											
0045		SOUTHWEST			GW	016											
		DIVISION			METALS	017											
					MTG MINS	ANOMALY AF											
					ORDNANCE	BLDG. 307											
					PERCHLORATE	OU 1											
					ROD	OU 2A											
					RSE	OU 2B											
					SOIL	OU 2C											
					SVOC	OU 3											
					TPH												
					VOC												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002608	03-07-2002	CDM FEDERAL PROGRAMS	FINAL GROUNDWATER MONITORING	ADMIN RECORD	BCT	001	BECHTEL							
GS-10F-0227J	02-14-2002	S. THIBEAULT	REPORT SEPTEMBER 2001 MONITORING	BASE	BRAC	002	NATIONAL							
RPT	NONE	NAVFAC - SOUTHWEST DIVISION	ROUND 14	INFO	DCA	003	SW02052008							
N68711-00-F-0102				REPOSITORY	DCE	005								
0400					DQO	008								
					GW	011								
					METALS	012								
					MONITORING	016								
					MTBE	017								
					NFA	018								
					PCB	024								
					PCE	OU 1								
					PERCHLORATE	OU 2A								
					QA	OU 2B								
					QC	OU 2C								
					RCRA	OU 3								
					RD									
					REMEDIAL ACTIO									
					ROD									
					SAP									
					SOP									
					SOW									
					SVE									
					SVOC									
					TCA									
					TCE									
					UST									
					VOC									
					WATER									

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002757 NONE LTR NONE 0002	06-06-2002 02-15-2002 NONE	DTSC - CYPRESS T. CHESNEY MCAS EL TORO D. GOULD	COMMENTS ON THE SUMMARY REPORT - PHANTOM DRUM STORAGE AREA SOLID WASTE MANAGEMENT UNIT 32 - DTSC CONCURS WITH THE PROPOSED PHANTOM DESIGNATION AND DELETION OF SWMU 32 (SEE AR #2756 - SUMMARY REPORT)	ADMIN RECORD BASE INFO REPOSITORY	COMMENTS DRUMS SWMU	015 025 BLDG. 31 BLDG. 36 OU 2A OU 3 SWMU 32	SOUTHWEST DIVISION							
M60050 / 002610 NONE LTR NONE 0003	03-07-2002 02-19-2002 NONE	DTSC - CYPRESS T. CHESNEY NAVFAC - SOUTHWEST DIVISION D. GOULD	COMMENTS ON THE SUMMARY REPORT - PHANTOM DRUM STORAGE AREA SOLID WASTE MANAGEMENT UNIT 109; DTSC CONCURS WITH PROPOSED PHANTOM DESIGNATION AND DELETION OF SWMU 379 (SEE AR #2606 - SUMMARY REPORT)	ADMIN RECORD BASE INFO REPOSITORY	COMMENTS RCRA RFA SWMU	024 BLDG. 314 BLDG. 379 OU 2A SWMU 109	BECHTEL NATIONAL SW02052008							
M60050 / 002619 SWDIV SER 06CC.GB/0355 XMTL NONE 0007	04-19-2002 04-09-2002 NONE	NAVFAC - SOUTHWEST DIVISION D. GOULD CITY OF IRVINE D. JUNG	COMPILED RESPONSE TO COMMENTS ON THE DRAFT TECHNICAL MEMORANDUM PRELIMINARY ASSESSMENT - BUILDING 307 (SEE AR #2564 - TECH MEMO)	ADMIN RECORD BASE INFO REPOSITORY	BCT BRAC COMMENTS DCE GW PCE RESPONSE SOIL SOLVENTS TCE TECH MEMO VOC WELLS	024 BLDG. 307 OU 2A	BECHTEL NATIONAL SW02052008							

UIC No. / Rec. No.	Doc. Control No.	Prct. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002622	05-02-2002	DTSC - CYPRESS	COMMENTS ON THE CLOSURE REPORT -	ADMIN RECORD	CANCER	024	BECHTEL							
NONE	04-23-2002	T. CHESNEY	SOLID WASTE MANAGEMENT UNIT	CONFIDENTIAL	CLOSURE	BLDG. 306	NATIONAL							
LTR	NONE	NAVFAC -	NUMBER 88 (SEE AR #2514 - CLOSURE		COMMENTS	OU 2A	SW02052008							
NONE		SOUTHWEST	REPORT)		METALS	SWMU 88								
0003		DIVISION			PCB	TAA 306								
		D. GOULD			PESTICIDES									
					RCRA									
					RFA									
					SOIL									
					SWMU									

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002626	05-14-2002	BECHTEL								DRAFT FINAL RECORD OF DECISION FOR	ADMIN RECORD	ARAR	018	BECHTEL
CTO-0164/0296	05-01-2002	NATIONAL, INC.								THE REGIONAL VOLATILE ORGANIC	BASE	BCT	024	NATIONAL
MISC	00164									COMPOUND GROUNDWATER PLUME AND	INFO	BRAC	BLDG. 307	SW02052008
N68711-92-D-4670		NAVFAC -								THE VOLATILE ORGANIC COMPOUND	REPOSITORY	CHARACTERIZATI	OU 1	
0300		SOUTHWEST								SOURCE AREA		DCA	OU 2A	
		DIVISION										DCE		
												DQO		
												FFA		
												FOSET		
												FOST		
												FS		
												GW		
												HERBICIDE		
												METALS		
												MONITORING		
												MW		
												NCP		
												NPL		
												PCA		
												PCB		
												PCE		
												PESTICIDES		
												PRG		
												RAB		
												RCRA		
												RFA		
												RI		
												ROD		
												SARA		
												SDWA		
												SOIL		
												SVE		
												SVOC		
												SWMU		
												TCE		

## UIC No. / Rec. No.

Doc. Control No.	Prct. Date	Author Affil.	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Record Type	Record Date	Author	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.	Recipient	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient	Recipient	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
							TPH TSDF VOA VOC WELLS		
M60050 / 002627 CTO-0164/0297 MISC N68711-92-D-4670 0031	05-14-2002 05-01-2002 00164	BECHTEL NATIONAL, INC.	BECHTEL NATIONAL, INC.	NAVFAC - SOUTHWEST DIVISION	COMPILED RESPONSE TO COMMENTS ON THE DRAFT RECORD OF DECISION FOR THE REGIONAL VOLATILE ORGANIC COMPOUND GROUNDWATER PLUME AND THE VOLATILE ORGANIC COMPOUND SOURCE AREA (COMMENTS BY US EPA, DTSC, RWQCB & OCWD) (SEE AR #2596 - DRAFT ROD)	ADMIN RECORD BASE INFO REPOSITORY	COC COMMENTS COPC DCA DCE GW HERBICIDE METALS MOA PCB PCE PERCHLORATE PESTICIDES RESPONSE ROD SOIL SVOC TCA TCE VOC WATER WELLS	018 024 OU 1 OU 2A	BECHTEL NATIONAL SW02052008
M60050 / 002629 CTO-0161/0370 MISC N68711-92-D-4670 0006	05-14-2002 05-01-2002 00161	BECHTEL NATIONAL, INC.	BECHTEL NATIONAL, INC.	NAVFAC - SOUTHWEST DIVISION	COMPILED RESPONSE TO COMMENTS ON THE DRAFT TECHNICAL MEMORANDUM - WOOD-INLK/1 RISK EVALUATION {COMMENTS BY CITY OF IRVINE, RWQCB, DTSC & US EPA} (SEE AR #2593 - TECH MEMO)	ADMIN RECORD BASE INFO REPOSITORY	COMMENTS COPC RESPONSE TECH MEMO WELLS	018 OU 1	BECHTEL NATIONAL SW02052008

UIC No. / Rec. No.

Doc. Control No. Prc. Date Author Affil.

Record Type Record Date Author

Contr./Guid. No. CTO No. Recipient Affil.

Approx. # Pages EPA Cat. # Recipient Subject Classification Keywords Sites Location Box No.

((([qry\_main\_admin\_record\_select by uic].SUBJECT Like "ACTION" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "ASSESSM" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "ARAR" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "APPROPRIATE" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "CHARACTERIZ" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "CLOSURE" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "FACILITY" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "INVESTIG" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "RESTORATION PROGRAM PLAN" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "MONITORING" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "NFA" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "PROPOSED PLAN" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "RESULT" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "RESPONSE" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "SITE" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "WORK PLAN" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "RI/FS" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "FEASIBILITY STUDY" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "COMMENTS" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "RCRA" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "RECOVERY ACT" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "HAZARD RANK" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "INSPECTION" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "SAMPLING" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "REMEDIES" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "REMEDY" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "SOIL" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "GROUNDWATER" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "AIR" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "PCBS" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "EBS" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "BASELINE" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "QUALITY" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "BACKGR" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "PILOT" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "CONSTR" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "CONTINGENCY" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "REMOVAL")) AND UIC=M60050

No Keywords

Sites=018;024;18;24;OU 1;OU 2A

No Classification

# **PUBLIC PARTICIPATION DOCUMENTS**

EL TORO MCAS

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

PUBLIC PARTICIPATION DOCUMENTS

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Constr./Guid. No.	CTO No.	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #														
M60050 / 001135		12-22-1995	MCAS EL TORO								LETTER WITH INVITATION FOR MEMBERSHIP IN THE TECHNICAL REVIEW COMMITTEE	ADMIN RECORD	PUBNOT	OU 1	BECHTEL NATIONAL
		03-30-1988	S.R. HOLM										RAB		80462349
LTR		NONE	OICC										TRC		IMAGED
NONE		10.3	SOUTHWEST												
0001															
M60050 / 001134		12-22-1995	MCAS EL TORO								LETTER WITH INVITATION FOR MEMBERSHIP IN THE TECHNICAL REVIEW COMMITTEE	ADMIN RECORD	PUBNOT	OU 1	BECHTEL NATIONAL
		03-31-1988											RAB		80462349
LTR		NONE	CRWQCB										TRC		IMAGED
NONE		01.6	RIVERSIDE												
0001															
M60050 / 001136		12-22-1995	MCAS EL TORO								LETTER WITH INVITATION FOR MEMBERSHIP IN THE TECHNICAL REVIEW COMMITTEE	ADMIN RECORD	PUBNOT	OU 1	BECHTEL NATIONAL
		04-08-1988	D.V. SHUTER										RAB		80462349
LTR		NONE	CITY OF IRVINE										TRC		IMAGED
NONE		10.3	L. AGRAIN												
0002															
M60050 / 000781		07-07-1995	MCAS EL TORO								CORRESPONDENCE RE: REVIEW & COMMENTS ON THE NOTICE OF PREP. NEGATIVE DECLARATION & INITIAL STUDY	ADMIN RECORD	COMMENTS	018	BECHTEL NATIONAL
		05-30-1989												OU 1	37041256
LTR		NONE	OCWD FOUNTAIN												IMAGED
NONE		01.2	VA												
0002			J.F. REILLY												
M60050 / 001085		12-22-1995	SOUTHWEST								FEBRUARY 21, 1990 MEETING MINUTES OF REGULAR MEETING AND PUBLIC HEARING BOARD OF DIRECTORS, OCWD IRVINE DESALTER PROJECT	ADMIN RECORD	MTG MINS	OU 1	SOUTHWEST DIVISION
		02-21-1990	DIVISI												37041203*
MM		NONE	ATTENDEES												IMAGED
NONE		01.6													
0004															

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002203	05-31-2001	JACOBS	AGENDA OF THE TECHNICAL REVIEW	ADMIN RECORD	ARAR	001	CHOICE										
CLE-C01-01F018-13-0002	09-26-1990	ENGINEERING GROUP	COMMITTEE PRESENTATION FOR THE		DMP	002	MICROGRAPHICS										
MISC			REMEDIAL INVESTIGATION/FEASIBILITY		DQO	003	SW01080901										
N68711-89-D-9296		NAVFAC -	STUDY		FS	004											
0017		SOUTHWEST			GW	005											
		DIVISION			METALS	006											
					MW	007											
					PESTICIDES	008											
					RAB	009											
					RI	010											
					RISK	011											
					SEDIMENTS	012											
					SOIL	013											
					SOIL BORING	014											
					SVOC	015											
					TCE	016											
					TPH	017											
					TRC	018											
					VOC	019											
					WATER	020											
					WELLS	021											
						022											
						OU 1											
						OU 2											
						OU 3											

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001014	12-08-1995	JACOBS								MARCH 20, 1991 TECHNICAL REVIEW	ADMIN RECORD	CHAR	018	BECHTEL
CLE-C01-01F018-I3-0022	04-03-1991	ENGINEERING								COMMITTEE MEETING MINUTES		DCE	OU 1	NATIONAL
MM	00018	J. DOLEGOWSKI										MTG MINS		80462348
N68711-89-D-9296	01.6	NAVFAC -										MW		IMAGED
0005		SOUTHWEST										PCE		
		DIVISION										PUBNOT		
												RCRA		
												RFA		
												SI		
												SWAT		
												TANK		
												TCE		
												TRC		
												WELLS		

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000892		07-19-1995	SOUTHWEST										FACT SHEET "DESCRIBING	ADMIN RECORD	HAZ WASTE	001	BECHTEL
		11-01-1991	DIVISI										INVESTIGATION OF POSSIBLE		PUB. PARTICIPAT	002	NATIONAL
MISC		NONE											HAZARDOUS WASTE CONTAMINATION"			003	37041252
NONE		10.6														004	IMAGED
0006																005	
																006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																018	
																019	
																020	
																021	
																022	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001834	03-24-1997	MCAS EL TORO	PUBLIC FORUM AGENDA WITH HANDOUTS	ADMIN RECORD								CERCLA	001	SOUTHWEST
	11-18-1991											OU	002	DIVISION
MISC	NONE											PUB. PARTICIPAT	003	37041259*
NONE	10.4											RI	004	IMAGED
0011													005	
													006	
													007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													018	
													019	
													020	
													021	
													022	
													OU 1	
													OU 2	
													OU 4	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001020		12-08-1995	JACOBS										JUNE 2, 1992 TRC MEETING MINUTES ON THE RI/FS PHASE I	ADMIN RECORD	MTG MINS	002	BECHTEL
		06-02-1992	ENGINEERING												PUB. PARTICIPAT	003	NATIONAL
LTR		00145													TRC	005	80462348
N6871189D929600		01.6	SOUTHWEST													017	IMAGED
0004			DIVISION													018	
																024	
																025	
																OU 1	
																OU 2	
																OU 2A	
																OU 2B	
																OU 2C	

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001028		12-08-1995	JACOBS		12-17-1992	ENGINEERING				DECEMBER 17, 1992 TRC MEETING MINUTES	ADMIN RECORD	MTG MINS	001	BECHTEL
												PUB. PARTICIPAT	002	NATIONAL
MM		00145										TRC	003	80462348
N6871189D929600		01.6	SOUTHWEST			DIVISION							004	IMAGED
0026													005	
													006	
													007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													018	
													019	
													020	
													021	
													022	
													024	
													025	
													OU 1	
													OU 2	
													OU 2A	
													OU 2B	
													OU 2C	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Subject	Classification	Keywords	Sites	Location Box No.			
Approx. # Pages	EPA Cat. #	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.			
M60050 / 001022	12-08-1995	01-06-1993	JACOBS ENGINEERING	DQO WORKSHOP 18-20 NOVEMBER 1992 SUMMARY OF EVENTS, DECISIONS, AND ACTION ITEMS OF THE PHASE I RI/FS COORDINATED WITH REGULATORY AGENCIES	ADMIN RECORD	MTG MINS TECH/GUID DOC.	018 OU 1	BECHTEL NATIONAL 80462348 IMAGED			
LTR N6871189D929600 0006	00145 01.6		SOUTHWEST DIVISION								
M60050 / 000815	07-07-1995	02-15-1993	JACOBS ENGINEERING	DEFINITION OF OPERABLE UNITS 1, 2, 3 AND 4	ADMIN RECORD	GUID NFA OU	OU 1 OU 2 OU 3 OU 4	SOUTHWEST DIVISION			
MEMO NONE 0004	00145 01.6		NAVFAC - SOUTHWEST DIVISION								
M60050 / 000125	11-01-1993	02-26-1993	DTSC G. HOLMES SOUTHWEST DIVISION A. PISZKIN	DRAFT POSITION PAPER ON THE PRELIMINARY RISK ASSESS. FOR OPERABLE UNITS (OUS)-1, 2 AND 3 AND THE PROPOSED EL TORO BASELINE HUMAN HEALTH RISK ASSESS. FOR OU-1	ADMIN RECORD	NFA OU RISK TECH/GUID DOC.	OU 1 OU 2 OU 3	SOUTHWEST DIVISION 37041127* IMAGED			
LTR NONE 0000	NONE 08.1										
M60050 / 001529	07-10-1993	08-06-1993	JACOBS ENGINEERING GROUP J. DOLEGOWSKI NAVFAC - SOUTHWEST DIVISION A. PISZKIN	MEMO REGARDING ABILITY TO PROCEED WITH REMEDIAL INVESTIGATION (RI) AT OPERABLE UNIT 1 - FEASIBILITY STUDY BASED ON PHASE I RI DATA	ADMIN RECORD	FS RI	018 OU 1	BECHTEL NATIONAL 80462364 IMAGED			
MEMO NONE 0002	NONE 03.0										
M60050 / 001482	05-21-1996	09-27-1993	ORANGE COUNTY WATER DISTRICT R. HERNDON NAVFAC - SOUTHWEST DIVISION A. PISZKIN	LETTER REGARDING NAVY ACCESS TO MONITORING WELLS INSTALLED BY OCWD IN RELATION TO OPERABLE UNIT 1 FEASIBILITY STUDY	ADMIN RECORD	FS MW WELLS	018 OU 1	BECHTEL NATIONAL 80462357 IMAGED			
LTR NONE 0001	NONE 02.0										

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002204	05-31-2001	JACOBS	TECHNICAL REVIEW	ADMIN RECORD	BCP	001	BECHTEL										
CLE-C01-01F145-I2-0073	01-13-1994	ENGINEERING	COMMITTEE/REMEDIAL ADVISORY BOARD		BRAC	002	NATIONAL										
MM	00145	C. FLAGG	MEETING SUMMARY		CLOSURE	003	SW01071201										
N68711-89-D-9296		NAVFAC -			DISPOSAL	004											
0006		SOUTHWEST			EBS	005											
		DIVISION			FS	006											
		A. PISKIN			GW	007											
					RAB	008											
					RI	009											
					SEDIMENTS	010											
					SOIL	011											
					TRC	012											
					WATER	013											
						014											
						015											
						016											
						017											
						018											
						019											
						020											
						021											
						022											
						OU 1											
						OU 2											
						OU 3											
M60050 / 000153	09-21-1999	JACOBS	CONFERENCE NOTES ON MEETING HELD	ADMIN RECORD	ARAR	OU 1	SOUTHWEST										
CLE-C01-01F145-I2-0076	02-18-1994	J. DOLEGOWSKI	1/24/94 TO DISCUSS APPLICABLE OR		FS		DIVISION										
MM	00145	SOUTHWEST DIV	RELEVANT AND APPROPRIATE		GW		SW01011002										
N68711-89-D-9296	10.4	R. GREEN	REQUIRMENTS (ARARS) FOR THE		RI												
0025			OPERABLE UNIT 1 RI/FS														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	Reciplent Affil.	Subject	Approx. # Pages	EPA Cat. #	Recipient				
M60050 / 002223	05-31-2001	MCAS EL TORO	STATUS OF OPERABLE UNIT 1 REMEDIAL INVESTIGATION/FEASIBILITY STUDY AND ORANGE COUNTY WATER DISTRICT DESALTER PROJECT	NONE	06-15-1994		ADMIN RECORD	AOC ARAR BRAC FFA FS GW MW NCP OU REMEDIAL ACTIO RI ROD TCE VOC WELLS	OU 1	CHOICE MICROGRAPHICS SW01080901
M60050 / 000647	07-19-1994 07-01-1994	JACOBS ENGINEERING GROUP	REMEDIAL INVESTIGATION/FEASIBILITY STUDY DRAFT OPERABLE UNIT 1 REMEDIAL INVESTIGATION REPORT	RPT	00145		ADMIN RECORD	FS GW NFA RI SOIL	OU 1	BECHTEL NATIONAL 37041237 IMAGED
N68711-89-D-9296	03.0	NAVFAC - SOUTHWEST DIVISION		0200						
M60050 / 000828	07-10-1995 08-16-1994	JACOBS ENGINEERING J.DOLEGOWSKI	RESTORATION ADVISORY BOARD MEETING SUMMARY	XMTL	00145	SOUTHWEST DIVISION	ADMIN RECORD	PUB. PARTICIPAT RAB	OU 1	BECHTEL NATIONAL 80462345 IMAGED
N6871189D929600	10.4			0040						
M60050 / 001103	12-22-1995 09-14-1994	NEWS FOCUS	NEWSPAPER ARTICLE "TEAMING UP FOR CLEANUP"	MISC	NONE	COMMUNITY MEMBER	ADMIN RECORD	PUB. PARTICIPAT PUBNOT	OU 1	SOUTHWEST DIVISION 37041203* IMAGED
NONE	01.6			0003						

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guld. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001380	CTO-0080/0002	03-19-1996	BECHTEL NATIONAL, INC.	LTR	10-18-1994	D. TEDALDI	N68711-92-D-4670	04.5	US EPA REGION IX	0012	00080	B. ARTHUR	RESPONSE TO COMMENTS ON THE DRAFT OPERABLE UNIT ONE INTERIM ACTION FEASIBILITY STUDY REPORT INCLUDING DRAFT GROUNDWATER MODELING	ADMIN RECORD	COMMENTS FS GW OU	018 OU 1	BECHTEL NATIONAL 80462353 IMAGED
M60050 / 000743	LTR	06-15-1995	DTSC LONG BEACH	NONE	11-09-1994	J.M. JIMENEZ		03.6	MCAS EL TORO	0039		W.D. LEE	COMMENTS ON THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY DRAFT OPERABLE UNIT 1 INTERIM ACTION FEASIBILITY STUDY	ADMIN RECORD	COMMENTS FS RI	018 OU 1	BECHTEL NATIONAL 37041246 IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prs. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001545		07-10-1996	SOUTHWEST DIVISI		12-29-1994								LETTER WRITTEN FROM THE NAVY TO DTSC REQUESTING AN EXTENSION TO FFA SCHEDULE FOR OPERABLE UNIT (OU) 2 AND 3 DATED 12/29/94	ADMIN RECORD	FFA OU	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 019 020 021 022 024 025 OU 2 OU 3	IRON MOUNTAIN 80462365 IMAGED
LTR NONE 0004		00080 01.1	J. PAWLISCH DTSC REGION IV J. SCANDURA														
M60050 / 000171		09-21-1999	JACOBS ENGINEERING GROUP		01-26-1995								ARAR ISSUED RAISED IN EPA COMMENTS FOR OPERABLE UNIT 1 INTERIM-ACTION FEASIBILITY STUDY	ADMIN RECORD	ARAR COMMENTS GW HAZ WASTE RCRA TCE VOC	OU 1	SOUTHWEST DIVISION SW01011002
CLE-C01-01F145-I3-0130 MEMO N68711-89-D-9296 0006		00145 06.3	J. DOLEGOWSKI SOUTHWEST DIVISION R. GREEN														

UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000166 CLE-C01-01F145-12-0094 MM N68711-89-D-9296 0030	09-21-1999 02-03-1995 00145 03.6	JACOBS ENGINEERING GROUP J. DOLEGOWSKI SOUTHWEST DIVISION R. GREEN	MINUTES FROM OPERABLE UNIT 1 REMEDIAL INVESTIGATION/FEASIBILITY STUDY IAFS STRATEGY MEETING HELD ON JANUARY 6, 1995	ADMIN RECORD	FS GW MTG MINS RI	OU 1	SOUTHWEST DIVISION SW01011002
M60050 / 000167 CLE-C01-01F145-12-0093 MM N68711-89-D-9296 0006	09-21-1999 02-03-1995 00145 03.6	JACOBS ENGINEERING GROUP J. DOLEGOWSKI SOUTHWEST DIVISION R. GREEN	MINUTES OF MEETING HELD ON JANUARY 19, 1995 TO DISCUSS OPERABLE UNIT 1 INTERIM-ACTION FEASIBILITY STUDY DISCHARGE OPTIONS ARARS	ADMIN RECORD	ARAR FS GW MTG MINS RI VOC	OU 1	SOUTHWEST DIVISION SW01011002
M60050 / 000934 LTR NONE 0026	08-07-1995 04-11-1995 NONE 10.4	MCAS EL TORO J. JOYCE RAB MEMBERS	APRIL 27, 1995 RAB MEETING MINUTES AND REVISED MEETING MINUTES FROM MARCH 30, 1995 RAB MEETING	ADMIN RECORD	MTG MINS RAB TECH/GUID DOC.	004 007 011 013 014 019 020 OU 1	BECHTEL NATIONAL 80462347 IMAGED
M60050 / 001041 MM N6871189D929600 0010	12-08-1995 04-28-1995 00145 01.6	JACOBS ENGINEERING J. DOLEGOWSKI SOUTHWEST DIVISION G. MCCLAIN	SUMMARY OF PUBLIC WORKSHOP PRESENTED BY RWQCB FOR A REVIEW OF THE SANTA ANA RIVER BASIN WATER QUALITY CONTROL PLAN	ADMIN RECORD		018 OU 1	BECHTEL NATIONAL 80462364 IMAGED
M60050 / 001567 LTR NONE 0003	07-11-1996 05-11-1995 NONE 10.1	RAB MEMBER J. WERNER MCAS EL TORO J. JOYCE	COMMENTS FROM RAB MEMBER OF THE OPERABLE UNIT (OU) 2 SUBCOMMITTEE ON THE REVISED DRAFT WORK PLAN AND DRAFT FIELD SAMPLING PLAN/PHASE II RI/FS	ADMIN RECORD	COMMENTS FS PUB. PARTICIPAT RI SAP TECH/GUID DOC.	002 003 005 015 017 024 OU 2	BECHTEL NATIONAL 37041207 IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001294		03-13-1996	IRV RANCH										RESTORATION ADVISORY BOARD OU-2	ADMIN RECORD	COMMENTS	002	IRON MOUNTAIN
		05-25-1995	WATER										SUBCOMMITTEE COMMENTS TO REVISED		FS	003	80462352
LTR		00059	R. MCVICKER										DRAFT WORKPLAN AND DRAFT FIELD		PUB. PARTICIPAT	005	IMAGED
NONE		10.1	RAB COMMUNITY										SAMPLING PLAN PHASE II RI/FS		RAB	017	
0005			CH												RI	024	
			M. RUDOLPH												TECH/GUID DOC.	025	
																OU 2	
M60050 / 001566		07-11-1996	IRV. RANCH										LETTER FORWARDING COMMENTS FROM	ADMIN RECORD	COMMENTS	002	BECHTEL
		05-25-1995	WATER										THE OPERABLE UNIT (OU)2 RAB		FS	003	NATIONAL
LTR		NONE	R. MCVICKER										SUBCOMMITTEE ON THE REVISED DRAFT		PUB. PARTICIPAT	005	37041207
NONE		03.0	MCAS EL TORO										WORK PLAN AND DRAFT FIELD SAMPLING		RI	017	IMAGED
0001			RAB										PLAN/PHASE II RI/FS		SAP	024	
			M. RUDOLPH												TECH/GUID DOC.	025	
																OU 2	
M60050 / 000939		08-07-1995	NAVFAC -										DON REQUESTS A REVISED DEADLINE	ADMIN RECORD	FS	OU 1	BECHTEL
		06-23-1995	SOUTHWEST										FOR SUBMITTAL OF THE DRAFT INTERIM		ROD		NATIONAL
LTR		NONE	DIVISION										ACTION FEASIBILITY STUDY ASSOCIATED				80462347
NONE		01.6	J.R. PAWLISCH										WITH THE DRAFT PROPOSED PLAN &				IMAGED
0040			EPA SAN										DRAFT INTERIM RECORD OF DECISION				
			FRANCISCO										FOR OU 1				
			J. ANDERSON														
M60050 / 000182		10-11-1999	JACOBS										MINUTES OF OPERABLE UNIT 1 INTERIM-	ADMIN RECORD	ARAR	OU 1	SOUTHWEST
CLE-C01-01F145-12-		07-06-1995	ENGINEERING										ACTION FEASIBILITY STUDY PLANNING		FS		DIVISION
0110		00145	GROUP										MEETING HELD ON JUNE 28, 1995		MTG MINS		SW01011002
MM		03.6	J. DOLEGOWSKI												ROD		
N68711-89-D-9296			SOUTHWEST														
0006			DIVISION														
			G. MCCLAIN														
M60050 / 000948		08-07-1995	DTSC LONG										OU 1 DELIVERABLES DEADLINES	ADMIN RECORD		OU 1	BECHTEL
		07-13-1995	BEACH										EXTENDED				NATIONAL
LTR		NONE	J.N. JIMENEZ														80462347
NONE		01.6	SOUTHWEST														IMAGED
0003			DIVISION														
			J. JOYCE														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000966		08-29-1995	RAB MEMBERS		07-27-1995								JULY 27, 1995 RAB MEETING MINUTES	ADMIN RECORD INFO REPOSITORY	MTG MINS PUB. PARTICIPAT	002 003 005 017 024 025 OU 2 OU 3	BECHTEL NATIONAL 80462347 IMAGED
MM		NONE															
NONE		10.4															
0016																	
M60050 / 000970		08-29-1995	MCAS EL TORO		07-27-1995								JULY 27, 1995 RAB MEETING MINUTES	ADMIN RECORD INFO REPOSITORY	MTG MINS PUB. PARTICIPAT	002 003 005 017 024 025 OU 2 OU 3	BECHTEL NATIONAL 80462347 IMAGED
MM		NONE															
NONE		10.4															
0019																	

UIC No. / Rec. No.	Doc. Control No.	Prd. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001067		12-11-1995	MCAS EL TORO		07-27-1995								JULY 27, 1995 RAB MEETING MINUTES	ADMIN RECORD	MTG MINS	001	BECHTEL
														INFO	PUB. PARTICIPAT	002	NATIONAL
MM		NONE	RAB MEMBERS											REPOSITORY	RAB	003	80462364
NONE		10.4														004	IMAGED
0007																005	
																006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																018	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 1	
																OU 2	
																OU 2A	
																OU 2B	
																OU 2C	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001068		12-11-1995	MCAS EL TORO		08-31-1995								AUGUST 31, 1995 RAB MEETING MINUTES (PARTIALLY PRIVILEGED AND CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL DOC	MTG MINS PUB. PARTICIPAT RAB	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 024 025 OU 1 OU 2 OU 2A OU 2B OU 2C OU 3	BECHTEL NATIONAL 80462364 IMAGED
MM		NONE	RAB MEMBERS														
NONE		10.4															
0009																	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001069		12-11-1995	MCAS EL TORO		08-31-1995								RAB MAILING LIST (PARTIALLY PRIVILEGED AND CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL DOC	MAILING LST RAB	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 024 025 OU 1 OU 2 OU 2A OU 2B OU 2C OU 3	BECHTEL NATIONAL 80462364 IMAGED
MISC NONE 0009		NONE 10.4	RAB MEMBERS														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001055	12-11-1995	BROWN,PISTONE,	REQUEST FOR APPLICATION FOR	ADMIN RECORD	RAB								001	BECHTEL
	09-05-1995	HU	MEMBERSHIP IN THE RESTORATION										002	NATIONAL
LTR	NONE	G.F. HURLEY	ADVISORY BOARD (RAB)										003	80462364
NONE	10.1	NAVFAC -											004	IMAGED
0001		SOUTHWEST											005	
		DIVISION											006	
		J. JOYCE											007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													018	
													019	
													020	
													021	
													022	
													024	
													025	
													OU 1	
													OU 2	
													OU 2A	
													OU 2B	
													OU 2C	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001057		12-11-1995	BECHTEL										DRAFT AGENDA AND PUBLIC NOTICE	ADMIN RECORD	MAILING LST	001	BECHTEL
		09-14-1995	NATIONAL										SEPTEMBER 28, 1995 WITH RAB MAILING	CONFIDENTIAL	PUB. PARTICIPAT	002	NATIONAL
LTR		00063	D.K. COWSER										LIST (DOCUMENT MADE DISCLOSABLE)	DOC	RAB	003	80462364
N68711-92-D-4670		10.3	SOUTHWEST													004	IMAGED
0008			DIVISION													005	
			L. NUZUM													006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																018	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 1	
																OU 2	
																OU 2A	
																OU 2B	
																OU 2C	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001062		12-11-1995	MCAS EL TORO							SEPTEMBER 28, 1995 RAB MEETING MINUTES WITH ATTENDANCELIST (PARTIACLLY PRIVELEGED AND CONFIDENTIAL)	ADMIN RECORD	MTG MINS	001	BECHTEL
		09-28-1995									CONFIDENTIAL	PUB. PARTICIPAT	002	NATIONAL
MM		NONE	COMMUNITY								DOC	RAB	003	80462364
NONE		10.4	MEMBER								INFO		004	IMAGED
0012											REPOSITORY		005	
													006	
													007	
													008	
													009	
													010	
													011	
													012	
													013	
													014	
													015	
													016	
													017	
													018	
													019	
													020	
													021	
													022	
													024	
													025	
													OU 1	
													OU 2	
													OU 2A	
													OU 2B	
													OU 2C	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001070		12-11-1995	MCAS EL TORO										NOTICE OF RAB MEETING FOR OCTOBER 26, 1995 AND RAB MAILING LIST (PARTIALLY PRIVILEGED AND CONFIDENTIAL)	ADMIN RECORD	PUB. PARTICIPAT	001	BECHTEL
		10-12-1995	J. JOYCE											CONFIDENTIAL	PUBNOT	002	NATIONAL
MISC		NONE	RAB MEMBERS											DOC	RAB	003	80462364
NONE		10.4												INFO		004	IMAGED
0008														REPOSITORY		005	
																006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																018	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 1	
																OU 2	
																OU 2A	
																OU 2B	
																OU 2C	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001195 CLE-J02-01F145-S1-0010 LTR N68711-89-D-9296 0021	01-23-1996 12-15-1995 00145 10.1	JACOBS ENGINEERING J. DOLEGOWSKI NAVFAC - SOUTHWEST DIVISION A. BARKER	AGENCY & RESTORATION ADVISORY BOARD REVIEW OF THE DRAFT PROPOSED PLAN	ADMIN RECORD	GW HRA RAB	OU 1	SOUTHWEST DIVISION 37041206* IMAGED							
M60050 / 002632 NONE MISC NONE 0018	05-21-2002 12-15-1995 NONE	DTSC - LONG BEACH J. JIMENEZ MCAS EL TORO J. JOYCE	COMMENTS ON THE DRAFT SECOND INTERIM ACTION OPERABLE UNIT 1 FEASIBILITY STUDY REPORT (INCLUDED ALSO ARE COMMENTS FROM CRWQCB) (SEE AR #1006-1008 - DRAFT IAFS REPORT)	ADMIN RECORD BASE	ARAR COMMENTS DATA FS GW HAZ WASTE RCRA TCE VOC WATER WELLS	018 024 OU 1	SOUTHWEST DIVISION							
M60050 / 002633 NONE MISC NONE 0012	05-21-2002 12-15-1995 NONE	US EPA - SAN FRANCISCO B. ARTHUR MCAS EL TORO J. JOYCE	COMMENTS ON THE DRAFT SECOND INTERIM ACTION OPERABLE UNIT 1 FEASIBILITY STUDY REPORT (SEE AR #1006-1008 - IAFS REPORT)	ADMIN RECORD BASE	AOC ARAR BCT BRAC COMMENTS FS GW METALS PRG ROD SOIL SVE TCE VOC WATER WELLS	018 024 OU 1 OU 3	SOUTHWEST DIVISION							

UIC No. / Rec. No.

Doc. Control No.	Prc. Date	Author Affil.						
Record Type	Record Date	Author						
Contr./Guid. No.	CTO No.	Recipient Affil.						
Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location	Box No.
M60050 / 002634	05-21-2002	CITY OF IRVINE	COMMENTS ON THE DRAFT INTERIM ACTION OPERABLE UNIT 1 FEASIBILITY STUDY REPORT (SEE AR #1006-1008 - IAFS REPORT)	ADMIN RECORD	COMMENTS	018	SOUTHWEST DIVISION	
NONE	12-18-1995	P. HERSH		BASE	COST	OU 1		
MISC	NONE	MCAS EL TORO			FS			
NONE		OU-1 SUB-COMMITTEE			GW			
0003					RAB			
					ROD			
					TCE			
					VOC			
M60050 / 001433	04-03-1996	BECHTEL	DRAFT MINUTES FROM THE 30 NOVEMBER 1995 RESTORATION ADVISORY BOARD (RAB) MEETING; INCLUDES: SIGN-IN SHEETS, FLIER, AND RAB MAILING LIST	ADMIN RECORD	MTG MINS	001	BECHTEL	
CTO-0063/0210	01-12-1996	NATIONAL, INC.		INFO	PIM	002	NATIONAL	
MM	00063	D. COWSER		REPOSITORY	PUBNOT	003	80462355	
N68711-92-D-4670	10.0	NAVFAC - SOUTHWEST DIVISION			RAB	004	IMAGED	
0021		P. KENNEDY				005		
						006		
						007		
						008		
						009		
						010		
						011		
						012		
						013		
						014		
						015		
						016		
						017		
					018			
					019			
					020			
					021			
					022			
					024			
					025			
					OU 1			
					OU 2			
					OU 3			



UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr/Guid. No.	CTO No.	CTO No.	Recipient	Subject	Classification	Keywords	Sites	Location Box No.			
Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.				
M60050 / 001472	05-21-1996	US EPA REGION I	US EPA LETTER TRANSMITTING	ADMIN RECORD	COMMENTS	018	BECHTEL				
	02-16-1996	B. ARTHUR	COMMENTS ON THE DRAFT OU 1 INTERIM		DRINKING WATE	024	NATIONAL				
LTR	NONE	MCAS EL TORO	PROPOSED PLAN		FS	OU 1	80462357				
NONE	10.1	J. JOYCE			GW	OU 2A	IMAGED				
0005					MW						
					NCP						
					PROPOSED PLAN						
					ROD						
					SOLVENTS						
					TCE						
					VOC						
					WATER						
					WELLS						
M60050 / 002637	05-22-2002	DTSC - LONG	COMMENTS ON THE DRAFT OU 1 INTERIM	ADMIN RECORD	COC	018	SOUTHWEST				
NONE	02-16-1996	BEACH	PROPOSED PLAN WITH ENCLOSURE OF	BASE	COMMENTS	024	DIVISION				
MISC	NONE	T. MAHMOUD	ADDITIONAL COMMENTS FROM THE		DCE	OU 1					
NONE		MCAS EL TORO	PUBLIC PARTICIPATION SPECIALIST AND		DRINKING WATE	OU 2A					
0031		J. JOYCE	INFORMATION MATERIALS		GW						
					PCE						
					PROPOSED PLAN						
					SOIL						
					TCE						
					VOC						
					WELLS						
M60050 / 001413	03-25-1996	BECHTEL	DRAFT PHASE II REMEDIAL	ADMIN RECORD	OU	024	BECHTEL				
CTO-0073/0080	02-20-1996	NATIONAL	INVESTIGATION REPORT OPERABLE UNIT	INFO	RI	OU 2A	NATIONAL				
RPT	00073	P. BROOKS	(OU) 2A SITE 24, DATED FEBRUARY 1996 -	REPOSITORY			80462354				
N68711-92-D-4670	03.4	SOUTHWEST	(VOLUME I OF IV), TEXT				IMAGED				
0300		DIVISION									
		P. KENNEDY									

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001402	03-20-1996	MCAS EL TORO	DOCUMENTS FOR 23 AND 24 FEBRUARY	ADMIN RECORD	PUB. PARTICIPAT	001								BECHTEL
	02-27-1996	C. WIEMERT	1996 MCAS EL TORO RAB TOUR INCLUDES	INFO	RAB	002								NATIONAL
MISC	00063	BECHTEL	TOUR INFORMATION, PUBLIC NOTICE AND	REPOSITORY		003								80462354
NONE	10.0	NATIONAL	TOWN HALL FLIER			004								IMAGED
0025		B. COLEMAN				005								
						006								
						007								
						008								
						009								
						010								
						011								
						012								
						013								
						014								
						015								
						016								
						017								
						018								
						019								
						020								
						021								
						024								
						025								
						OU 1								
						OU 2								
						OU 3								

UIC No. / Rec. No.	Doc. Control No.	Prs. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guld. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002639		05-22-2002	DTSC - LONG BEACH	NONE	04-18-1996	T. MAHMOUD			MCAS EL TORO			J. JOYCE	TRANSMITTAL OF COMMENTS FROM DTSC, DTSC - HUMAN AND ECOLOGICAL RISK SECTION, AND CRWQCB ON THE DRAFT PHASE II REMEDIAL INVESTIGATION REPORT FOR THE VOC SOURCE AREA, OPERABLE UNIT 2A (SEE AR #1269 - RI)	ADMIN RECORD BASE	BCT BRAC COMMENTS DQO GW RCRA RD REMEDIAL ACTIO RI SOIL SOLVENTS TCE TOC UST VOC WELLS	024 BLDG. 296 BLDG. 297 OU 2A	SOUTHWEST DIVISION
M60050 / 002008		09-24-1997	MCAS EL TORO	MISC	04-24-1996	RAB MEMBERS					10.4		PUBLIC INFORMATION MATERIALS FOR APRIL 24, 1996 INCLUDES AGENDA, RAB MEETING MINUTES OF 2/28/96, SIGN-IN SHEETS OF 4/24/96	ADMIN RECORD INFO REPOSITORY	MTG MINS PUB. PARTICIPAT PUBNOT RAB	024 OU 2A TANK 398	SOUTHWEST DIVISION 37041254* IMAGED
M60050 / 001932		04-29-1997	NAVFAC - SOUTHWEST DIVISION	LTR	05-01-1996	L. NUZUM					10.1		REQUEST THAT DTSC AS LEAD AGENCY FOR STATE OF CALIFORNIA ARARS FOR OPERABLE UNIT (OU) 24	ADMIN RECORD	ARAR REQUEST	024 025 OU 2	SOUTHWEST DIVISION
M60050 / 001775		03-20-1997	ORANGE CO. REGIS	MISC	07-24-1996	PUBLIC INTEREST					10.6		JULY 31, 1996 PUBLIC NOTICE OF MCAS EL TORO AND TUSTINRAB MEETING	ADMIN RECORD INFO REPOSITORY	OU PRESS REL PUB. PARTICIPAT PUBNOT RAB	013 018	SOUTHWEST DIVISION 37041241* IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 001980	09-18-1997	MCAS EL TORO			07-31-1996					PUBLIC INFORMATION MATERIALS FOR JULY 31, 1996, RAB MEETING-AGENDA, HANDOUTS	ADMIN RECORD INFO REPOSITORY	BRAC CLEANUP GW LANDFILL MTG MINS PUB. PARTICIPAT PUBNOT RAB SOIL UST VOC WATER	002 003 005 015 017 018 019 020 024 025 OU 1 OU 2A OU 2B OU 2C OU 3 TANK 398	SOUTHWEST DIVISION 37041248* IMAGED
MISC NONE 0100	NONE 10.3	RAB MEMBERS												
M60050 / 001645	09-27-1996	BECHTEL			08-09-1996					DRAFT PHASE II FEASIBILITY STUDY REPORT FOR THE OU 2A VOC SOURCE AREA (DISCREPANCY IN TEXT EDIT TOC TABLES 3-3 THRU 3-7 TO BE IN PLACE IN FINAL PHASE II FS REPORT) (SEE AR #490 & 491 - COMMENTS BY RAB MEMBER & #2645- IRWD COMMENTS)	ADMIN RECORD INFO REPOSITORY	COST FS	024 OU 1 OU 2A	BECHTEL NATIONAL 37041205 IMAGED
CTO-0073/0159 RPT N68711-92-D-4670 2000	00073 04.2	G.BROOKS NAVFAC - SOUTHWEST DIVISION												
M60050 / 001671	09-30-1996	BNI SAN DIEGO			09-11-1996					SEPTEMBER 25, 1996, DRAFT RAB MEETING AGENDA SITE (B) BASEWIDE COMMUNITY RELATIONS SUPPORT MEETING MAILER & JULY 31, 1996 DRAFT MEETING MINUTES	ADMIN RECORD INFO REPOSITORY	CRP MTG MINS NFA PUB. PARTICIPAT RAB	002 004 007 011 013 014 017 019 020 B OU 2A	BECHTEL NATIONAL 80462359 IMAGED
XMTL N6871192D467000 0013	0063B 10.5	D. COWSER SOUTHWEST DIVISION R. SELBY												

## UIC No. / Rec. No.

Doc. Control No.	Prc. Date	Author Affil.						Location
Record Type	Record Date	Author						Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.						
Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites		
M60050 / 001983	09-18-1997 09-25-1996	MCAS EL TORO	PUBLIC INFORMATION MATERIALS FOR SEPTEMBER 25, 1996, MEETING-AGENDA, HANDOUTS, & MINUTES OF JULY 31, 1996 RAB MTG., SIGN-IN SHEETS, REV. "BLUE SHEET"	ADMIN RECORD INFO REPOSITORY	CLEANUP MTG MINS PUB. PARTICIPAT PUBNOT SOIL	002 003 005 015 017 018 019 020 024 025 OU 1 OU 2A OU 2B OU 2C OU 3 TANK 398	SOUTHWEST DIVISION 37041248* IMAGED	
MISC NONE 0068	NONE 10.4	RAB MEMBERS						
M60050 / 001930	04-29-1997 10-08-1996	BL ASSOCIATES M. RUDOLPH	COMMENTS ON DRAFT PHASE II FEASIBILITY STUDY FOR OPERABLE UNIT 2A VOC SOURCE AREA, FROM THE ORANGE COUNTY WATER DISTRICT AND OU 2 SUBCOMMITTEE CO-CHAIR W/ENCLS	ADMIN RECORD INFO REPOSITORY	COMMENTS FS GW VOC	024 OU 2A	SOUTHWEST DIVISION	
LTR NONE 0003	NONE 10.1	NAVFAC - SOUTHWEST DIVISION J. JOYCE						
M60050 / 002645	05-22-2002 10-08-1996	IRVINE RANCH WATER DISTRICT R. MCVICKER	COMMENTS ON THE DRAFT FINAL OPERABLE UNIT 1 INTERIM-ACTION FEASIBILITY STUDY REPORT ADDENDUM AND THE DRAFT PHASE II FEASIBILITY STUDY REPORT FOR THE OPERABLE UNIT 2A VOC SOURCE AREA	ADMIN RECORD BASE	COMMENTS FS GW REMEDIAL ACTIO TCE VOC	024 OU 1 OU 2A	SOUTHWEST DIVISION	
NONE LTR NONE 0002	NONE	MCAS EL TORO J. JOYCE						
M60050 / 001875	03-26-1997 10-10-1996	EPA SAN FRANCISCO B. ARTHUR	ACCEPTANCE OF "DRAFT FINAL INTERIM ACTION REMEDIAL INVESTIGATION/ FEASIBILITY STUDY REPORTS." AND COMMENTS FOR FUTURE OU 1 DRAFT FINAL PROPOSED PLAN AND RECORD OF DECISION	ADMIN RECORD INFO REPOSITORY	COMMENTS FS OU RI ROD	018 OU 1	SOUTHWEST DIVISION 37041242* IMAGED	
LTR NONE 0009	NONE 10.1	MCAS EL TORO J. JOYCE						

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002042	CTO-0073/0360	12-15-1997	BECHTEL NATIONAL, INC.	MISC	10-10-1996	D. TEDALDI	N68711-92-D-4670	00073	VARIOUS AGENCIES	0038	10.1		COMPILED RESPONSE TO COMMENTS ON DRAFT PHASE II FEASIBILITY STUDY FOR THE OPERABLE UNIT 2A VOC SOURCE AREA (SEE AR #2645 - IRWD COMMENTS & #1645 - FS)	ADMIN RECORD INFO REPOSITORY	COMMENTS FS GW RESPONSE SOIL VOC	024 OU 2A	IRON MOUNTAIN 37041253 IMAGED
M60050 / 001708	MISC	11-13-1996	BNI SAN DIEGO	N6871192D467000	10-15-1996	D. COWSER	0025	0063B	SOUTHWEST DIVISION		10.1	R. SELBY	SITE (B) BASEWIDE COMMUNITY RELATIONS SUPPORT-EL TORO DRAFT FACT SHEET NO. 7-CYCLE 2 REVIEW, DTD 10/14/96	ADMIN RECORD INFO REPOSITORY	CRP	019 OU 1 OU 2A UNIT 2	BECHTEL NATIONAL 80462360
M60050 / 001709	MISC	11-13-1996	BNI SAN DIEGO	N6871192D467000	10-15-1996	D. COWSER	0025	0063B	SOUTHWEST DIVISION		10.1	R. SELBY	SITE (B) BASEWIDE COMMUNITY RELATIONS SUPPORT-EL TORO DRAFT FACT SHEET NO. 7-CYCLE 2 REVIEW, DTE 10/14/96	ADMIN RECORD INFO REPOSITORY	CRP	019 OU 1 OU 2A UNIT 2	BECHTEL NATIONAL 80462360 IMAGED
M60050 / 001927	LTR NONE 0005	04-29-1997	EPA SAN FRANCISC		10-15-1996	B. ARTHUR		NONE	MCAS EL TORO		10.1	J. JOYCE	COMMENTS ON THE DRAFT PHASE II FEASIBILITY STUDY OPERABLE UNIT 2A REPORT ON OCTOBER 11, 1996	ADMIN RECORD INFO REPOSITORY	COMMENTS FS OU	025 OU 2A	SOUTHWEST DIVISION

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001848		03-24-1997			12-04-1996								DECEMBER 4, 1996 RAB MEETING PUBLIC INFO. MATERIALS INCLDS: MTG. AGENDA, DRF MTG. MIN., MEMBER SIGN-UP SHEET, FACT SHT.#7, EXEC.SUMRY ON DRFT RI OU 3A, ETC.	ADMIN RECORD INFO REPOSITORY	IRP PUB. PARTICIPAT RAB	002 003 004 005 006 008 009 010 011 012 013 015 016 017 018 019 020 021 022 024 OU 1 OU 2A OU 2B OU 2C OU 3A	SOUTHWEST DIVISION 37041242* IMAGED
MISC		NONE															
NONE		10.4															
0156																	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001981		09-18-1997	MCAS EL TORO		12-04-1996								PUBLIC INFORMATION MATERIALS FOR DECEMBER 4, 1996, RAB MEETING- AGENDA, HANDOUTS, & MINUTES OF SEPTEMBER 25, 1996, REVISED "BLUE SHEET" FOR 12/4/96 MTG.	ADMIN RECORD INFO REPOSITORY	CLEANUP LANDFILL MTG MINS OU PUB. PARTICIPAT PUBNOT RAB SOIL	002 003 004 005 006 008 009 010 011 012 013 015 016 017 018 019 021 022 OU 1 OU 2B OU 2C OU 3A	SOUTHWEST DIVISION 37041248* IMAGED
MISC NONE 0173		NONE 10.4	RAB MEMBERS														
M60050 / 001850		03-24-1997	BECHTEL NATIONAL		12-12-1996								FINAL FACT SHEET NO. 7 UPDATE ON ENVIRONMENTAL RESTORATION PROGRAM (MAILING LIST IN CONFIDENTIAL FILE)	ADMIN RECORD CONFIDENTIAL DOC INFO REPOSITORY	CLEANUP PUB. PARTICIPAT	024 OU 1 OU 2A	BECHTEL NATIONAL 80462363 IMAGED
XMTL N6871192D467000 0056		0063B 10.6	H. MASRI VARIOUS AGENCIES														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001737		03-17-1997	BECHTEL										DRAFT FINAL PHASE II REMEDIAL	ADMIN RECORD	RI	007	BECHTEL
		03-11-1997	NATIONAL										INVESTIGATION REPORT OPERABLE UNIT	INFO		008	NATIONAL
RPT		00073	G. BROOKS										2A-SITE 24 VOLUME I, VOLUME II, VOLUME	REPOSITORY		009	80462363
N68711-92-D-4670		03.4	SOUTHWEST										III, APPENDICES A-J, VOLUME IV,			010	IMAGED
3050			DIVISION										APPENDICES K-P			011	
																012	
																022	
																024	
																025	
																BLDG. 296	
																BLDG. 297	
																BLDG. 299	
																BLDG. 326	
																BLDG. 359	
																BLDG. 360	
																BLDG. 529	
																BLDG. 655	
																BLDG. 800	
																OU 1	
																OU 2A	
																OU 3	
M60050 / 001846		03-24-1997	BECHTEL										DRAFT PROPOSED PLAN	ADMIN RECORD	OU	024	SOUTHWEST
CTO-0063/0529		03-11-1997	NATIONAL, INC.												PROPOSED PLAN	025	DIVISION
XMTL		00063	C. CARLISLE												SOIL	OU 2A	37041242*
N68711-92-D-4670		01.1	VARIOUS														IMAGED
0011			AGENCIES														
M60050 / 001938		05-28-1997	MCAS EL TORO										PUBLIC INFORMATION	ADMIN RECORD	COMMENTS	024	SOUTHWEST
		03-26-1997											MATERIALS/HANDOUTS INCLUDES: RAB	INFO	MTG MINS	OU 2A	DIVISION
MISC		NONE	PUBLIC INTEREST										MEETING AGENDA, JANUARY 30, 1997	REPOSITORY	PUB. PARTICIPAT		37041243*
NONE		10.3											DRAFT MTG MINUTES, COMMENTS FROM		RAB		IMAGED
0075													VARIOUS AGENCIES				



UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000339		04-12-2000	RAB MEMBER										COMMENTS BY RAB MEMBER ON THE SITE	ADMIN RECORD	COMMENTS	024	SOUTHWEST
NONE		05-28-1997	E. COHN										24 SOIL CLEANUP PROPOSED PLAN	CONFIDENTIAL	SOIL		DIVISION
MISC		NONE	NAVFAC -										(MAILING LIST IS CONFIDENTIAL)				SW01011005
NONE			SOUTHWEST														
0003			DIVISION														
			J. JOYCE														
M60050 / 001934		05-28-1997	BECHTEL										SITE (B) BASEWIDE COMMUNITY	ADMIN RECORD	CRP	001	SOUTHWEST
		05-28-1997	NATIONAL										RELATIONS SUPPORT-INCLUDESMAY 28,	CONFIDENTIAL	MTG MINS	002	DIVISION
MISC		0063B	C. CARLISLE										1997 RAB AGENDA, MARCH 26, 1997 DRAFT	DOC	PUB. PARTICIPAT	003	37041243*
N6871192D467000		10.4	VARIOUS										MEETING MINUTES, PUBLIC NOTICE &	INFO	RAB	004	IMAGED
0017			AGENCIES										(MAILING LIST IN CONFIDENTL)	REPOSITORY			
																005	
																006	
																007	
																008	
																010	
																011	
																012	
																013	
																015	
																016	
																017	
																019	
																020	
																021	
																022	
																024	
																025	
																OU 1	
																OU 2C	
																OU 3	
																OU 3A	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001974		09-18-1997	MCAS EL TORO		05-28-1997								PUBLIC INFORMATION MATERIALS FOR MAY 28, 1997, RAB MEETING-AGENDA, HANDOUTS & DRAFT MEETING MINUTES FROM MARCH 26, 1997 RAB MEETING	ADMIN RECORD INFO REPOSITORY	MTG MINS PUB. PARTICIPAT PUBNOT RAB	002 004 006 008 009 010 011 012 013 015 016 017 019 020 021 022 024 025 OU 2A OU 2B OU 3 OU 3A	SOUTHWEST DIVISION 37041248* IMAGED
MISC NONE 0150		NONE 10.3	RAB MEMBERS														
M60050 / 000342		04-12-2000	RAB COMMUNITY CO-CHAIR		05-29-1997								COMPILED COMMENTS, STATEMENTS, AND QUESTIONS BY RAB COMMUNITY CO-CHAIR ON THE PROPOSED PLAN, SVE OF VADOSE ZONE SOIL (WITH ATTACHMENTS)	ADMIN RECORD	ARAR DCE FS GW PCE RAB ROD SVE TCA TCE TDS VOC	024 OU 1 OU 2 OU 2A	SOUTHWEST DIVISION SW01011005
NONE MISC NONE 0020		NONE	C. BENNETT VARIOUS														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	EPA Cat. #	Recipient	Approx. # Pages								
M60050 / 000388		04-18-2000	RAB MEMBER					COMMENTS REGARDING THE PROPOSED PLAN WHICH PERTAINS TO THE SOIL IN THE VADOSE ZONE (MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL	COMMENTS GW RAB SOIL	024	SOUTHWEST DIVISION SW01011005
NONE		05-29-1997	M. RUDOLPH									
LTR		NONE	NAVFAC - SOUTHWEST DIVISION									
NONE			J. JOYCE	0002								
M60050 / 000144		09-21-1999	EL TORO LOCAL REDEVELOPMENT					COMMENTS ON PROPOSED PLAN FOR ENVIRONMENTAL RESTORATION	ADMIN RECORD	IRP VOC	024	SOUTHWEST DIVISION SW01011002
NONE		05-30-1997	C. WIERCIOCH									
LTR		NONE	MCAS EL TORO									
NONE		10.1	J. JOYCE	0002								
M60050 / 000337		04-12-2000	RAB MEMBER					PUBLIC COMMENT PERIOD, "PROPOSED NO FURTHER ACTION SITES" (MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL	NFA PUBNOT	024	SOUTHWEST DIVISION SW01011005
NONE		05-30-1997	J. WERNER									
LTR		NONE	NAVFAC - SOUTHWEST DIVISION									
NONE			J. JOYCE	0002								
M60050 / 000341		04-12-2000	RAB MEMBER					COMMENTS BY RESTORATION ADVISORY BOARD MEMBER ON SOIL CLEANUP PROPOSED PLAN (MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL	COMMENTS SOIL SVE TCE	024	SOUTHWEST DIVISION SW01011005
NONE		05-30-1997	J. WERNER									
LTR		NONE	NAVFAC - SOUTHWEST DIVISION									
NONE			J. JOYCE	0002								
M60050 / 000384		04-18-2000	ALZETA CORP, SANTA CLARA, CA					COMMENTS ON THE CONTAMINATED SOILS CLEANUP, SOIL VAPOR EXTRACTION WITH CARBON ABSORPTION AND REGENERATION PROPOSED PLAN	ADMIN RECORD	EMISSION SOIL SVE	024	SOUTHWEST DIVISION
NONE		05-30-1997	B. MYATT									
LTR		NONE	NAVFAC - SOUTHWEST DIVISION									
NONE			J. JOYCE	0003								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001959		06-30-1997	ORANGE COUNTY		06-20-1997	REPORTER			NEWSPAPER ARTICLE: "ELEVEN EL TORO SITES WON'T NEED CLEANUP, MARINES SAY"			GENERAL PUBLIC		ADMIN RECORD	FUEL	004	SOUTHWEST DIVISION
MISC		NONE												INFO REPOSITORY	NEWSART	006	37041248*
NONE		10.6													PIM	009	IMAGED
0001																010	
																013	
																015	
																019	
																020	
																021	
																022	
																025	
																OU 2A	
																OU 3A	
M60050 / 001960		06-30-1997	BECHTEL NATIONAL		06-25-1997				RESPONSIVENESS SUMMARY: RESPONSE TO COMMENTS; COMMENTS FROM PROGRAM MANAGER MCAS EL TORO LOCAL REDEVELOPMENT AUTHORITY ON OU 2A VADOSE ZONE					ADMIN RECORD	CERCLA	024	SOUTHWEST DIVISION
CTO-135/0049		00135													COMMENTS	BLDG. 296	37041248*
MISC		10.1	SOUTHWEST DIVISION												GW	BLDG. 297	IMAGED
N68711-92-D-4670															OU	OU 2A	
0004															PUB. PARTICIPAT		
															RESPONSE		
															SOIL		
															VOC		
M60050 / 001962		06-30-1997	BECHTEL NATIONAL, INC.		07-01-1997				DRAFT INTERIM RECORD OF DECISION OPERABLE UNIT 2A VOC SOURCE AREA VADOSE ZONE (SEE AR #2660 - US EPA COMMENTS)					ADMIN RECORD	GW	024	BECHTEL NATIONAL
CTO-135/0033 &		00135													OU	OU 2A	37041248
CTO-0135/0101 &		05.0	D. TEDALDI												PIM		IMAGED
CTO-0135/0098			VARIOUS AGENCIES												ROD		
RPT															SOIL		
N68711-92-D-4670															VOC		
0162																	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.						
Record Type	Record Date	Author							
Contr./Guid. No.	CTO No.	Recipient Affil.							
Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.		
M60050 / 002660	05-28-2002	US EPA - SAN FRANCISCO	COMMENTS ON THE DRAFT INTERIM RECORD OF DECISION OPERABLE UNIT 2A VOC SOURCE AREA VADOSE ZONE (SEE AR #1962 - DRAFT ROD)	ADMIN RECORD BASE	ARAR COMMENTS COPC GW ROD SOIL SVE TCE VOC	024 OU 2A	SOUTHWEST DIVISION		
NONE	07-24-1997	G. KISTNER							
LTR	NONE	MCAS EL TORO							
NONE		J. JOYCE							
0003									
M60050 / 001973	09-18-1997	MCAS EL TORO	PUBLIC INFORMATION MATERIALS FOR AUGUST 6, 1997, RAB MEETING-AGENDA, HANDOUTS & DRAFT MEETING MINUTES FROM MAY 28, 1997 RAB MEETING	ADMIN RECORD INFO REPOSITORY	MTG MINS PUB. PARTICIPAT PUBNOT RAB	004 006 008 009 010 011 012 013 015 016 019 020 021 022 024 025 OU 2A OU 3A	SOUTHWEST DIVISION 37041248* IMAGED		
MISC	08-06-1997	RAB MEMBERS							
NONE	NONE								
0133	10.3								

UIC No. / Rec. No.	Doc. Control No.	Pr. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001967	09-18-1997	BECHTEL	DRAFT RECORD OF DECISION OPERABLE	ADMIN RECORD	NFA	004	SOUTHWEST										
CTO-135/0034	08-18-1997	NATIONAL	UNITS 2A AND 3A NO ACTION SITES	OU	006	DIVISION											
RPT	00135	D. TEDALDI		ROD	009	37041248*											
N68711-92-D-4670	05.1	VARIOUS			010	IMAGED											
0129		AGENCIES			013												
					015												
					019												
					020												
					021												
					022												
					025												
					OU 2A												
					OU 3A												
M60050 / 001996	09-23-1997	BECHTEL	DRAFT FINAL INTERIM RECORD OF	ADMIN RECORD	OU	024	SOUTHWEST										
CTO-135/0082	09-01-1997	NATIONAL, INC.	DECISION - VOC SOURCE AREA, VADOSE	INFO	ROD	OU 2A	DIVISION										
RPT	00135	D. TEDALDI	ZONE (SEE AR #2661 - SIGNED SIGNATURE	REPOSITORY	VOC		37041257*										
N68711-92-D-4670	10.0	VARIOUS	PAGE FROM CRWQCB)				IMAGED										
0050		AGENCIES															

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001986		09-18-1997	MCAS EL TORO		09-05-1997	J. JOYCE							ADVANCED SUBMITTAL OF FEDERAL FACILITIES AGREEMENT EXTENSION REQUEST FOR CHANGES TO THE DRAFT FINAL INTERIM RECORD OF DECISION (ROD) FOR OU 2A, OU 2B AND OU 2C	ADMIN RECORD	FFA ROD	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 024 025 OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION 37041248* IMAGED
FAX NONE 0005		NONE 01.6	VARIOUS AGENCIES														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001977		09-18-1997	BECHTEL		09-16-1997	NATIONAL, INC.							DRAFT RESPONSIVENESS SUMMARY PROPOSED PLAN, NO ACTION SITES	ADMIN RECORD INFO REPOSITORY	CLEANUP GW NFA OU ROD SOIL VOC	004 006 009 010 013 015 019 020 021 022 024 025 OU 2A OU 3A	SOUTHWEST DIVISION 37041248* IMAGED
MISC NONE 0015		NONE 10.1	D. TEDALDI SOUTHWEST DIVISION R. SELBY														
M60050 / 001979		09-18-1997	MCAS EL TORO		09-17-1997	COMMANDING OFFICER							FAXED COPIES OF VARIOUS NEWS CLIPPINGS: PUBLIC NOTICE DATED 31 JULY 1997, PRESENTATION & DISCUSSION MEETING, IRP PROPOSED PLAN OPERABLE UNIT 2A, NO FURTHER ACTION OPERABLE UNIT 3A	ADMIN RECORD INFO REPOSITORY	GW NFA PIM PROPOSED PLAN PUBNOT ROD SOIL VOC	024 OU 2A OU 3A	SOUTHWEST DIVISION
NONE FAX NONE 0004		NONE 10.3	BECHTEL NATIONAL, INC. B. COLEMAN														
M60050 / 001985		09-18-1997	NAVFAC -		09-18-1997	SOUTHWEST DIVISION							INTERIM RECORD OF DECISION (ROD) OU 2A, SITE 24 VOC SOURCE AREA; MODIFICATION OF THE LANGUAGE INCLUDED AT THE END OF DRAFT FINAL ROD, SECTION 10.2.1.1	ADMIN RECORD INFO REPOSITORY	ROD VOC	024 OU 2A	SOUTHWEST DIVISION 37041248* IMAGED
LTR NONE 0002		NONE 01.6	R. CALLAWAY VARIOUS AGENCIES														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001987		09-18-1997	MCAS EL TORO		09-18-1997	J. JOYCE							SUBMITTAL OF FEDERAL FACILITIES AGREEMENT EXTENSION REQUEST FOR CHANGES IN THE DRAFT FINAL INTERIM RECORD OF DECISION (ROD) FOR OU 2A, OU 2B AND OU 2C (SEE AR #2662 - CRWQCB RESPONSE)	ADMIN RECORD	BCT BRAC FFA ROD VOC	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 024 025 OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION 37041248* IMAGED
LTR		NONE	VARIOUS														
NONE		01.6	AGENCIES														
0006																	
M60050 / 001997		09-23-1997	BECHTEL NATIONAL, INC.		09-23-1997	D. TEDALDI							RESPONSE TO COMMENTS ON DRAFT INTERIM ROD, OPERABLE UNIT 2A, VOC SOURCE AREA VADOSE ZONE AND ASSOCIATED RESPONSIVENESS SUMMARY (VARIOUS DATES) (SEE AR #2660 - EPA COMMENTS & #1962 - DRAFT ROD)	ADMIN RECORD INFO REPOSITORY	COMMENTS GW RESPONSE ROD SOIL VOC	024 OU 2A	SOUTHWEST DIVISION 37041257* IMAGED
CTO-135/0091																	
MISC		00135	VARIOUS														
N68711-92-D-4670		10.1	AGENCIES														
0020																	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002661	NONE	05-28-2002	CRWQCB - RIVERSIDE	LTR	09-23-1997	L. VITALE			MCAS EL TORO		NONE	J. JOYCE	TRANSMITTAL OF SIGNED SIGNATURE PAGE FOR THE DRAFT FINAL INTERIM RECORD OF DECISION - VOC SOURCE AREA, VADOSE ZONE (SEE AR #1996 - ROD)	ADMIN RECORD BASE	ROD VOC	024 OU 2A	SOUTHWEST DIVISION
M60050 / 001978	MISC N6871192D467000 0015	09-18-1997 09-24-1997	BECHTEL NATIONAL D. TEDALDI VARIOUS AGENCIES					10.4					RAB MEETING MAILER, AGENDA, & PUBLIC NOTICE OF SEPTEMBER 24, 1997, RAB MEETING MINUTES OF AUGUST 6, 1997 (MAILER IN CONFIDENTIAL FILE)	ADMIN RECORD CONFIDENTIAL DOC INFO REPOSITORY	CLEANUP CRP FFA INVESTIGATION MTG MINS PUB. PARTICIPAT RAB ROD SOIL	001 004 006 007 008 009 010 011 012 013 014 015 016 019 020 021 022 024 025 OU 2A OU 3 OU 3A OU 3B	SOUTHWEST DIVISION 37041248* IMAGED

UIC No. / Rec. No.

Doc. Control No.	Proc. Date	Author Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Record Type	Record Date	Author					
Contr./Guid. No.	CTO No.	Recipient Affil.					
Approx. # Pages	EPA Cat. #	Recipient					
M60050 / 002039	11-24-1997	MCAS EL TORO	SEPTEMBER 24, 1997, RAB MEETING;	ADMIN RECORD	COMMENTS	001	SOUTHWEST
	09-24-1997	RAB	PUBLIC INFORMATION MATERIALS	INFO	MTG MINS	004	DIVISION
MISC	NONE	RAB MEMBERS	INCLUDES: RAB MTG.AGENDA, PUBLIC	REPOSITORY	PUB. PARTICIPAT	006	37041254*
NONE	10.6		NOTICE, RAB MTG.MINS OF 8/6/97, MISC.		PUBNOT	007	IMAGED
0071			AGENCIES COMMENTS		RAB	008	
						009	
						010	
						011	
						012	
						013	
						014	
						015	
						016	
						019	
						020	
						021	
						022	
						024	
						OU 2A	
						OU 3	
						OU 3A	
M60050 / 002025	11-21-1997	BECHTEL	RESPONSE TO COMMENTS ON DRAFT	ADMIN RECORD	COMMENTS	009	SOUTHWEST
CTO-135/0102	09-25-1997	NATIONAL, INC.	ROD, OUS 2A AND 3A, NO ACTION SITES	INFO	RESPONSE	024	DIVISION
LTR	00135	D. TEDALDI	AND ASSOCIATED RESPONSIVENESS	REPOSITORY	ROD	025	37041254*
N68711-92-D-4670	01.6	VARIOUS	SUMMARY (VARIOUS DATES)			OU 2A	IMAGED
0008		AGENCIES				OU 3A	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002020	09-26-1997	BECHTEL	DRAFT FINAL RECORD OF DECISION	ADMIN RECORD	ARAR	004	SOUTHWEST							
CTO-135/0086	09-26-1997	NATIONAL, INC.	OPERABLE UNITS 2A AND 3A NO ACTION	INFO	ARSENIC	006	DIVISION							
RPT	00135	D. TEDALDI	SITES (SEE AR #2663 - SIGNED	REPOSITORY	BCT	009	37041254*							
N68711-92-D-4670	05.1	VARIOUS	SIGNATURE PAGE FROM CRWQCB)		BRAC	010	IMAGED							
0100		AGENCIES			CANCER	013								
					COPC	015								
					COPEC	019								
					DQO	020								
					FFA	021								
					GW	022								
					METALS	025								
					MONITORING	OU 2A								
					MW	OU 3								
					NFA	OU 3A								
					NPL	OU 3B								
					OU									
					PCB									
					PCE									
					PESTICIDES									
					RAB									
					RFA									
					ROD									
					SOIL									
					SVOC									
					SWMU									
					TCE									
					TPH									
					UST									
					VOC									
M60050 / 002662	05-28-2002	CRWQCB -	RESPONSE TO FEDERAL FACILITIES	ADMIN RECORD	FFA	024	SOUTHWEST							
NONE	09-26-1997	RIVERSIDE	AGREEMENT EXTENSION REQUEST FOR	BASE	ROD	OU 2A	DIVISION							
LTR	NONE	L. VITALE	AN EXTENSION OF FIVE DAYS FOR THE											
NONE		MCAS EL TORO	DRAFT FINAL INTERIM RECORD OF											
0001		J. JOYCE	DECISION (ROD) - RWQCB CONCURS WITH											
			REQUEST (SEE AR #1987 - REQUEST)											

## UIC No. / Rec. No.

Doc. Control No.	Prs. Date	Author Affil.						Location
Record Type	Record Date	Author		Subject	Classification	Keywords	Sites	Box No.
Contr./Guld. No.	CTO No.	Recipient Affil.						
Approx. # Pages	EPA Cat. #	Recipient						
M60050 / 002663	05-28-2002	CRWQCB -		TRANSMITTAL OF SIGNED SIGNATURE	ADMIN RECORD	ROD	004	SOUTHWEST
NONE	09-29-1997	RIVERSIDE		PAGE FOR THE DRAFT FINAL RECORD OF	BASE		006	DIVISION
LTR	NONE	L. VITALE		DECISION OPERABLE UNITS 2A AND 3A NO			009	
NONE		MCAS EL TORO		ACTION SITES (SEE AR #2020 - ROD)			010	
0004		J. JOYCE					013	
							015	
							019	
							020	
							021	
							022	
							024	
							025	
							OU 2A	
							OU 3	
							OU 3A	
							OU 3B	
M60050 / 002037	11-24-1997	MCAS EL TORO		REQUEST CHANGES TO FEDERAL	ADMIN RECORD	FFA	018	SOUTHWEST
	09-30-1997	J. JOYCE		FACILITIES AGREEMENT (FFA) SUBMITTAL		FS	024	DIVISION
LTR	NONE	VARIOUS		DATES FOR THE PRE-DRAFT PROPOSED		ROD	OU 1	37041254*
NONE	01.6	AGENCIES		PLAN, DRAFT FINAL INTERIM ACTION			OU 2A	IMAGED
0005				FEASIBILITY STUDY, DRAFT PROPOSED				
				PLAN, AND DRAFT RECORD OF DECISION				
				(SEE AR #2664 & #2665 - DTSC				
				RESPONSES TO REQUEST)				
M60050 / 002664	05-28-2002	DTSC - LONG		ACKNOWLEDGEMENT OF RECEIPT OF	ADMIN RECORD	BCT	018	SOUTHWEST
NONE	10-03-1997	BEACH		REQUEST FOR EXTENSION OF SIX	BASE	BRAC	024	DIVISION
LTR	NONE	J. SCANDURA		DEADLINES FOR THE PRE-DRAFT		FFA	OU 1	
NONE		MCAS EL TORO		PROPOSED PLAN, DRAFT FINAL INTERIM		FS	OU 2A	
0003		J. JOYCE		ACTION FEASIBILITY STUDY, DRAFT		PROPOSED PLAN		
				PROPOSED PLAN, AND DRAFT RECORD OF		ROD		
				DECISION - DTSC WILL MAKE A DECISION				
				AFTER MEETING WITH THE BCT				
M60050 / 002665	05-28-2002	DTSC - LONG		RESPONSE TO REQUEST FOR EXTENSION	ADMIN RECORD	BCT	018	SOUTHWEST
NONE	10-17-1997	BEACH		OF SIX DEADLINES FOR THE PRE-DRAFT	BASE	BRAC	024	DIVISION
LTR	NONE	J. SCANDURA		PROPOSED PLAN, DRAFT FINAL INTERIM		FFA	OU 1	
NONE		MCAS EL TORO		ACTION FEASIBILITY STUDY, DRAFT		FS	OU 2A	
0003		J. JOYCE		PROPOSED PLAN, AND DRAFT RECORD OF		PROPOSED PLAN		
				DECISION - DTSC GRANTS REQUEST (SEE		ROD		
				AR #2037 - REQUEST)				

UIC No. / Rec. No.

Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002036	11-24-1997 10-20-1997	MCAS EL TORO J. JOYCE	LTR NONE 0003	NONE 01.6	VARIOUS AGENCIES							PROPOSED DEADLINES FOR COMPLETION OF POST RECORD OF DECISION DRAFT PRIMARY DOCUMENTS FOR OPERABLE UNIT 2A, VOLATILE ORGANIC COMPOUND SOURCE AREA (SEE AR #2049 - EPA RESPONSE)	ADMIN RECORD	FFA OU ROD VOC	024 OU 2A	SOUTHWEST DIVISION 37041254* IMAGED
M60050 / 002666	05-28-2002 10-22-1997	CRWQCB - RIVERSIDE L. VITALE MCAS EL TORO J. JOYCE	LTR NONE 0001	NONE								RESPONSE TO REQUEST FOR EXTENSION OF SIX DEADLINES FOR THE PRE-DRAFT PROPOSED PLAN, DRAFT FINAL INTERIM ACTION FEASIBILITY STUDY, DRAFT PROPOSED PLAN, AND DRAFT RECORD OF DECISION - CRWQCB GRANTS REQUEST (SEE AR #2037 - REQUEST)	ADMIN RECORD BASE	FFA FS GW PROPOSED PLAN ROD VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 002026	11-21-1997 10-29-1997	DTSC LONG BEACH M. MINGAY VARIOUS AGENCIES	LTR NONE 0049	NONE 01.6								RESPONSIVENESS SUMMARY FOR PROPOSED PLAN OU 2A VADOSE ZONE; FORWARDED TO INDIVIDUALS WHO SUBMITTED COMMENTS (MAILING LIST IN CONFIDENTIAL FILE)	ADMIN RECORD CONFIDENTIAL DOC	COMMENTS OU PUB. PARTICIPAT	007 008 009 010 011 022 024 BLDG. 296 BLDG. 297 OU 2A	SOUTHWEST DIVISION 37041254* IMAGED
M60050 / 002027	11-21-1997 10-29-1997	DTSC LONG BEACH M. MINGAY VARIOUS AGENCIES	LTR NONE 0024	NONE 01.6								RESPONSIVENESS SUMMARY FOR PROPOSED PLAN OU 2A AND 3A NO ACTION SITES; FORWARDED TO INDIVIDUALS WHO SUBMITTED COMMENTS (MAILING LIST IN CONFIDENTIAL FILE)	ADMIN RECORD CONFIDENTIAL DOC	COMMENTS OU PUB. PARTICIPAT	009 024 025 OU 2A OU 3A	SOUTHWEST DIVISION 37041254* IMAGED
M60050 / 002049	12-16-1997 11-05-1997	EPA SAN FRANCISCO G. KISTNER MCAS EL TORO J. JOYCE	LTR NONE 0002	NONE 01.6								RESPONSE TO LETTER DATED OCTOBER 20, 1997 THAT CONTAINED A PROPOSED SCHEDULE FOR REMEDIAL DESIGN/REMEDIAL ACTION DELIVERABLES (SEE AR #2036 - ORIGINAL LETTER)	ADMIN RECORD	FFA RD REMEDIAL ACTIO RESPONSE	024 OU 2A	IRON MOUNTAIN 37041253 IMAGED

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002030	11-21-1997	BECHTEL	COMMUNITY RELATIONS SUPPORT-RAB	ADMIN RECORD	CLEANUP	002	SOUTHWEST							
	11-19-1997	NATIONAL	MEETING AGENDA AND PUBLIC NOTICE	CONFIDENTIAL	PUB. PARTICIPAT	003	DIVISION							
MM	00155	D. TEDALDI	FOR 12/3/97 RAB MEETING RAB MEETING	DOC	PUBNOT	005	37041254*							
N6871192D467000	10.4	VARIOUS	SEPTEMBER 24, 1997 MTG. MIN.(MAILER IN	INFO	RAB	008	IMAGED							
0019		AGENCIES	CONFIDTL.FILE)	REPOSITORY		011								
						012								
						017								
						024								
						OU 2A								
						OU 3A								
M60050 / 002048	12-16-1997	MCAS EL TORO	DETAILED REVISED SCHEDULE FOR THE	ADMIN RECORD	GW	024	IRON MOUNTAIN							
	11-20-1997	J. JOYCE	PROPOSED POST RECORD OF DECISION,	INFO	RD	OU 2A	37041253							
LTR	NONE	REGULATORY	VOC SOURCE AREA, VADOSE ZONE (SEE	REPOSITORY	REMEDIAL ACTIO		IMAGED							
NONE	01.6	AGENCIES	AR #2667 - DTSC APPROVAL OF		ROD									
0003		VARIOUS	SCHEDULE)		VOC									
M60050 / 002687	05-28-2002	DTSC - LONG	DTSC APPROVES THE REVISED	ADMIN RECORD	BCT	024	SOUTHWEST							
	11-26-1997	BEACH	SCHEDULE FOR THE PROPOSED POST	BASE	BRAC	OU 2A	DIVISION							
LTR	NONE	J. SCANDURA	RECORD OF DECISION, VOC SOURCE		GW									
NONE		MCAS EL TORO	AREA, VADOSE ZONE (SEE AR #2048 -		RD									
0002		J. JOYCE	REQUEST FOR SCHEDULE CHANGE)		REMEDIAL ACTIO									
					ROD									
					VOC									
M60050 / 002058	01-29-1998	MCAS EL TORO	PUBLIC INFORMATION	ADMIN RECORD	COMMENTS	002	IRON MOUNTAIN							
	12-03-1997		MATERIAL/HANDOUTS INCLUDES:	INFO	LANDFILL	003	37041253							
MISC	NONE	RAB MEMBERS	12/3/97RAB MEETING AGENDA, PUB.	REPOSITORY	PUB. PARTICIPAT	005	IMAGED							
NONE	10.4		NOTICE, SEPTEMBER 24, 1997 MTG MIN.		RAB	008								
0091			RAB SIGN-IN SHEET & VARIOUS AGENCIES			011								
			COMMENTS			012								
						017								
						024								
						OU 2A								
						OU 2B								
						OU 2C								
						OU 3A								

UIC No. / Rec. No.	Doc. Control No.	Prs. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002060	01-29-1998	BECHTEL								REPLACEMENT PAGE, FIGURE 1-5, DRAFT	ADMIN RECORD	FS	024	IRON MOUNTAIN
CTO-0073/0370	01-07-1998	NATIONAL, INC.								FINAL PHASE II GROUNDWATER	INFO	GW	OU 2A	37041253
MISC	00073	D. TEDALDI								FEASIBILITY STUDY REPORT, OPERABLE	REPOSITORY	VOC		IMAGED
N68711-92-D-4670	04.2	VARIOUS								UNIT 2A VOC SOURCE AREA, DECEMBER				
0002		AGENCIES								1997 (SEE AR #2041 - FS REPORT)				
M60050 / 002057	01-29-1998	EPA SAN FRANCISCO								REQUEST FOR EXTENSION FOR	ADMIN RECORD	COMMENTS	018	IRON MOUNTAIN
	01-16-1998	G. KISTNER								SUBMITTING REVIEW COMMENTS ON		FS	024	37041253
LTR	NONE	MCAS EL TORO								DRAFT FINAL PHASE II GROUNDWATER		GW	OU 1	IMAGED
NONE	01.6	J. JOYCE								FEASIBILITY STUDY REPORT OPERABLE			OU 2A	
0001										UNIT 2A VOC SOURCE AREA AND TO				
										RESPOND TO THE NAVY RESPONSE TO				
										AGENCY COMMENTS ON THE OPERABLE				
										UNIT 1 FEASIBILITY STUDY REPORT				
M60050 / 002148	03-30-1998	MCAS EL TORO								PUBLIC INFORMATION MATERIALS	ADMIN RECORD	BRAC	001	SOUTHWEST
	01-28-1998									INCLUDES: JANUARY 28, 1998 AGENDA,	INFO	CLEANUP	002	DIVISION
MM	NONE	PUBLIC								PUBLIC NOTICE, DECEMBER 3, 1997 FINAL	REPOSITORY	COMMENTS	003	SW01013105
NONE	10.4									MTG. MINS., SIGN-IN SHEETS, MISC.		IR	004	
0050										AGENCIES COMMENTS		MTG MINS	005	
												PUB. PARTICIPAT	008	
												RAB	011	
												RESULTS	012	
												ROD	017	
													024	
													OU 2A	
													OU 2B	
													OU 2C	
													OU 3A	
													TANK 398	
M60050 / 002193	05-07-1998	MCAS EL TORO								PUBLIC INFORMATION	ADMIN RECORD	COMMENTS	002	SOUTHWEST
	03-25-1998									MATERIALS/HANDOUTS INCLUDES: RAB	CONFIDENTIAL	EVALUATION	003	DIVISION
MISC	NONE	RAB MEMBERS								MTG. AGENDA, PUBLIC NOTICE, JANUARY	DOC	LANDFILL	005	SW01013106
NONE	10.6									28, 1998 MTG. MIN.MISC.	INFO	MTG MINS	017	
0059										PRESENTATIONS,AGCY. COMMENTS	REPOSITORY	PUB. PARTICIPAT	024	
										(MAILER IN CONFID.)		RAB	OU 1	
												TECH/GUID DOC.	OU 2A	
												VOC	OU 3A	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002222	07-28-1998	MCAS EL TORO	PUBLIC INFORMATION MATERIALS JUNE 24, 1998 RAB MEETING AGENDA, PUBLIC NOTICE, 3/25/98, MTG. MINS. SIGN-IN SHEETS (NON-RAB MBRS. IN CONFID.FILE) MISC.HANDOUTS	ADMIN RECORD CONFIDENTIAL DOC INFO REPOSITORY	CLEANUP MTG MINS PUB. PARTICIPAT PUBNOT RAB	024 OU 1 OU 2A OU 2B OU 2C OU 3A	SOUTHWEST DIVISION SW01013107							
MISC NONE 0150	NONE 01.1	RAB MEMBERS												
M60050 / 002690	05-30-2002	US EPA - SAN FRANCISCO	EPA APPROVAL OF REQUEST FOR CHANGES IN THE FEDERAL FACILITY AGREEMENT SCHEDULE, BY THREE MONTHS, FOR THE DRAFT PROPOSED PLAN AND RECORD OF DECISION (SEE AR #2259 - REQUEST)	ADMIN RECORD BASE	FFA GW PROPOSED PLAN ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION							
NONE LTR NONE 0001	08-24-1998 NONE	G. KISTNER MCAS EL TORO J. JOYCE												
M60050 / 002691	05-30-2002	DTSC - CYPRESS	DTSC APPROVAL OF REQUEST FOR CHANGES IN THE FEDERAL FACILITY AGREEMENT SCHEDULE, BY THREE MONTHS, FOR THE DRAFT PROPOSED PLAN AND RECORD OF DECISION (SEE AR #2259 - REQUEST)	ADMIN RECORD BASE	FFA GW PROPOSED PLAN ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION							
NONE LTR NONE 0002	08-25-1998 NONE	J. SCANDURA MCAS EL TORO J. JOYCE												
M60050 / 002692	05-30-2002	CRWQCB - RIVERSIDE	CRWQCB APPROVAL OF REQUEST FOR CHANGES IN THE FEDERAL FACILITY AGREEMENT SCHEDULE, BY THREE MONTHS, FOR THE DRAFT PROPOSED PLAN AND RECORD OF DECISION (SEE AR #2259 - REQUEST)	ADMIN RECORD BASE	FFA GW PROPOSED PLAN ROD VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION							
NONE LTR NONE 0001	08-27-1998 NONE	P. HANNON MCAS EL TORO J. JOYCE												
M60050 / 002285	10-06-1998	BECHTEL NATIONAL	RAB MEETING MAILER-RAB MEETING AGENDA & PUBLIC NOTICE FOR 9/30/98 RAB MEETING, 7/29/98 RAB MEETING MINUTES (SIGN-IN SHEETS & MAILING LIST IN CONFIDENTIAL FILE)	ADMIN RECORD CONFIDENTIAL DOC INFO REPOSITORY	CLOSURE LANDFILL MTG MINS PUB. PARTICIPAT PUBNOT RAB SVEI UST	007 008 011 012 014 016 024 OU 3	SOUTHWEST DIVISION SW01013109							
MM N6871192D467000 0030	09-17-1998 00155 10.4	D. TEDALDI VARIOUS AGENCIES												

UIC No. / Rec. No.	Doc. Control No.	Prs. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002289	10-06-1998	MCAS EL TORO			09-30-1998					PUB INFO MATERIALS FOR 9/30/98 RAB MEETING; INCLUDING AGENDA, PUBLIC NOTICE, 7/29/98 MEETING MINUTES AND MISCELLANEOUS HANDOUTS (SIGN-IN SHEETS IN CONF FILE)	ADMIN RECORD CONFIDENTIAL DOC INFO REPOSITORY	CLOSURE LANDFILL MTG MINS PUB. PARTICIPAT PUBNOT RAB SVEI UST	002 007 008 011 012 014 017 024 OU 2A OU 2B OU 3	SOUTHWEST DIVISION SW01013109
MM NONE 0175	NONE 10.4	RAB MEMBERS												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002295		11-17-1998	MCAS EL TORO										FEDERAL FACILITY AGREEMENT (FFA)	ADMIN RECORD	FFA	001	SOUTHWEST DIVISION SW01013109
		11-03-1998	J. JOYCE										APPENDIX A SCHEDULE EXTENSION		FFSRA	002	
MISC		NONE	VARIOUS										REQUEST FOR DRAFT RECORD OF		LF	003	
NONE		01.1	AGENCIES										DECISION, OPERABLE UNIT 2C, LANDFILL		ROD	004	
0012													SITES 3 AND 5			005	
																006	
																007	
																008	
																009	
																010	
																011	
																012	
																013	
																014	
																015	
																016	
																017	
																018	
																019	
																020	
																021	
																022	
																024	
																OU 1	
																OU 2A	
																OU 2B	
																OU 2C	
																OU 3	
M60050 / 002297		11-25-1998	BECHTEL										DRAFT PROPOSED PLAN FOR	ADMIN RECORD	ARAR	018	SOUTHWEST DIVISION SW01013109
CTO-0155/0341		11-23-1998	NATIONAL, INC.										GROUNDWATER REMEDIATION AT		GW	024	
PLAN		155-2	D. TEDALDI										OPERABLE UNIT 1 SITE 18 AND OPERABLE		OU	OU 1	
N68711-92-D-4670		03.3	VARIOUS										UNIT 2A SITE 24 (SEE AR #2319 - EPA		TCE	OU 2A	
0023			AGENCIES										COMMENTS, #2371 - DTSC COMMENTS, & #2698 - CRWQCB COMMENTS)		VOC		

UIC No. / Rec. No.	Doc. Control No.	Prs. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002298		11-25-1998	BECHTEL		11-25-1998	NATIONAL							RAB MEETING MAILER: AGENDA AND PUBLIC NOTICE FOR 12/2/98 RAB MEETING, RAB MEETING MINUTES, 9/30/98	ADMIN RECORD CONFIDENTIAL DOC	MTG MINS PUB. PARTICIPAT PUBNOT	002 003 005	SOUTHWEST DIVISION SW01013109
MM N6871192D467000 0031		00155 10.4	D. TEDALDI VARIOUS AGENCIES										RAB MEETING MINUTES (RAB MAILING LIST IN CONF. FILE)	INFO REPOSITORY	RAB ROD SOIL	007 008 011 012 014 016 017 024 OU 2A OU 2B OU 2C OU 3	
M60050 / 002300		12-22-1998	MCAS EL TORO		11-25-1998	J. JOYCE							SOME ASPECTS OF THE DRAFT PROPOSED PLAN FOR GROUND WATER REMEDIATION AT OU-1 AND OU-2A (SUBMITTED ON NOVEMBER 24, 1998) TO ASSIST WITH AGENCY REVIEW	ADMIN RECORD	ARAR GW	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01013109
LTR NONE 0002		NONE 01.1	VARIOUS AGENCIES														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Constr./Guid. No.	CTO No.	CTO No.	Recipient	Subject	Classification	Keywords	Sites	Location Box No.			
Approx. # Pages	EPA Cat. #	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.			
M60050 / 002303	12-22-1998	12-02-1998	MCAS EL TORO	PUBLIC INFORMATION MATERIALS FOR DECEMBER 2, 1998 RAB MEETING;	ADMIN RECORD	GW	001	SOUTHWEST DIVISION			
MM	NONE		RAB MEMBERS	AGENDA, PUBLIC NOTICE, SEPTEMBER 30, 1998 RAB MEETING MINUTES AND MISCELLANEOUS HANDOUTS	INFO REPOSITORY	LF	002	SW01013110			
NONE	10.4					MTG MINS	007				
0100						PUBNOT	008				
						RAB	011				
						UST	012				
							014				
							016				
							017				
							018				
							024				
							OU 1				
							OU 2A				
							OU 2B				
							OU 2C				
							OU 3A				
							OU 3B				
M60050 / 002388	04-13-1999	01-01-1999	SWDIV	FINAL FACT SHEET MARINE CORPS TO PROCEED WITH INTERIM REMEDIAL ACTION DATED JANUARY 1999 (MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD	FACTSHEET	024	SOUTHWEST DIVISION			
CTO-0155/0411	01-01-1999	00155	G. TINKER		INFO REPOSITORY	IR		SW01013112			
FACT	00155		VARIOUS AGENCIES			REMEDIAL ACTIO					
N68711-92-D-4670	10.6					SVE					
0050						VOC					
M60050 / 002319	04-06-1999	01-13-1999	EPA SAN FRANCISCO	US EPA COMMENTS ON DRAFT PROPOSED PLAN FOR GROUNDWATER REMEDIATION, VOC SOURCE AREA (SEE AR #2297 - PLAN)	ADMIN RECORD	COMMENTS	024	SOUTHWEST DIVISION			
LTR	NONE		G. KISTNER			GW	OU 2A	SW01013110			
NONE	10.1		MCAS EL TORO			PROPOSED PLAN					
0002			J. JOYCE			TCE					
M60050 / 002373	04-12-1999	01-16-1999	ORANGE COUNTY RE	PUBLIC NOTICE INTERIM REMEDIAL ACTION AT INSTALLATION RESTORATION SITE 24		PRESS REL.	024	SOUTHWEST DIVISION			
MISC	NONE		ORANGE COUNTY RE			PUB. PARTICIPAT		SW01013111			
NONE	10.6		PUBLIC								
0001			PUBLIC								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location
Approx. # Pages	EPA Cat. #	Recipient												Box No.
M60050 / 002374	04-12-1999	LA TIMES	PUBLIC NOTICE INTERIM REMEDIAL ACTION AT INSTALLATION RESTORATION SITE 24	MISC	01-16-1999	LA TIMES					ADMIN RECORD	PRESS REL	024	SOUTHWEST DIVISION
NONE	NONE	PUBLIC										PUB. PARTICIPAT		SW01013111
0001	10.6	PUBLIC												
M60050 / 002370	04-12-1999	DTSC CYPRESS	COMMENTS ON PROPOSED PLAN FOR GROUNDWATER REMEDIATION AT OU-1, SITE 18 AND OU-2A, SITE 24 (SEE AR #2297 - PLAN)	PLAN	01-21-1999	M. MINGAY					ADMIN RECORD	COMMENTS	018	SOUTHWEST DIVISION
NONE	NONE	DTSC CYPRESS										GW	024	SW01013111
0011	03.3	T. MAHMOUD											OU 1	
													OU 2A	
M60050 / 002371	04-12-1999	DTSC - CYPRESS	COMMENTS ON DRAFT PROPOSED PLAN FOR GROUNDWATER REMEDIATION (SEE AR #2297 - DRAFT PROPOSED PLAN)	LTR	01-22-1999	T. MAHMOUD					ADMIN RECORD	COMMENTS	018	SOUTHWEST DIVISION
NONE	NONE	MCAS EL TORO										GW	024	SW01013111
0003	10.1	J. JOYCE										PROPOSED PLAN	OU 1	
												REMEDIAL ACTIO	OU 2A	
												VOC		
M60050 / 002698	05-31-2002	CRWQCB - RIVERSIDE	WATER BOARD HAS NO SIGNIFICANT COMMENTS ON THE DRAFT PROPOSED PLAN FOR GROUNDWATER REMEDIATION AT OPERABLE UNIT 1 SITE 18 AND OPERABLE UNIT 2A SITE 24 (SEE AR #2297 - PLAN)	LTR	01-22-1999	P. HANNON					ADMIN RECORD	COMMENTS	018	SOUTHWEST DIVISION
NONE	NONE	MCAS EL TORO										PROPOSED PLAN	024	
0001		J. JOYCE											OU 1	
													OU 2A	
M60050 / 002375	04-12-1999	MCAS EL TORO	RESTORATION ADVISORY BOARD MEETING HELD AT IRVINE CITY HALL	MM	01-27-1999	J. JOYCE					ADMIN RECORD	MTG MINS	024	SOUTHWEST DIVISION
NONE	NONE	RAB MEMBERS										PIM	OU 2A	SW01013111
0060	10.4											PUBNOT		
												RAB		
M60050 / 002401	05-03-1999	MCAS EL TORO	PUBLIC INFORMATION MATERIALS FROM JANUARY 27, 1999 RESTORATION ADVISORY BOARD MEETING; INCLUDING PUBLIC NOTICE, AGENDA, HANDOUTS, 12/2/98 RAB MEETING MINUTES	MISC	01-27-1999	RAB MEMBERS					ADMIN RECORD	MTG MINS	008	SOUTHWEST DIVISION
NONE	NONE											PIM	011	SW01013112
0120	10.4											PUBNOT	012	
												RAB	024	
												VOC	OU 2A	
													OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002720	CERT MAIL NO P115386420	06-04-2002 03-23-1999	MCAS EL TORO J. JOYCE	LTR NONE 0002	06-04-2002 03-23-1999	MCAS EL TORO J. JOYCE			US EPA - SAN FRANCISCO G. KISTNER		NONE		REQUEST FOR CHANGES TO FEDERAL FACILITIES AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS, SCHEDULE FOR OPERABLE UNIT 1 AND 2A REQUIRES REVISED DELIVERABLE DATE FOR THE DRAFT FINAL PROPOSED PLAN FOR GROUNDWATER REMEDIATION (SEE AR #2701 - EPA RESPONSE)	ADMIN RECORD BASE	ARAR FFA GW PROPOSED PLAN VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 002721	CERT MAIL NO. P115386421	06-04-2002 03-23-1999	MCAS EL TORO J. JOYCE	LTR NONE 0002	06-04-2002 03-23-1999	MCAS EL TORO J. JOYCE			DTSC - CYPRESS J. SCANDURA		NONE		REQUEST FOR CHANGES TO FEDERAL FACILITIES AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS, SCHEDULE FOR OPERABLE UNIT 1 & 2A REQUIRES A REVISED DELIVERABLE DATE FOR THE DRAFT FINAL PROPOSED PLAN FOR GROUNDWATER REMEDIATION (SEE AR #2702 - DTSC RESPONSE)	ADMIN RECORD BASE	ARAR FFA GW PROPOSED PLAN VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 002722	CERT MAIL NO. P115386422	06-04-2002 03-23-1999	MCAS EL TORO J. JOYCE	LTR NONE 0002	06-04-2002 03-23-1999	MCAS EL TORO J. JOYCE			CRWQCB - RIVERSIDE P. HANNON		NONE		REQUEST FOR CHANGES TO FEDERAL FACILITIES AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS, SCHEDULE FOR OPERABLE UNIT 1 & 2A REQUIRES A REVISED DELIVERABLE DATE FOR THE DRAFT FINAL PROPOSED PLAN FOR GROUNDWATER REMEDIATION	ADMIN RECORD BASE	ARAR FFA GW PROPOSED PLAN VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 002702	NONE LTR NONE 0002	06-03-2002 03-30-1999	DTSC - CYPRESS J. SCANDURA		06-03-2002 03-30-1999	DTSC - CYPRESS J. SCANDURA			MCAS EL TORO J. JOYCE		NONE		APPROVAL OF REQUEST FOR CHANGES TO FEDERAL FACILITIES AGREEMENT SCHEDULE - DTSC GRANTS THIRTY DAY EXTENSION PROVIDED NAVY SCHEDULE MEETINGS TO RESOLVE REGULATORY AGENCY COMMENTS (SEE AR #2297 - DRAFT PROPOSED PLAN & #2721 - EXTENSION REQUEST)	ADMIN RECORD BASE	COMMENTS FFA GW PROPOSED PLAN	018 024 OU 1 OU 2A	SOUTHWEST DIVISION

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location
Contr./Guld. No.	CTO No.	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location	Box No.	
M60050 / 002406	05-03-1999	MCAS EL TORO	REQUEST FOR CHANGES IN FEDERAL FACILITY AGREEMENT SCHEDULE - THIRTY DAY EXTENSION FOR SUBMITTAL OF THE DRAFT FINAL PROPOSED PLAN FOR OPERABLE UNITS 1 AND 2A GROUNDWATER REMEDIATION (SEE AR #2705 - DTSC RESPONSE)	ADMIN RECORD	FFA	001	SOUTHWEST DIVISION			
LTR	04-29-1999	J. JOYCE			GW	002				
NONE	NONE	VARIOUS AGENCIES			PROPOSED PLAN	003	SW01013112			
0004	03.6					004				
						005				
						006				
						007				
						008				
						009				
						010				
						011				
						012				
						013				
						014				
						015				
						016				
						017				
						018				
						019				
						020				
						021				
						022				
						024				
						025				
						OU 1				
						OU 2A				
						OU 2B				
						OU 2C				
						OU 3				
M60050 / 002705	06-03-2002	DTSC - CYPRESS	RESPONSE TO REQUEST FOR THIRTY DAY EXTENSION FOR THE SUBMITTAL OF THE DRAFT FINAL PROPOSED PLAN FOR GROUNDWATER REMEDIATION AT OPERABLE UNITS 1 AND 2A - DTSC GRANTS REQUEST (SEE AR #2406 - REQUEST)	ADMIN RECORD	FFA	018	SOUTHWEST DIVISION			
NONE	05-04-1999	J. SCANDURA		BASE	GW	024				
LTR	NONE	MCAS EL TORO			PROPOSED PLAN	OU 1				
NONE		J. JOYCE			REMEDIAL ACTIO	OU 2A				
0003										

UIC No. / Rec. No.	Doc. Control No.	Prs. Date	Author Affil.	Record Type	Record Date	Author	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location Box No.		
Approx. # Pages	EPA Cat. #									
M60050 / 000028 NONE LTR NONE 0003	08-04-1999 06-04-1999 NONE 03.6	DTSC CYPRESS J. SCANDURA MCAS EL TORO J. JOYCE	DTSC AGREEMENT TO 30 DAY EXTENSION OF THE FEDERAL FACILITIES AGREEMENT SCHEDULE FOR SUBMITTAL OF A DRAFT FINAL PROPOSED PLAN	ADMIN RECORD	FFA GW	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01011001			
M60050 / 000374 NONE LTR NONE 0002	04-17-2000 06-04-1999 NONE	U.S. EPA SAN FRANCISCO G. KISTNER NAVFAC - SOUTHWEST DIVISION J. JOYCE	RESPONSE TO 5/28/99 NAVY REQUEST FOR FEDERAL FACILITY AGREEMENT (FFA) EXTENSION FOR AN ADDITIONAL 30 DAYS TO SUBMIT THE DRAFT FINAL PROPOSED PLAN	ADMIN RECORD	FFA GW PROPOSED PLAN	018 024 OU 1 OU 2A	BECHTEL NATIONAL			
M60050 / 002725 CERT MAIL NO. Z 288 008 967 LTR NONE 0005	06-04-2002 06-29-1999 NONE	MCAS EL TORO J. JOYCE US EPA - SAN FRANCISCO G. KISTNER	REQUEST FOR CHANGES TO FEDERAL FACILITIES AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS, SCHEDULE FOR OPERABLE UNIT 1 & 2A REQUIRES A REVISED DELIVERABLE DATE FOR THE DRAFT FINAL PROPOSED PLAN AND THE DRAFT RECORD OF DECISION	ADMIN RECORD BASE	BCT BRAC FFA GW PROPOSED PLAN REMEDIAL ACTIO ROD VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION			
M60050 / 002727 NONE LTR NONE 0001	06-04-2002 07-12-1999 NONE	LOCAL REDEVELOPMENT AUTHORITY C. WIERCIOCH MCAS EL TORO J. JOYCE	QUESTIONS REGARDING REQUEST FOR SEVEN MONTH EXTENSION FOR OPERABLE UNIT 1 & 2A DRAFT FINAL PROPOSED PLAN AND THE DRAFT RECORD OF DECISION (SEE AR #2725 - REQUEST)	ADMIN RECORD BASE	FFA GW PROPOSED PLAN ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION			
M60050 / 000019 CTO-0155/0544 LTR N68711-92-D-4670 0025	08-03-1999 07-15-1999 00155 10.4	BECHTEL NATIONAL, INC. T. HEIRONIMUS NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD MEETING MAILER: AGENDA AND PUBLIC NOTICE FOR 28 JULY 1999 RAB MEETING WITH 26 MAY 1999 MEETING MINUTES (MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL	FOSL GW MTG MINS PUBNOT RAB	008 011 012 OU 1 OU 2A	SOUTHWEST DIVISION SW01011001			

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.	
M60050 / 002729	SWDIV SER	06-04-2002	NAVFAC -	SBME.JJ/0368	07-19-1999	SOUTHWEST					NONE	J. JOYCE	RESPONSE TO LETTER OF 13 JULY 1999 WITH COMPROMISE TO EXTENSION SCHEDULE DIFFERENCES FOR THE SUBMITTAL OF THE DRAFT GROUNDWATER PROPOSED PLAN AND THE DRAFT RECORD OF DECISION (SEE AR #399 - 13 JULY LETTER)	ADMIN RECORD BASE	FFA GW PROPOSED PLAN ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION	
M60050 / 000134	NONE	09-09-1999	EL TORO RAB	MISC	07-28-1999	RAB MEMBERS					NONE		PUBLIC INFORMATION MATERIALS FROM 7/28/99 RESTORATION ADVISORY BOARD MEETING WITH 5/26/99 RAB MEETING MINUTES AND VARIOUS HANDOUTS (PORTION OF MAILING LIST AND SIGN-IN-SHEETS ARE CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL	MTG MINS RAB	001 002 003 005 008 012 017 024 OU 1 OU 2A OU 3	SOUTHWEST DIVISION SW01011001	
M60050 / 000137	CTO-0155/0563	09-09-1999	BECHTEL	MM	08-04-1999	T. HEIRONIMUS					10.4		RESTORATION ADVISORY BOARD SUBCOMMITTEE MEETING MINUTES AND RAB MEMBER DOCUMENT COMMENTS PRESENTED AT THE 7/28/99 RAB MEETING	ADMIN RECORD	COMMENTS MTG MINS RAB	001 002 003 005 008 012 017 018 024	SOUTHWEST DIVISION SW01011001	
M60050 / 000175	SW7075.1	09-21-1999	OHM	MAP	09-13-1999	S. BORNHOFT					01.4		REMOVAL AND REMEDIAL ACTIONS - ADDITIONAL COPIES OF SPECIAL MAP PACKAGES FOR RESTORATION ADVISORY BOARD SUB-COMMITTEE	ADMIN RECORD	PIM RAB REMEDIAL ACTIO REMOVAL	024 OU 2A	SOUTHWEST DIVISION SW01011002	
	N68711-92-D-4670		NAVFAC -			SOUTHWEST												
	0075		DIVISION			B. DEMAREE												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Subject	Classification	Keywords	Sites	Location Box No.	
M60050 / 000203	11-22-1999	09-29-1999	MCAS EL TORO RAB	NONE	NONE	PUBLIC INFORMATION MATERIALS - SEPTEMBER 29, 1999 RESTORATION ADVISORY BOARD MEETING AGENDA, JULY 28, 1999 RAB MEETING MINUTES AND VARIOUS HANDOUTS (PORTION OF SIGN- IN SHEETS ARE CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	GW MTG MINS RAB	OU 1 OU 2A	SOUTHWEST DIVISION SW01011002	
M60050 / 000410	04-19-2000	11-19-1999	KENNEDY/JENKS CONSULTANTS R. OUELLETTE BECHTEL NATIONAL, INC. B. COLEMAN	NONE	NONE	RESTORATION ADVISORY BOARD (RAB) TECHNICAL REVIEW SUBCOMMITTEE MEETING MINUTES FROM SEPTEMBER 8, 1999	ADMIN RECORD	FS MTG MINS RAB RI UST	001 003 005 024 BLDG. 296	SOUTHWEST DIVISION SW01011005	
M60050 / 000412	04-19-2000	11-19-1999	KENNEDY/JENKS CONSULTANTS R. OUELLETTE BECHTEL NATIONAL, INC. B. COLEMAN	NONE	NONE	RESTORATION ADVISORY BOARD (RAB) TECHNICAL REVIEW SUBCOMMITTEE MEETING MINUTES FROM MAY 12, 1999	ADMIN RECORD	MTG MINS RAB	024	SOUTHWEST DIVISION SW01011005	
M60050 / 000413	04-19-2000	11-19-1999	KENNEDY/JENKS CONSULTANTS R. OUELLETTE BECHTEL NATIONAL, INC. B. COLEMAN	NONE	NONE	RESTORATION ADVISORY BOARD (RAB) TECHNICAL REVIEW SUBCOMMITTEE MEETING MINUTES FROM JUNE 9, 1999	ADMIN RECORD	MTG MINS RAB	024	SOUTHWEST DIVISION SW01011005	
M60050 / 000243	12-28-1999	12-01-1999	MCAS EL TORO RAB	CTO-0155/0667	00155	AGENDA, NOTICE AND HANDOUTS FOR 12/1/99 RESTORATION ADVISORY BOARD MEETING WITH 9/29/99 RAB MEETING MINUTES (MAILING LIST AND SIGN-IN SHEETS ARE CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	GW MTG MINS RAB UST	OU 1 OU 2A	SOUTHWEST DIVISION SW02051701	
N68711-92-D-4670	10.4		VARIOUS AGENCIES	0030							

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000350	04-13-2000	VARIOUS								PUBLIC INFORMATION MATERIALS FROM THE DECEMBER 1, 1999 RESTORATION ADVISORY BOARD (RAB) MEETING (PORTIONS OF MAILING LIST ARE CONFIDENTIAL - RAB AGENDA & MEETING MINUTES FROM 9/29/99 CAN BE REFERENCED AT REF. #243)	ADMIN RECORD CONFIDENTIAL	APHO BCP BRAC BTEX DDT EOD FS IRP LUFT MTBE NFA OU PAH PCE PESTICIDES PIM QAPP RAB RI ROD SOIL SVE SVOC SWMU TCE TDS UST UXO VOC	001 002 003 005 007 008 011 012 014 016 017 018 024 APHO 10 APHO 28 APHO 30 APHO 35 APHO 37 APHO 41 APHO 8 APHO 9 BLDG. 296 BLDG. 297 BLDG. 368 BLDG. 47 OU 1 OU 2A OU 2B OU 2C OU 3 OU 3B SWMU 46 UST 278 UST 298A UST 298B	SOUTHWEST DIVISION SW01011005
NONE	12-01-1999													
MM	NONE	NAVFAC - SOUTHWEST DIVISION												
NONE														
0200														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
																UST 380	
																UST 388B	
																UST 390	
																UST 391	
																UST 392E	
																UST 392F	
																UST 462	
																UST 473	
																UST 47A	
																UST 47B	
																UST 637	
																UST 651	
																UST 673	
																UST 800	
																UST 891A	
																UST 891B	
																UST 891C	
																UST 902A	
																UST 902B	
																UST 902C	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guld. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000273		03-15-2000	NAVFAC -	NONE	12-15-1999	SOUTHWEST							RESPONSE TO RESTORATION ADVISORY BOARD (RAB) COMMITTEE CHAIRMAN COMMENTS DATED 11/2/99, TO THE BASE REALIGNMENT AND CLOSURE (BRAC) PLAN (REFERENCE AR #377 - COMMENTS BY TECHNICAL REVIEW COMMITTEE & AR #2392 BRAC CLEANUP PLAN)	ADMIN RECORD INFO REPOSITORY	APHO BCP COMMENTS HRA IRP RFA TRC UST	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 024 025	CHOICE MICROGRAPHICS SW01011004
M60050 / 000312		04-07-2000	BECHTEL			NATIONAL INC							RESTORATION ADVISORY BOARD (RAB) MEETING MAILER - RAB MEETING AGENDA & PUBLIC NOTICE FOR 1/26/00 RAB MTG AND RAB MTG MINUTES & ATTACHMENTS FROM THE 12/1/99 MEETING (INCLUDES MAILING LIST PORTIONS OF WHICH ARE TO BE CONSIDERED CONFIDENTIAL) (REF. #357)	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	FFA MTBE RAB REMEDIAL ACTIO RI ROD SVE UST	002 011 017 024 BLDG. 296 OU 1 OU 2A	SOUTHWEST DIVISION SW01013101
CTO-0200/0032		01-21-2000		MM	00200				NAVFAC -								
N68711-92-D-4670			SOUTHWEST	0025		DIVISION			R. SELBY								

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000360	04-13-2000	BECHTEL	RESTORATION ADVISORY BOARD (RAB)	ADMIN RECORD	BCP	001	SOUTHWEST							
CTO-0200/0054	03-29-2000	NATIONAL INC	MEETING AGENDA OF MARCH 29, 2000	CONFIDENTIAL	FOST	002	DIVISION							
MM	00200		INCLUDES MEETING MINUTES OF 1/26/00,		GW	003	SW01011005							
N68711-92-D-4670		NAVFAC -	MEETING MINUTES OF 10/27/99, MEETING		MCL	005								
0042		SOUTHWEST	MINUTES OF 1/12/00, VARIOUS HANDOUTS		MTBE	017								
		DIVISION	AND MAILING LIST PARTS OF WHICH		RAB	BLDG. 242								
		R. SELBY	SHOULD BE CONSIDERED CONFIDENTIAL		RADIUM	BLDG. 243								
					RADON	OU 1								
					ROD									
					TEPH									
					TVPH									
					UST									
					VOC									
M60050 / 000435	04-26-2000	BL ASSOCIATES	RESTORATION ADVISORY BOARD (RAB)	ADMIN RECORD	BCP	002	SOUTHWEST							
NONE	03-29-2000	C. BENNETT	REPORT/AGENDA ISSUES SINCE 29		EIS	017	DIVISION							
MISC	NONE	NAVFAC -	JANUARY 2000		GW	024	SW01011006							
NONE		SOUTHWEST			LANDFILL									
0001		DIVISION			RAB									
					ROD									
M60050 / 000310	04-06-2000	BECHTEL	DRAFT PROPOSED PLAN FOR FINAL SOIL	ADMIN RECORD	DCE	018	SOUTHWEST							
CTO-0200/0057 &	04-01-2000	NATIONAL, INC.	AND GROUNDWATER CLEANUP (INCLUDES	INFO	FS	024	DIVISION							
57-1	00200	T. HEIRONIMUS	TRANSMITTAL LETTERS TO US EPA, DTSC,	REPOSITORY	GW	OU 1	SW01013101							
PLAN		NAVFAC -	& CRWQCB) (SEE AR #488 - COMMENTS BY		OU	OU 2A								
N68711-92-D-4670		SOUTHWEST	DTSC}		PCE									
0023		DIVISION			RI									
					ROD									
					SOIL									
					TCE									
					VOC									

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient	Subject										
M60050 / 000488 NONE LTR NONE 0005	07-14-2000 05-03-2000 NONE	DTSC - CYPRESS, CA. T. CHESNEY NAVFAC - SOUTHWEST DIVISION D. GOULD	COMMENTS BY DTSC ON DRAFT PROPOSED PLAN FOR FINAL SOIL AND GROUNDWATER CLEANUP (SEE AR #310 - DRAFT PROPOSED PLAN)	ADMIN RECORD INFO REPOSITORY	COMMENTS GW RAB ROD SOIL TCE VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01011006						
M60050 / 000454 CTO-0200/0075 MM N68711-92-D-4670 0040	06-29-2000 05-31-2000 00200	BECHTEL NATIONAL INC.  NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MAILER - RAB MEETING AGENDA AND PUBLIC NOTICE FOR 5/31/00 MEETING & RAB MEETING MINUTES AND ATTACHMENTS FROM THE 3/29/00 MEETING (INCLUDES MAILING LIST - PORTIONS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	BCP BRAC COMMENTS FFA FS GW HAZ WASTE HRA LF MTBE PAH RAB RCRA ROD SOIL SVE TCE UST WELLS	002 003 005 007 014 016 017 018 024 BLDG. 295 BLDG. 296 BLDG. 297	SOUTHWEST DIVISION SW01011006						
M60050 / 000531 NONE MISC NONE 0001	10-04-2000 05-31-2000 NONE	RAB SUBCOMMITTEE CHAIR C. BENNETT NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) SUBCOMMITTEE REQUEST FOR HERB LEVINE, US EPA, TO ATTEND 5/31/00 RAB MEETING TO ANSWER QUESTIONS DURING THE REGULATORY AGENCY PORTION OF MEETING	ADMIN RECORD	GW LF PERCHLORATE RAB SOIL SOLVENTS WATER	001 002 005 018 024	SOUTHWEST DIVISION SW01013102						

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000498	CTO-0200/0095	08-03-2000	BECHTEL NATIONAL, INC.	MISC	07-19-2000	T. HEIRONIMUS	N68711-92-D-4670	00200	NAVFAC - SOUTHWEST DIVISION	0050			RESTORATION ADVISORY BOARD (RAB) MEETING MAILER - RAB MEETING AGENDA & PUBLIC NOTICE FOR THE JULY 26, 2000 RAB MEETING. ALSO, INCLUDES RAB MEETING MINUTES & ATTACHMENTS FROM THE 5/31/00 MEETING. (MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	GW LANDFILL MTG MINS PCE RAB RJ ROD TCA TCE UST VOC	001 002 003 005 012 016 017 018 024 BLDG. 1789 BLDG. 1803 BLDG. 307 BLDG. 787 OU 1 OU 2A OU 2B OU 3	SOUTHWEST DIVISION SW01013102
M60050 / 000500	NONE	08-07-2000	DTSC - CYPRESS	LTR	07-28-2000	J. SCANDURA	NONE	NONE	NAVFAC - SOUTHWEST DIVISION	0003		D. GOULD	DTSC RESPONSE TO NAVY'S REQUEST FOR A THREE WEEK EXTENSION TO THE DRAFT FINAL PROPOSED PLAN AND DRAFT RECORD OF DECISION	ADMIN RECORD BASE INFO REPOSITORY	FFA IRP OU ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01013102

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000518 CTO-0200-0104 PLAN N68711-92-D-4670 0032	08-14-2000 08-01-2000 00200	BECHTEL NATIONAL INC.  NAVFAC - SOUTHWEST DIVISION	PRELIMINARY DRAFT FINAL PROPOSED PLAN FOR THE REGIONAL GROUNDWATER PLUME AND THE VOC SOURCE AREA (SEE AR #645 - EPA COMMENTS, #760 - LRA COMMENTS, & #2736 - DTSC COMMENTS)	ADMIN RECORD INFO REPOSITORY	BCT BRAC FFA FS GW MW OU PCE PUBNOT RA RI ROD SOIL TCE VOC WATER WELLS	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01013102							
M60050 / 002735 NONE LTR NONE 0002	06-04-2002 08-01-2000 NONE	US EPA - SAN FRANCISCO G. KISTNER MCAS EL TORO D. GOULD	RESPONSE TO REQUEST FOR THREE WEEK EXTENSION TO SUBMIT A PRELIMINARY DRAFT FINAL PROPOSED PLAN AND A DRAFT RECORD OF DECISION FOR OU 1 & 2A - EPA GRANTS REQUEST	ADMIN RECORD BASE	FFA GW PROPOSED PLAN ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION							
M60050 / 002736 NONE LTR NONE 0003	06-04-2002 08-21-2000 NONE	DTSC - CYPRESS T. CHESNEY MCAS EL TORO D. GOULD	COMMENTS ON THE PRELIMINARY DRAFT FINAL PROPOSED PLAN FOR THE REGIONAL GROUNDWATER PLUME AND THE VOC SOURCE AREA (SEE AR #518 - PLAN)	ADMIN RECORD BASE	COMMENTS GW PROPOSED PLAN TCE VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION							
M60050 / 000645 NONE LTR NONE 0001	02-15-2001 08-22-2000 NONE	CRWQCB SANTA ANA REGION J. BRODERICK MCAS EL TORO D. GOULD	EPA HAS COMPLETED REVIEW OF PRELIMINARY DRAFT FINAL PROPOSED PLAN AND HAS NO SIGNIFICANT COMMENTS (SEE AR #518 - PROPOSED PLAN)	ADMIN RECORD BASE	COMMENTS PROPOSED PLAN	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01053001							

UIC No. / Rec. No.	Doc. Control No.	Prd. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000760	NONE	03-26-2001	LOCAL REDEVELOPMENT AUTHORITY	LTR	09-11-2000	R. RICHARDSON			MCAS EL TORO	NONE			COMMENTS ON THE PRELIMINARY DRAFT FINAL PROPOSED PLAN FOR FINAL SOIL CLEANUP AND JOINT TREATMENT FACILITY FOR GROUNDWATER (SEE AR #518 - PROPOSED PLAN)	ADMIN RECORD BASE INFO REPOSITORY	AST CLOSURE COMMENTS FUEL GW LUST MONITORING MW REMEDIAL ACTIO RI ROD SOIL TCE UST VOC WELLS	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01053002
M60050 / 000603	NONE	12-21-2000	RESTORATION ADVISORY BOARD	MISC	09-27-2000	NAVFAC - SOUTHWEST DIVISION				NONE			PUBLIC INFORMATION MATERIALS - RESTORATION ADVISORY BOARD (RAB) MEETING DATED 9/27/00 INCLUDES AGENDA AND PUBLIC NOTICE, RAB MEETING MINUTES FROM 7/26/00, RAB SUBCOMMITTEE MEETING MINUTES FROM 6/28/00 AND 05/10/00 (CORRECTED), HANDOUTS, AND LETTERS	ADMIN RECORD	IRP MTG MINS OU PUBNOT RAB	001 002 003 005 007 014 016 017 018 024 OU 1 OU 3	SOUTHWEST DIVISION SW01013103

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000604		12-26-2000	RESTORATION										PUBLIC INFORMATION MATERIALS -	ADMIN RECORD	BRAC	007	SOUTHWEST
NONE		10-25-2000	ADVISORY BOARD										PUBLIC MEETING, PROPOSED PLAN - NO		IRP	014	DIVISION
MISC		NONE											FURTHER ACTION DATED 10/25/00		MTG MINS	024	SW01013103
NONE			NAVFAC -										INCLUDES PUBLIC MEETING AGENDA,		NFA	OU 3	
0100			SOUTHWEST										PUBLIC MEETING OVERVIEW, FORMAL		OU		
			DIVISION										PRESENTATION/PUBLIC COMMENT		RAB		
													MEETING, PUBLIC MEETING TRANSCRIPT,		UST		
													MATERIALS, AND HANDOUTS		VOC		

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000586	CTO-0164/0197	11-27-2000	BECHTEL NATIONAL, INC.	MISC	11-01-2000						00164	NAVFAC - SOUTHWEST DIVISION	DRAFT RECORD OF DECISION FOR THE TANK DROP DRAINAGE AREA NO. 2 AND THE BATTERY ACID DISPOSAL AREA (SEE AR #692 - COMMENTS BY DTSC, AR #694 - COMMENTS BY LRA, AR #1305 - COMMENTS BY CRWQCB, & #1478 - COMPILED RESPONSES)	ADMIN RECORD BASE	AOC ARAR ARSENIC COPC DDD DDE DDT DISPOSAL DQO FFA FS GW HERBICIDE IAS LF LUFT METALS MONITORING MW NFA PAH PCB PCE PESTICIDES PUBNOT RAB ROD SB SOIL SVE SVOC SWMU TCE TPH TRPH	007 014 016 018 024 025 BLDG. 245 OU 3B	SOUTHWEST DIVISION SW01013103

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
															VOC WELLS		
M60050 / 000583	11-27-2000	BECHTEL	RESTORATION ADVISORY BOARD (RAB)	ADMIN RECORD	COMMENTS	001	SOUTHWEST										
CTO-0200/0164	11-29-2000	NATIONAL, INC.	MEETING MAILER - INCLUDES: RAB	BASE	DCE	003	DIVISION										
MM	00200		MEETING AGENDA, AND PUBLIC NOTICE	CONFIDENTIAL	FS	005	SW01013103										
N68711-92-D-4670		NAVFAC -	FOR 11/29/00 RAB MEETING & RAB		GW	007											
0045		SOUTHWEST	MEETING MINUTES AND ATTACHMENTS		METALS	014											
		DIVISION	FROM THE 9/27/00 MEETING (CONTAINS		MONITORING	016											
			CONFIDENTIAL MAILING LIST)		MTBE	018											
					MTG MINS	024											
					MW	025											
					PCE	BLDG. 296											
					PUBNOT	BLDG. 297											
					RAB	BLDG. 360											
					RI	OU 1											
					ROD	OU 2A											
					SOIL												
					SVE												
					TCE												
					UST												
					VOC												
					WATER												
					WELLS												
					WORK PLAN												
M60050 / 001318	03-29-2001	DTSC - CYPRESS	DTSC RESPONSE TO REQUEST FOR A	ADMIN RECORD	FFA	018	CHOICE										
NONE	12-15-2000	J. SCANDURA	CHANGE TO THE FEDERAL FACILITY	BASE	ROD	024	MICROGRAPHICS										
LTR	NONE	MCAS EL TORO	AGREEMENT (FFA) SCHEDULE WITH A 6-		WATER	OU 1	SW01061401										
NONE		D. GOULD	MONTH EXTENSION FOR SUBMITTAL OF			OU 2A											
0003			DRAFT RECORD OF DECISION - DTSC														
			RELUCTANTLY GRANTS REQUEST (SEE AR														
			#607 - ORIGINAL REQUEST)														

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002739	SWDIV SER	06-04-2002	NAVFAC -	LTR	12-15-2000	SOUTHWEST	06CC.DG/1025	NONE	D. GOULD	0004	NONE	J. BRODERICK	REQUEST FOR A CHANGE TO THE FEDERAL FACILITY AGREEMENT (FFA) SCHEDULE WITH A 6-MONTH EXTENSION FOR SUBMITTAL OF DRAFT RECORD OF DECISION (SEE AR #688 - CRWQCB RESPONSE)	ADMIN RECORD BASE	BCT BRAC FFA ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 002740	NONE	06-04-2002	US EPA - SAN FRANCISCO	LTR	12-21-2000	G. KISTNER	NONE	NONE	MCAS EL TORO	0002	NONE	D. GOULD	RESPONSE TO REQUEST FOR A CHANGE TO THE FEDERAL FACILITY AGREEMENT (FFA) SCHEDULE WITH A 6-MONTH EXTENSION FOR SUBMITTAL OF DRAFT RECORD OF DECISION - EPA GRANTS EXTENSION TO 1 MAY 2001 (SEE AR #607 - REQUEST)	ADMIN RECORD BASE	BCT BRAC FFA GW ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION

UIC No. / Rec. No.	Doc. Control No.	Prd. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000627		01-18-2001	BECHTEL										RESTORATION ADVISORY BOARD	ADMIN RECORD	CLOSURE	001	SOUTHWEST
CTO-0200/0188		01-18-2001	NATIONAL, INC.										MEETING MAILER INCLUDING: MEETING	BASE	COMMENTS	002	DIVISION
MISC		00200											AGENDA & PUBLIC NOTICE FOR 1/31/01	CONFIDENTIAL	DCA	003	SW01013104
N68711-92-D-4670			NAVFAC -										MEETING, MINUTES FROM 11/29/00 RAB		EE/CA	005	
0045			SOUTHWEST										MEETING, RAB SUBCOMMITTEE MINUTES		EOD	007	
			DIVISION										OF 11/29/00 & 10/25/00 AND MAILING LIST -		GW	012	
													PARTS OF WHICH SHOULD BE		LF	014	
													CONSIDERED CONFIDENTIAL		METALS	016	
															MONITORING	017	
															ORDNANCE	018	
															PUBNOT	024	
															RAB	OU 1	
															ROD	OU 2	
															SOIL	OU 3	
															SOIL BORING		
															SOLVENTS		
															SVOC		
															TANK		
															TCE		
															TPH		
															TRC		
															UST		
															VOC		
															WELLS		
M60050 / 000692		02-22-2001	DTSC - CYPRESS										COMMENTS ON THE DRAFT RECORD OF	ADMIN RECORD	COMMENTS	007	SOUTHWEST
NONE		01-22-2001	T. CHESNEY										DECISION FOR THE TANK DROP	BASE	DISPOSAL	014	DIVISION
LTR		NONE	MCAS EL TORO										DRAINAGE AREA NO. 2 AND THE BATTERY	INFO	GW	018	SW01053001
NONE			D. GOULD										ACID DISPOSAL AREA (SEE AR #586 -	REPOSITORY	MONITORING	024	
0004													DRAFT ROD)		ROD	OU 3B	
															SOIL		
															TANK		
															VOC		
															WELLS		

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000963	NONE	03-29-2001	BECHTEL NATIONAL, INC.	MISC	01-31-2001					0100	NONE	NAVFAC - SOUTHWEST DIVISION	PUBLIC INFORMATION MATERIALS FROM THE JANUARY 31, 2001 RESTORATION ADVISORY BOARD MEETING INCLUDING: RAB MEETING AGENDA/PUBLIC NOTICE, MEETING MINUTES FROM THE 11/29/00 RAB MEETING, RAB MEETING SCHEDULE, VARIOUS HANDOUTS	ADMIN RECORD BASE CONFIDENTIAL	COMMENTS GW LF MONITORING MTG MINS PIM PUBNOT RAB ROD SOIL TCE UST WELLS	001 002 003 005 007 008 012 014 016 017 018 024 OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION SW01053002

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 000766	03-26-2001	BECHTEL	RESTORATION ADVISORY BOARD (RAB)	ADMIN RECORD	COMMENTS	001	SOUTHWEST							
CTO-0200/0204	03-21-2001	NATIONAL, INC.	MEETING MAILER - RAB MEETING AGENDA	BASE	EOD	002	DIVISION							
MISC	00200		& PUBLIC NOTICE FOR 3/21/01 MEETING,	CONFIDENTIAL	GW	003	SW01053002							
N68711-92-D-4670		NAVFAC -	AND MEETING MINUTES & ATTACHMENTS		HRA	005								
0027		SOUTHWEST	FROM THE 1/31/01 MEETING (INCLUDES		LF	016								
		DIVISION	MAILING LIST AND SIGN-IN, PARTS OF		MONITORING	017								
			WHICH SHOULD BE CONSIDERED		MTG MINS	018								
			CONFIDENTIAL)		ORDNANCE	024								
					PIM	ANOMALY AF								
					PUBNOT	APHO 38								
					RAB	APHO 44								
					SOIL	APHO 46								
					TCE	BLDG. 1789								
					UXO	BLDG. 1803								
					VOC	BLDG. 242								
						BLDG. 243								
						BLDG. 244								
						BLDG. 295								
						BLDG. 319								
						BLDG. 360								
						BLDG. 787								
M60050 / 001732	05-10-2001	BECHTEL	PUBLIC INFORMATION MATERIALS FROM	ADMIN RECORD	COMMENTS	001	CHOICE							
NONE	03-21-2001	NATIONAL, INC.	THE RESTORATION ADVISORY BOARD	BASE	EOD	002	MICROGRAPHICS							
MISC	00200		MEETING OF MARCH 21, 2001 INCLUDES:	CONFIDENTIAL	LF	017	SW01061401							
NONE		NAVFAC -	RAB MEETING AGENDA & PUBLIC NOTICE		MAG RD LANDFIL	018								
0120		SOUTHWEST	FOR 3/21/01 MEETING, RAB MEETING		MTG MINS	024								
		DIVISION	MINUTES FROM 1/31/01 AND VARIOUS		ORDNANCE	OU 2A								
			HANDOUTS		PIM	OU 2B								
					PUBNOT	OU 3								
					RAB									

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Recipient Affil.	Classification	Keywords	Sites	Location
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Approx. # Pages	EPA Cat. #	Subject	Classification	Keywords	Sites	Location	Box No.
M60050 / 001525	05-10-2001	05-01-2001	NAVFAC - SOUTHWEST DIVISION	NONE	NONE	REQUEST FOR AN EXTENSION TO THE FEDERAL FACILITY AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS FOR THE DRAFT RECORD OF DECISION (SEE AR #1920 - DTSC RESPONSE; #2149 - CRWQCB RESPONSE; #2150 - ADDITIONAL REQUEST FOR EXTENSION)	ADMIN RECORD BASE INFO REPOSITORY	BCT BRAC FFA ROD	018 024 OU 1 OU 2A	CHOICE MICROGRAPHICS SW01061401	
LTR			D. GOULD								
NONE			CRWQCB, US EPA, DTSC								
0011			HANNON, MOUTOUX, SCANDURA								
M60050 / 001920	05-17-2001	05-08-2001	DTSC - CYPRESS J. SCANDURA	NONE	NONE	RESPONSE TO REQUEST FOR AN EXTENSION TO THE FEDERAL FACILITY AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS FOR THE DRAFT RECORD OF DECISION - DTSC GRANTS THE EXTENSION (SEE AR #1525 - ORIGINAL REQUEST)	ADMIN RECORD BASE INFO REPOSITORY	FFA RESPONSE ROD	018 024 OU 1 OU 2A	CHOICE MICROGRAPHICS SW01061401	
LTR			NAVFAC - SOUTHWEST DIVISION								
NONE			D. GOULD								
0002											
M60050 / 002149	05-17-2001	05-08-2001	CRWQCB - RIVERSIDE P. HANNON	NONE	NONE	RESPONSE TO REQUEST FOR AN EXTENSION TO THE FEDERAL FACILITY AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS FOR THE DRAFT RECORD OF DECISION - CRWQCB APPROVES EXTENSION (SEE AR #1525 - ORIGINAL REQUEST)	ADMIN RECORD BASE INFO REPOSITORY	FFA RESPONSE ROD	018 024 OU 1 OU 2A	CHOICE MICROGRAPHICS SW01061401	
LTR			NAVFAC - SOUTHWEST DIVISION								
NONE			D. GOULD								
0001											
M60050 / 002150	05-18-2001	05-15-2001	NAVFAC - SOUTHWEST DIVISION	NONE	NONE	ADDITIONAL REQUEST FOR AN EXTENSION TO THE FEDERAL FACILITY AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS FOR THE DRAFT RECORD OF DECISION (SEE AR #619 - RESPONSE TO THIS LETTER; #525 - ORIGINAL LETTER REQUESTING EXTENSION)	ADMIN RECORD BASE INFO REPOSITORY	BCT FFA ROD	018 024 OU 1 OU 2A	CHOICE MICROGRAPHICS SW01061401	
LTR			D. GOULD								
NONE			US EPA, CRWQCB, DTSC								
0007			MOUTOUX, HANNON, SCANDURA								
M60050 / 000619	06-01-2001	05-18-2001	DTSC - CYPRESS J. SCANDURA	NONE	NONE	RESPONSE TO REQUEST FOR EXTENSION TO FEDERAL FACILITY AGREEMENT FOR A DRAFT RECORD OF DECISION - DTSC GRANTS EXTENSION (SEE AR #2150 - REQUEST)	ADMIN RECORD BASE INFO REPOSITORY	FFA GW ROD	018 024 OU 1 OU 2A	CHOICE MICROGRAPHICS SW01080901	
LTR			MCAS EL TORO								
NONE			D. GOULD								
0003											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 001739		05-17-2001	BECHTEL										RESTORATION ADVISORY BOARD	ADMIN RECORD	EBS	001	CHOICE
CTO-0200/0232		05-30-2001	NATIONAL, INC.										MEETING MAILER - RAB MEETING AGENDA	BASE	EOD	002	MICROGRAPHICS
MM		00200											& PUBLIC NOTICE AND RAB MEETING	CONFIDENTIAL	GW	003	SW01061401
N68711-92-D-4670			NAVFAC -										MINUTES AND ATTACHMENTS FROM		LF	005	
0035			SOUTHWEST										3/21/01 MEETING (CONTAINS MAILING LIST		MTG MINS	017	
			DIVISION										PARTS OF WHICH SHOULD BE		ORDNANCE	018	
													CONSIDERED CONFIDENTIAL)		PIM	024	
															PUBNOT	BLDG. 307	
															RAB	TANK FARM	
															ROD		
															SOIL		
															STORMWATER		
															UXO		
															VOC		
M60050 / 002439		06-25-2001	BECHTEL										PUBLIC INFORMATION MATERIALS FROM	ADMIN RECORD	BRAC	001	CHOICE
NONE		05-30-2001	NATIONAL, INC.										THE MAY 30, 2001, RESTORATION	BASE	GW	002	MICROGRAPHICS
MM		00200											ADVISORY BOARD MEETING, INCLUDING	CONFIDENTIAL	LF	003	SW01080901
N68711-92-D-4670			NAVFAC -										MINUTES AND VARIOUS HANDOUTS		MTG MINS	005	
0050			SOUTHWEST										(PORTION OF SIGN-IN SHEETS ARE		PA	016	
			DIVISION										CONFIDENTIAL)		RAB	017	
															RD	018	
															REMEDIAL ACTIO	024	
															ROD	BLDG. 307	
															SOIL	OU 1	
															UST	OU 2A	
															VOC	OU 2B	
															WORK PLAN	OU 2C	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002415	05-04-2001	BECHTEL	FINAL - BRAC CLEANUP TEAM 31 MAY 2000	ADMIN RECORD	MTBE	001	CHOICE										
CTO-200/0228	05-31-2001	NATIONAL, INC.	MEETING MINUTES (INCLUDES 3	INFO	MTG MINS	011	MICROGRAPHICS										
MM	00200		ATTACHMENTS - RADIONUCLIDE UPDATE	REPOSITORY	RAB	012	SW01061401										
N68711-92-D-4670		NAVFAC -	BRIEFING DTD 3/31/00; CAL. DHS FLOW		TCE	014											
0050		SOUTHWEST	CHART FOR RADIONUCLIDE ANALYSES;			16											
		DIVISION	AND MAGAZINE ROAD LANDIFILL			17											
			BOUNDARY - RAB MEETING 5/31/00)			18											
						2											
						24											
						3											
						5											
						7											
						8											
						OU 1											
						OU 2A											
						UST 651 GRC											
						UST 651-1											
						UST 651-2											
						UST 651-3											
						UST 651-4											

UIC No. / Rec. No.	Doc. Control No.	Proc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002565	10-30-2001	CDM FEDERAL PROGRAMS	FINAL GROUNDWATER MONITORING REPORT JUNE 2000 MONITORING ROUND 12 (INCLUDES TRANSMITTAL LETTER TO REGULATORS AND RAB MEMBER WITH ONE CONFIDENTIAL ADDRESS)	ADMIN RECORD	COPC	002	CHOICE							
GS-10F-0227J	06-26-2001	R. CLIFFORD		BASE	DCA	003	MICROGRAPHICS							
RPT	NONE	NAVFAC - SOUTHWEST DIVISION		CONFIDENTIAL	DCE	005	SW02052302							
N68711-00-F-0102				INFO	DQO	017								
0350				REPOSITORY	GW	018								
					MONITORING	024								
					MTBE	OU 1								
					NFA	OU 2A								
					PCE	OU 2B								
					QA	OU 2C								
					QC									
					REMEDIAL ACTIO									
					RFA									
					ROD									
					SVOC									
					TCA									
					TCE									
					VOC									
					WATER									

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002446		07-12-2001	BECHTEL										RESTORATION ADVISORY BOARD	ADMIN RECORD	BCT	001	CHOICE
CTO-0200/0252		07-25-2001	NATIONAL, INC.										MEETING MAILER INCLUDING: RAB	BASE	CHAR	002	MICROGRAPHICS
MISC		00200											MEETING AGENDA AND PUBLIC NOTICE	CONFIDENTIAL	EOD	012	SW01080901
N68711-92-D-4670			NAVFAC -										FOR RAB MEETING, MINUTES AND		GW	017	
0036			SOUTHWEST										ATTACHMENTS FROM 5/30/01 MEETING		LF	018	
			DIVISION										(PORTION OF MAILING LIST AND SIGN-IN		MTG MINS	024	
													SHEETS ARE CONFIDENTIAL)		MW	BLDG. 307	
															ORDNANCE	OU 1	
															PIM	OU 2A	
															PUBNOT	OU 2B	
															RAB	OU 3	
															SOIL	TANK FARM !	
															TCE		
															UXO		
															VOC		
															WELLS		
															WORK PLAN		
M60050 / 002491		09-04-2001	BECHTEL										PUBLIC INFORMATION MATERIALS FROM	ADMIN RECORD	COMMENTS	001	BECHTEL
NONE		07-25-2001	NATIONAL, INC.										THE RESTORATION ADVISORY BOARD	BASE	LF	002	NATIONAL
MISC		00200											MEETING INCLUDING: AGENDA AND		MTG MINS	003	SW02052003
NONE			NAVFAC -										PUBLIC NOTICE FOR RAB MEETING,		ORDNANCE	005	
0100			SOUTHWEST										MINUTES AND ATTACHMENTS FROM		PIM	016	
			DIVISION										5/30/01 MEETING, SUBCOMMITTEE		PUBNOT	017	
													HANDOUTS & LETTERS, LETTERS FROM		RAB	018	
													VARIOUS REGULATORY AGENCIES			024	
																BLDG. 307	
																OU 2A	
																OU 2B	
																OU 2C	
																OU 3	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002477	SWDIV SER	08-13-2001	NAVAFAC - SOUTHWEST DIVISION	06CC.DG/0809	08-03-2001	D. GOULD			US EPA, DTSC, & CRWQCB		NONE	MOUTOUX, SCANDURA, & HANNON	REQUEST FOR EXTENSION TO FEDERAL FACILITIES AGREEMENT OF MILESTONE DELIVERABLE DATE FOR DRAFT RECORD OF DECISION FOR OPERABLE UNITS 1 & 2 (SEE AR #2547 - DTSC RESPONSE & #2549 - EPA RESPONSE)	ADMIN RECORD BASE INFO REPOSITORY	BCT BRAC FFA FFSRA ROD	018 024 OU 1 OU 2A	CHOICE MICROGRAPHICS SW02052301
M60050 / 002547	LTR	10-17-2001	DTSC - CYPRESS		08-07-2001	J. SCANDURA			NAVAFAC - SOUTHWEST DIVISION		NONE	D. GOULD	RESPONSE TO REQUEST FOR EXTENSION TO FEDERAL FACILITIES AGREEMENT OF MILESTONE DELIVERABLE DATE FOR DRAFT RECORD OF DECISION FOR OPERABLE UNITS 1 & 2 - DTSC GRANTS REQUEST (SEE AR #2477 - ORIGINAL LETTER)	ADMIN RECORD BASE INFO REPOSITORY	FFA ROD	018 024 OU 1 OU 2A	BECHTEL NATIONAL SW02052006
M60050 / 002549	LTR	10-17-2001	US EPA - SAN FRANCISCO		08-09-2001	N. MOUTOUX			NAVAFAC - SOUTHWEST DIVISION		NONE	D. GOULD	RESPONSE TO EXTENSION REQUEST FOR FEDERAL FACILITIES AGREEMENT FOR RECORD OF DECISION FOR OPERABLE UNITS 1 & 2 - EPA GRANTS EXTENSION (SEE AR #2477 - REQUEST)	ADMIN RECORD BASE INFO REPOSITORY	FFA ROD	018 024 OU 1 OU 2A	BECHTEL NATIONAL SW02052006

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guld. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002534	09-19-2001	BECHTEL	RESTORATION ADVISORY BOARD	ADMIN RECORD	BCT	001	BECHTEL										
CTO-0200/0278	09-19-2001	NATIONAL, INC.	MEETING MAILER; INCLUDES: RAB	BASE	BRAC	002	NATIONAL										
MISC	00200		MEETING AGENDA & PUBLIC NOTICE FOR	CONFIDENTIAL	CLOSURE	003	SW02052006										
N68711-92-D-4670		NAVFAC -	9/19/01 MEETING, AND RAB MEETNG		EOD	004											
0024		SOUTHWEST	MINUTES AND ATTACHMENTS FROM		GW	005											
		DIVISION	7/25/01 MEETING (CONTAINS MAILING LIST		LF	008											
			PARTS OF WHICH SHOULD BE		MAG RD LANDFIL	012											
			CONSIDERED CONFIDENTIAL)		MTG MINS	017											
					ORDNANCE	024											
					RAB	025											
					SOIL	ANOMALY AF											
					TCE	BLDG. 1789											
					WELLS	BLDG. 1803											
						BLDG. 242											
						BLDG. 243											
						BLDG. 244											
						BLDG. 319											
						BLDG. 360											
						BLDG. 787											
						HANGAR 295											
						OU 1											
						OU 2A											
						OU 2B											
						OU 2C											
						OU 3											
						OU 3B											
M60050 / 002563	10-30-2001	BECHTEL	PROPOSED PLAN - GROUNDWATER	ADMIN RECORD	GW	018	BECHTEL										
CTO-0200/0313	10-01-2001	NATIONAL, INC.	CLEANUP FOR OPERABLE UNITS 1 AND 2A	BASE	MW	024	NATIONAL										
PLAN	00200				ROD	OU 1	SW02052006										
N68711-92-D-4670		NAVFAC -			SVE	OU 2A											
0028		SOUTHWEST			TCE												
		DIVISION			VOC												
					WELLS												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002567 CTO-0200/0320 PLAN N68711-92-D-4670 0025	11-07-2001 11-01-2001 00200	BECHTEL NATIONAL, INC.  NAVFAC - SOUTHWEST DIVISION	BECHTEL NATIONAL, INC.  NAVFAC - SOUTHWEST DIVISION	PROPOSED PLAN - GROUNDWATER CLEANUP FOR OPERABLE UNITS 1 AND 2A (INCLUDES MAILING LIST PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL) (SEE AR #2753 - PUBLIC MEMBER COMMENTS & #2754 - LOCAL REDEVELOPMENT AUTHORITY COMMENTS)	ADMIN RECORD BASE CONFIDENTIAL	CANCER DCE GW MW PCE ROD SOIL SOLVENTS SVE TCE VOC WELLS		018 024 BLDG. 296 BLDG. 297 OU 1 OU 2A	BECHTEL NATIONAL SW02052006					
M60050 / 002597 CTO-0200/0342 MM N68711-92-D-4670 0085	01-16-2002 11-13-2001 00200	BECHTEL NATIONAL, INC.  NAVFAC - SOUTHWEST DIVISION	BECHTEL NATIONAL, INC.  NAVFAC - SOUTHWEST DIVISION	TRANSCRIPT OF PROPOSED PLAN PUBLIC MEETING REGARDING GROUNDWATER CLEANUP AT OPERABLE UNITS 1 AND 2A	ADMIN RECORD BASE INFO REPOSITORY	GW MTG MINS NPL PIM REMEDIAL ACTIO RI SOIL SOLVENTS TCE VOC		018 024 BLDG. 296 BLDG. 297 OU 1 OU 2A	BECHTEL NATIONAL SW02052007					
M60050 / 002599 CTO-0200/0341 MISC N68711-92-D-4670 0200	01-16-2002 11-13-2001 00200	BECHTEL NATIONAL, INC.  NAVFAC - SOUTHWEST DIVISION	BECHTEL NATIONAL, INC.  NAVFAC - SOUTHWEST DIVISION	PUBLIC INFORMATION MATERIALS FOR PUBLIC MEETING REGARDING PROPOSED PLAN - GROUNDWATER CLEANUP AT OPERABLE UNITS 1 AND 2A WITH VARIOUS HANDOUTS (SEE AR #2597 - PUBLIC MEETING TRANSCRIPT)	ADMIN RECORD BASE INFO REPOSITORY	BCT BRAC GW IRP PIM RAB TCE VOC WATER		018 024 OU 1 OU 2A	BECHTEL NATIONAL SW02052008					

UIC No. / Rec. No.

Doc. Control No.	Prc. Date	Author Affil.						Location
Record Type	Record Date	Author						Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.						
Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites		
M60050 / 002572	11-26-2001	NAVFAC -	SUMMARY REPORT - SITE 07GN1 - WITHIN	ADMIN RECORD	BCT	007	BECHTEL	
NONE	11-16-2001	SOUTHWEST	THE DROP TANK DRAINAGE AREA	BASE	BRAC	024	NATIONAL	
RPT	NONE	DIVISION	NUMBER 2, FORMER TOTAL	INFO	GW	07GN1	SW02052007	
NONE		L. HORNECKER	RECOVERABLE PETROLEUM	REPOSITORY	MTBE	BLDG. 310		
0250		NAVFAC -	HYDROCARBON RELEASE		ROD	BLDG. 315		
		SOUTHWEST			SOIL	OU 2A		
		DIVISION			SOIL BORING	OU 3		
					SOLVENTS	UNIT 5		
					TCE			
					TPH			
					TRPH			
					WELLS			
M60050 / 002753	06-06-2002	RW	COMMENTS FROM 13 NOVEMBER 2001	ADMIN RECORD	GW	018	SOUTHWEST	
NONE	11-26-2001	ENVIRONMENTAL	PUBLIC MEETING ATTENDEE ON THE	BASE	MW	024	DIVISION	
LTR	NONE	CONSULTING	PROPOSED PLAN - GROUNDWATER		PROPOSED PLAN	OU 1		
NONE		R. WILSON	CLEANUP FOR OPERABLE UNITS 1 AND 2A		SOLVENTS	OU 2A		
0002		MCAS EL TORO	(SEE AR #2567 - PROPOSED PLAN)		VOC			
		D. GOULD			WELLS			

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002574	CTO-0200/0327	11-26-2001	BECHTEL NATIONAL, INC.	MISC	11-28-2001	NAVFAC - SOUTHWEST DIVISION	N68711-92-D-4670	00200		0028			RESTORATION ADVISORY BOARD MEETING MAILER WHICH INCLUDES: RAB MEETING AGENDA/PUBLIC NOTICE, 19 SEPTEMBER MEETING MINUTES, & 30 MAY SUBCOMMITTEE MEETING MINUTES (INCLUDES MAILING LIST PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL)	ADMIN RECORD BASE CONFIDENTIAL INFO REPOSITORY	DCE EOD FFA FOST FS FUEL GW LF MAG RD LANDFIL MTG MINS NFA ORDNANCE PA PUBNOT RAB RD REMEDIAL ACTIO RI ROD SI SOIL TCE UXO VOC	001 002 004 006 007 008 009 010 011 012 013 014 015 016 017 018 020 021 022 024 025 BLDG. 307 OU 1 OU 2A OU 2B OU 3 TANK FARM	BECHTEL NATIONAL SW02052007

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002598	01-16-2002	BECHTEL	PUBLIC INFORMATION MATERIALS WHICH	ADMIN RECORD	AST	002	BECHTEL										BECHTEL
CTO-0200/0340	11-28-2001	NATIONAL, INC.	INCLUDES: RAB MEETING AGENDA/PUBLIC	BASE	BCP	004	NATIONAL										NATIONAL
MISC	00200		NOTICE, 19 SEPTEMBER MEETING	INFO	BCT	006											SW02052007
N68711-92-D-4670		NAVFAC -	MINUTES, & 30 MAY SUBCOMMITTEE	REPOSITORY	BRAC	008											
0300		SOUTHWEST	MEETING MINUTES, RAB MEETING		COMMENTS	009											
		DIVISION	SCHEDULE, NOVEMBER PROPOSED PLAN		COPC	010											
			FOR GROUNDWATER, VARIOUS		CRP	011											
			HANDOUTS, AGENCY COMMENTS AND		EOD	012											
			LETTERS		FOSL	013											
					FOST	016											
					GW	017											
					MTG MINS	018											
					MW	020											
					NCP	021											
					NPL	022											
					ORDNANCE	024											
					PAH	025											
					PCB	OU 1											
					PCE	OU 2A											
					PESTICIDES	OU 2B											
					PIM	OU 2C											
					PUBNOT	OU 3											
					RAB												
					ROD												
					SOIL												
					SOLVENTS												
					SVE												
					SVOC												
					SWAT												
					SWMU												
					TCE												
					UST												
					VOC												
					WATER												
					WELLS												

## UIC No. / Rec. No.

Doc. Control No.	Prc. Date	Author Affil.						
Record Type	Record Date	Author						
Contr./Guid. No.	CTO No.	Recipient Affil.						
Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.	
M60050 / 002587	12-13-2001	NAVFAC -	TRANSMITTAL OF COMPILED RESPONSE	ADMIN RECORD	COMMENTS	001	BECHTEL	
SWDIV SER	12-07-2001	SOUTHWEST	TO COMMENTS ON THE DRAFT TECHNICAL	BASE	COPC	002	NATIONAL	
06CC.DG/1292	00072	DIVISION	MEMORANDUM PHASE II EVALUATION OF	INFO	EOD	003	SW02052007	
XMTL		D. GOULD	RADIONUCLIDES IN GROUNDWATER AT	REPOSITORY	GW	004		
N62742-94-D-0048		DTSC, CRWQCB,	FORMER LANDFILL SITES AND THE		LF	005		
0011		& US EPA	EXPLOSIVE ORDNANCE DISPOSAL RANGE		MW	017		
		CHESNEY,	{COMMENTS BY DHS, LRA, EPA} (SEE AR		ORDNANCE	024		
		HANNON, &	#2550 - COMMENTS)		RADIONUCLIDES	OU 2B		
		MOUTOUX			RESPONSE	OU 2C		
					WELLS	OU 3		
						OU 3B		
M60050 / 002754	06-06-2002	COUNTY OF	LOCAL REDEVELOPMENT AUTHORITY	ADMIN RECORD	COMMENTS	018	SOUTHWEST	
NONE	12-07-2001	ORANGE - LRA	COMMENTS ON THE PROPOSED PLAN -	BASE	DRINKING WATE	024	DIVISION	
LTR	NONE	G. SIMON	GROUNDWATER CLEANUP FOR		GW	OU 1		
NONE		MCAS EL TORO	OPERABLE UNITS 1 AND 2A (SEE AR		MW	OU 2A		
0010		D. GOULD	#2587 - PROPOSED PLAN)		PROPOSED PLAN			
					ROD			
					SOLVENTS			
					TCE			
					VOC			
					WELLS			

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002596	01-10-2002	BECHTEL	DRAFT RECORD OF DECISION FOR THE	ADMIN RECORD	ARAR	018	CHOICE										
CTO-0164/0265	01-09-2002	NATIONAL, INC.	REGIONAL VOLATILE ORGANIC	BASE	BCT	024	MICROGRAPHICS										
MISC	00164		COMPOUND GROUNDWATER PLUME AND	INFO	BRAC	BLDG. 296	SW02052302										
N68711-92-D-4670		NAVFAC -	THE VOLATILE ORGANIC COMPOUND	REPOSITORY	COC	BLDG. 297											
0350		SOUTHWEST	SOURCE AREA		COPC	OU 1											
		DIVISION			DCA	OU 2A											
					DCE												
					DQO												
					FFA												
					FOST												
					GW												
					HERBICIDE												
					LUFT												
					MOA												
					NCP												
					NPL												
					PCA												
					PCB												
					PCE												
					PESTICIDES												
					PID												
					RAB												
					ROD												
					SARA												
					SEDIMENTS												
					SOLVENTS												
					SVE												
					SVOC												
					SWMU												
					TCA												
					TCE												
					TPH												
					VOA												
					VOC												
					WELLS												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
															WQA		
M60050 / 002603	01-31-2002	BECHTEL	DRAFT RESPONSIVENESS SUMMARY FOR	ADMIN RECORD	GW	018	BECHTEL										
CTO-0164/0269	01-25-2002	NATIONAL, INC.	THE REGIONAL VOLATILE ORGANIC	BASE	RESPONSE	024	NATIONAL										
MISC	00164		COMPOUND GROUNDWATER PLUME AND	INFO	ROD	OU 1	SW02052008										
N68711-92-D-4670		NAVFAC -	THE VOC SOURCE AREA	REPOSITORY	TCE	OU 2A											
0025		SOUTHWEST			VOC												
		DIVISION			WATER												
					WELLS												
M60050 / 002601	01-17-2002	BECHTEL	RESTORATION ADVISORY BOARD	ADMIN RECORD	EIS	001	BECHTEL										
CTO-0200/0343	01-30-2002	NATIONAL, INC.	MEETING MAILER - RAB MEETING AGENDA	BASE	EOD	002	NATIONAL										
MISC	00200		AND PUBLIC NOTICE AND MINUTES AND	CONFIDENTIAL	GW	003	SW02052008										
N68711-92-D-4670		NAVFAC -	ATTACHMENTS FROM THE 28 NOVEMBER	INFO	LF	004											
0031		SOUTHWEST	2001 MEETING (CONTAINS MAILING LIST	REPOSITORY	MW	005											
		DIVISION	PARTS OF WHICH SHOULD BE		NFA	007											
			CONSIDERED CONFIDENTIAL)		ORDNANCE	008											
					PCB	011											
					PIM	012											
					PUBNOT	017											
					RAB	024											
					RD	025											
					ROD	ANOMALY AF											
					SI	BLDG. 307											
					TCE	OU 2A											
					VOC	OU 2B											
					WELLS	OU 2C											
						OU 3											
						OU 3B											

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002614	CTO-0200/0371	04-04-2002	BECHTEL NATIONAL, INC.	MISC	03-27-2002			00200	NAVFAC - SOUTHWEST DIVISION	0041			RESTORATION ADVISORY BOARD MEETING MAILER - RAB MEETING AGENDA AND PUBLIC NOTICE FOR THE 27 MARCH 2002 MEETING WITH MINUTES AND ATTACHMENTS FROM THE 30 JANUARY 2002 MEETING	ADMIN RECORD BASE CONFIDENTIAL INFO REPOSITORY	EM GW LF MAG RD LANDFIL MW PIM PUBNOT RAB RCRA RSE SEDIMENTS SOIL SVOC TPH VOC WELLS	002 003 005 016 017 018 024 ANOMALY AF BLDG. 307 OU 1 OU 2A OU 2B OU 2C OU 3	BECHTEL NATIONAL SW02052008
M60050 / 002631	CTO-0038/0014	05-21-2002	BECHTEL ENVIRONMENTAL, INC.	MISC	03-27-2002			00038	NAVFAC - SOUTHWEST DIVISION	0125			PUBLIC INFORMATION MATERIALS INCLUDING: RESTORATION ADVISORY BOARD MEETING AGENDA & PUBLIC NOTICE FROM 27 MARCH 2002 MEETING; MINUTES FROM THE 30 JANUARY 2002 RAB MEETING; INFORMATION SHEETS; VARIOUS REGULATORY AGENCY LETTERS, & PRESENTATION MATERIALS	ADMIN RECORD BASE	BCT BRAC FACT SHEET GW PIM PUBNOT RAB SOIL TECH MEMO VOC	001 002 003 005 016 018 024 OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002626	05-14-2002	BECHTEL	DRAFT FINAL RECORD OF DECISION FOR	ADMIN RECORD	ARAR	018	BECHTEL										
CTO-0164/0296	05-01-2002	NATIONAL, INC.	THE REGIONAL VOLATILE ORGANIC	BASE	BCT	024	NATIONAL										
MISC	00164		COMPOUND GROUNDWATER PLUME AND	INFO	BRAC	BLDG. 307	SW02052008										
N68711-92-D-4670		NAVFAC -	THE VOLATILE ORGANIC COMPOUND	REPOSITORY	CHARACTERIZATI	OU 1											
0300		SOUTHWEST	SOURCE AREA		DCA	OU 2A											
		DIVISION			DCE												
					DQO												
					FFA												
					FOSET												
					FOST												
					FS												
					GW												
					HERBICIDE												
					METALS												
					MONITORING												
					MW												
					NCP												
					NPL												
					PCA												
					PCB												
					PCE												
					PESTICIDES												
					PRG												
					RAB												
					RCRA												
					RFA												
					RI												
					ROD												
					SARA												
					SDWA												
					SOIL												
					SVE												
					SVOC												
					SWMU												
					TCE												

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification	Keywords	Sites	Location Box No.
															TPH TSDF VOA VOC WELLS		
M60050 / 002627	CTO-0164/0297	05-14-2002	BECHTEL NATIONAL, INC.	MISC	05-01-2002		N88711-92-D-4670	00164	NAVFAC - SOUTHWEST DIVISION	0031			COMPILED RESPONSE TO COMMENTS ON THE DRAFT RECORD OF DECISION FOR THE REGIONAL VOLATILE ORGANIC COMPOUND GROUNDWATER PLUME AND THE VOLATILE ORGANIC COMPOUND SOURCE AREA (COMMENTS BY US EPA, DTSC, RWQCB & OCWD) (SEE AR #2596 - DRAFT ROD)	ADMIN RECORD BASE INFO REPOSITORY	COC COMMENTS COPC DCA DCE GW HERBICIDE METALS MOA PCB PCE PERCHLORATE PESTICIDES RESPONSE ROD SOIL SVOC TCA TCE VOC WATER WELLS	018 024 OU 1 OU 2A	BECHTEL NATIONAL SW02052008

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Record Type	Record Date	Author	Contr./Guid. No.	CTO No.	Recipient Affil.	Subject	Classification	Keywords	Sites	Location Box No.
Approx. # Pages	EPA Cat. #	Recipient												
M60050 / 002759	06-06-2002	BECHTEL	RESTORATION ADVISORY BOARD	ADMIN RECORD	BCP	001	SOUTHWEST							
CTO-0038/0018	05-29-2002	ENVIRONMENTAL, INC.	MEETING MAILER - RAB MEETING AGENDA	BASE	CANCER	002	DIVISION							
MM	00038		AND PUBLIC NOTICE WITH MINUTES AND	CONFIDENTIAL	CRP	003								
N68711-95-D-7526		NAVFAC -	2002 MEETING (CONTAINS MAILING LIST	INFO	DCA	005								
0031		SOUTHWEST	PARTS OF WHICH SHOULD BE	REPOSITORY	EBS	011								
		DIVISION	CONSIDERED CONFIDENTIAL)		GUID	016								
					GW	017								
					LF	018								
					MONITORING	024								
					MTG MINS	025								
					MW	ANOMALY AF								
					PCB	BLDG. 307								
					PCE	OU 1								
					PIM	OU 2A								
					PUBNOT	OU 2B								
					RAB	OU 2C								
					ROD	OU 3								
					RSE									
					SEDIMENTS									
					SOIL									
					SOLVENTS									
					STORMWATER									
					TCE									
					VOC									
					WATER									
					WELLS									

UIC No. / Rec. No.

Doc. Control No.    Prc. Date    Author Affil.  
Record Type        Record Date    Author  
Contr./Guid. No.    CTO No.        Recipient Affil.  
Approx. # Pages    EPA Cat. #     Recipient

Subject

Classification

Keywords

Sites

Location  
Box No.

((([qry\_main\_admin\_record\_select by uic].SUBJECT Like "TECHNICAL REVIEW COMMITTEE" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "TRC" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "FACT SHEET" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "PROPOSED PLAN" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "RESTORATION ADVISORY BOARD" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "RAB" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "PUBLIC" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "NEWS" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "RECORD OF DECISION" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "ROD" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "RESPONSIVENESS SUMMARY" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "LOCAL REUSE AUTHORITY" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "LRA" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "WORKSHOP" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "NOTICE" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "NEWSPAPER" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "HEARING" Or [qry\_main\_admin\_record\_select by uic].SUBJECT Like "LOCAL REDEVELOPMENT AUTHORITY")) AND UIC=M60050

No Keywords

Sites=018;024;OU 1;OU 2A

No Classification

# **ATTACHMENT B**

---

## **TRANSCRIPT FROM PUBLIC MEETING**

MARINE CORPS AIR STATION EL TORO

ORIGINAL

PROPOSED PLAN - PUBLIC MEETING - )  
GROUNDWATER CLEANUP FOR )  
OPERABLE UNITS 1 AND 2A AT )  
MARINE CORPS AIR STATION EL TORO )  
\_\_\_\_\_ )

Date and Time: Tuesday, November 13, 2001  
6:00 p.m. - 9:00 p.m.

Presentation/Question Session: 7:00 p.m.

Held at: Irvine Ranch Water District  
15600 Sand Canyon  
Irvine, California

(Pages 1 through 61)

**HAHN**  
**BOWERSOCK**  
CORPORATION  
Certified Court and Deposition Reporters  
151 Kalmus Drive Suite L-1 Costa Mesa, CA 92626  
800-660-3187 Fax 714-662-1398  
email: hbdeposet@aol.com

1 PRESENTATIONS WERE MADE BY THE FOLLOWING SPEAKERS:  
2  
3 MR. DEAN GOULD  
4 BRAC Environmental Coordinator, MCAS El Toro  
5 Base Realignment and Closure  
6 Southwest Division, Naval Facilities Engineering Command  
7  
8 MS. CONTENT ARNOLD  
9 Remedial Project Manager  
10 Southwest Division, Naval Facilities Engineering Command  
11  
12 DR. ANDREA TEMESHY  
13 Risk Assessor  
14 Bechtel National  
15  
16 MR. ANDY PISZKIN  
17 Former Lead Remedial Project Manager  
18 Southwest Division, Naval Facilities Engineering Command  
19  
20 MR. STEVE CONKLIN  
21 Associate General Manager  
22 Orange County Water District  
23  
24 MR. RICHARD BELL  
25 Engineer  
Irvine Ranch Water District  
MS. NICOLE MOUTOUX  
Project Manager  
U.S. EPA Region IX  
MS. TRISS CHESNEY  
Project Manager  
Cal-EPA, Department of Toxic  
Substances Control  
MS. PATRICIA HANNON  
Project Manager  
Cal-EPA, Regional Water Quality  
Control Board

I N D E X

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

Welcome/Opening Remarks by:		Page
Mr. Gould	-----	4
Presentations by:		
Ms. Arnold	-----	15
Dr. Temeshy	-----	20
Mr. Piszkin	-----	29
Mr. Conklin	-----	40
Mr. Bell	-----	42
Ms. Moutoux	-----	51
Ms. Chesney	-----	52
Ms. Hannon	-----	52
Public Comments:		
Mr. Mark Miller	-----	55
Mr. Blake Storie	-----	57
Mrs. Carol Boot-Storie	-----	57

1 IRVINE, CALIFORNIA; TUESDAY, NOVEMBER 13, 2001

2 7:02 p.m.

3  
4 MR. GOULD: Good evening, and thank you all for  
5 coming. My name is Dean Gould. I am the BRAC  
6 Environmental Coordinator for Marine Corps Air Station  
7 El Toro.

8 Tonight we have the public meeting for the  
9 proposed plan for the groundwater cleanup for sites  
10 known as operable unit 1, which would be site  
11 18, which is the off-station groundwater  
12 contamination, and operable unit 2A, site 24, somewhat  
13 informally known as the, quote, unquote, source area for  
14 that contamination.

15 I do sincerely thank you for being here this  
16 evening. I know there are a lot of competing interests.  
17 While we did hope the attendance would have been a  
18 little higher than what we have, I do see some faces I'm  
19 not accustomed to seeing in what we call restoration  
20 advisory board meetings, which is a meeting that we have  
21 every other month where we give an update on the  
22 environmental status of the base.

23 So I am encouraged to see the new faces, so  
24 thank you especially to you folks for coming.

25 Maybe one reason why folks did not come out in

1 greater numbers tonight is because due to the ad that  
2 ran in the paper. If you were to read it top to bottom,  
3 it pretty much says it all. So maybe we don't need to  
4 go on now.

5 It really is quite comprehensive. And in  
6 addition to that, with the information that's set up at  
7 the tables here and what we're going to give in the more  
8 formal presentation, I think you'll have literally as  
9 much information as you care to have on exactly what  
10 we're doing, what we're proposing.

11 And we want to hear back from you too. This  
12 is not meant to be strictly a one-way type of forum  
13 here.

14 Let me go ahead and go over what the format  
15 for tonight is. Believe it or not, we're actually  
16 one-third of the way through now that we're just getting  
17 into the more open-speaking portion.

18 The way this public meeting was set up and the  
19 format that we're still working with, but I think is  
20 probably the best for all concerned, at least as  
21 appealing to the widest spectrum of people, would be to  
22 have what we call a poster-board session where we have  
23 the various stations set up, and we have respective  
24 experts, if you will, for each of those stations.

25 We have regulatory agency representatives. We

1 have people from the Navy staff. We have, in this  
2 instance, water district representatives, community  
3 relation specialists. Just about anybody that you would  
4 need to go, to to get an answer to whatever you might  
5 have a question on with regards to these particular  
6 situation at El Toro are here tonight.

7 And so for that first hour, it was more of an  
8 informal question-and-answer period, going through the  
9 various phases of the program up to where we are  
10 tonight, which is the proposed plan proposal, if you  
11 will, to the community.

12 And this is what we're in right now which is called  
13 the public comment period where for 30 days, we sent out  
14 this proposed plan, and it is open for public comment.  
15 And this meeting is meant to both solicit interest as  
16 well as answer questions, get community feedback on the  
17 alternative that we, the Navy, in concert with the water  
18 districts, in this instance, are proposing.

19 So that was the first part of the meeting the informal  
20 poster-board session.

21 Now we're going to go into a little bit more  
22 of a prepared presentation, if you will. And I would  
23 ask if you please hold off on comments until we're  
24 completed with the presentation.

25 We're going to have a variety of speakers this

1 evening going through all the different phases that are  
2 on display here tonight. And then at the end, there  
3 will be the opportunity for the public to provide formal  
4 comments.

5 We have the good fortune of a formal court  
6 reporter here. As you can see, very detailed notes are  
7 being taken here this evening, and any comments that are  
8 provided or questions that are provided will be  
9 responded to. It is our job to respond in writing to  
10 them, so we want to make sure that we obtain your names,  
11 and we'll make sure that you get those responses in  
12 writing to any comments that are provided to us this  
13 evening.

14 And then the third portion would be after the  
15 formal presentation, if you will, if anybody would then  
16 like to still come forward and maybe privately go ahead  
17 and offer input to the court reporter, it's certainly  
18 your opportunity.

19 So you can either provide comments openly at  
20 the end of the presentations, or afterwards, once the  
21 presentation portion is concluded, feel free, by all  
22 means, to go ahead and come up and provide them  
23 to the court reporter in that manner.

24 We also have comment cards, if that's your  
25 preference. You can go ahead and just fill them out in

1 that manner. No shortage of opportunity to provide  
2 input to us this evening.

3 So we'll go ahead if -- I think we covered it  
4 all, to go ahead and kick it off.

5 The purpose, I think we touched on that. We  
6 want to present to you, the public, in a formal sense,  
7 what the proposed plan is for these particular sites in  
8 our overall CERCLA program.

9 Before we go too much farther, for those that  
10 would -- I think just about anybody would benefit from  
11 it, but for those -- especially the new members here  
12 tonight, I would suggest three documents that you  
13 should definitely have.

14 Hopefully everybody has a copy of the proposed  
15 plan itself. That would be this document here. It's  
16 very good because it really does say it all. In  
17 addition, it has a glossary of all of the terms in the  
18 back. That's one key document you should have.

19 Another would be an outline, really a copy of  
20 all the slides we're going to be giving this evening. I  
21 think we have those on a table. If anybody needs that,  
22 we can take a brief recess, and you can grab one of  
23 those to follow along and maybe take notes as we go  
24 through the presentation.

25 And a third would be I see a color handout of

1 the actual groundwater plume, over there. That would be  
2 nice just to take with you later on for reference  
3 purposes.

4 So definitely, if nothing else, I suggest that  
5 you take those three documents. But in addition to  
6 that, there is a whole table full of documents out there  
7 out front, plus at the various stations here. So  
8 please, by all means, help yourself. Plenty of  
9 information to go around.

10 Specifically, as we talked about a little bit,  
11 we're going to propose to you the remedial action for  
12 the volatile organic compounds that have found their way  
13 into the regional aquifer off-station at MCAS El Toro  
14 into the regional groundwater, as it mentions there.

15 We want community input. This is not just  
16 because it's a mandated requirement. We truly come up  
17 with a better product by getting community input.  
18 That's what we want and need this evening.

19 And then at the bottom there, opportunity for  
20 the community to learn about, and you can see the  
21 various bullet points. The contamination itself, how it  
22 got there, how it's going to be cleaned up, how long  
23 it's going to take, all those types of things.

24 Just to kind of summarize, tonight really is  
25 to focus on the CERCLA remedy for these two particular

1 sites. But we can't really go too much further without  
2 at least acknowledging that how we got here was by way  
3 of a settlement agreement that was just recently signed  
4 by the Department of Justice on behalf of the Navy, in  
5 addition to signatures by the local water districts, in  
6 this instance, Orange County Water District and Irvine  
7 Ranch Water District.

8 And certain people in the audience this  
9 evening may have a little bit bigger smiles on their  
10 face than others because that has been a very, very long  
11 time coming, and a great deal of effort has been put  
12 into it. And I'll give a little time line here in a  
13 minute to show you a portion of how long it's taken.

14 So we're very, very excited about that. It's  
15 a significant milestone in the program, and especially  
16 for the ultimate cleanup of the base and the affected  
17 off-station groundwater.

18 The settlement agreement that I mentioned is a  
19 very, very complex agreement, and it did take quite a  
20 bit of time to ultimately reach agreement on it.

21 And "agreement" really is the key word. It  
22 was agreed upon by the local water districts and the  
23 Department of Justice on behalf of the Navy, as I  
24 mentioned, to identify what we feel is the implementable  
25 remedy for this particular situation that we have, being

1 the contaminated groundwater.

2 So it's something that we have over years and  
3 extensive effort come to agreement on now, and we feel  
4 it's a very good product for the community, as well as  
5 for the agencies involved. So let's go ahead and get  
6 into the time line a little bit.

7 Okay. The first block there, the Federal  
8 Facilities Agreement was signed, it mentions, in  
9 February of 1990. Or I'm sorry. It was placed on the  
10 National Priorities list in February 1990.

11 The Federal Facilities Agreement is something  
12 I have in my hand. And what this means is this  
13 off-station groundwater was identified, and it was of a  
14 significant enough extent that the base was placed on  
15 something called a National Priorities list.

16 And once that is done, in this instance, the  
17 Navy was obligated to enter into something called a Federal  
18 Facilities Agreement, which was signed by a  
19 representative of the Navy, as well as what are now the  
20 Regional Water Quality Control Board, represented by  
21 Patricia Hannon this evening, Department of Toxic  
22 Substances Control with Triss Chesney here this evening,  
23 and U.S. EPA with Nicole Moutoux here this evening.

24 So those are the four parties that signed this  
25 agreement, and it's a legally binding document that says

1 the Navy is committed in a very structured sense to  
2 obtain a cleanup or complete follow-through through the  
3 CERCLA process of those sites that are identified in  
4 need of formal remediation.

5 And there's various schedules that needed to be  
6 adhered to with direct oversight by the three agencies I  
7 just mentioned. So for the first step, we're placed on  
8 the list, and then we enter into an agreement.

9 Okay. Now, once the agreement's been reached  
10 and we have a schedule to adhere to, the first step of  
11 that schedule would be the RI phase of remedial  
12 investigation. And you can see, looking at your  
13 handouts, what happens during that phase.

14 As the name implies, it's an investigation.  
15 We're trying to identify how much, where, when, how,  
16 those types of things. Very detailed investigation as  
17 to the source and the extent. And that was completed  
18 between the two different sites right around the  
19 1996-1997 time frame.

20 The next step would be the feasibility study.  
21 And from the feasibility study stage, now we're looking  
22 at ways to remedy those problems that were identified in  
23 the RI phase. So we're looking at alternatives, and  
24 we're looking for the preferred alternative, which is  
25 what we're here presenting you tonight. And that two --

1 those -- those alternatives were published in the  
2 feasibility study also right around the '96-'97 time  
3 frame.

4 And then the publishing of proposed plan and  
5 the holding of the public comment period 2001. What  
6 happened? That's five years. What happened between then?

7 Well, what happened was very lengthy  
8 discussion and negotiation between the parties that I've  
9 mentioned just a little bit ago. Very complex, both  
10 technically, physically, all those types of things, but  
11 we have now reached agreement.

12 So it took a little bit longer than what we  
13 would have hoped. The key thing is that we all are here  
14 this evening with a signed agreement so we are now able  
15 to move forward or continue on forward with our CERCLA  
16 process, that being the public comment period of the  
17 proposed plan phase.

18 Once this phase has been closed out, we've  
19 solicited and responded to public comments, if, in fact,  
20 after that input we do have public acceptance, and that  
21 is one of the criteria that we need to consider, we can  
22 move forward then with the publication of a ROD with  
23 hopefully this still being the preferred alternative.  
24 That would be the next step in the normal CERCLA  
25 process.

1           And then with the agreement that we do have,  
2 we would continue to be move forward with the water  
3 districts, in this instance, with the remedial design of  
4 the remedy, and then move forward with the actual  
5 treatment of the groundwater itself over the  
6 long-term.

7           So that is the process-- I won't say a nutshell  
8 because that was kind of a big nutshell, wasn't it? But  
9 that is the process and how we've gotten to where we are today.

10           All right. Now, the reason why I asked to be  
11 sure that you have one of those color handouts that are  
12 over on the table there, because looking at this one,  
13 it's not quite as crisp, and plus, just to get it on  
14 this elongated sheet, it's a little distorted, and that  
15 handout is a little bit crisper. So if you like, feel  
16 free to pick this up.

17           But this does give a pretty good feel for  
18 the extent of the on- and off-station groundwater  
19 contamination that did take place that we are now  
20 responsible for providing a remedy for and ultimately  
21 making sure that it is cleaned up.

22           Tonight I'll be serving essentially as a  
23 facilitator for the discussion this evening. We do, as  
24 I mentioned, have a variety of speakers, each presenting  
25 a different portion of where we're at in the process.

1 I'll turn it over now to Ms. Content Arnold.  
2 She is the lead remedial project manager for El Toro.  
3 She's with the Navy staff, working out of San Diego.  
4 She's going to go ahead and start off with some of the  
5 more technical aspects of some of this, getting into the  
6 site descriptions and getting into the remedial  
7 investigation.

8 MS. ARNOLD: Thanks, Dean.

9 As Dean said, I'd like to start off by giving  
10 you a brief description of the two sites. Site 18 is  
11 the regional groundwater plume, and it includes the area  
12 of groundwater contamination in the principal aquifer  
13 extending off-station from the source area. The Source  
14 area is Site 24. The plume extends approximately  
15 three miles west near Culver Avenue in Irvine.

16 Now, the principal aquifer varies from  
17 approximately 200 to 450 feet below ground surface. The  
18 primary chemical of concern is trichloroethene, or TCE  
19 as I'll be referring to it this evening.

20 Site 24 is a VOC source area, and that  
21 encompasses approximately 200 acres in the southwest  
22 quadrant of the base. It also includes two large  
23 hangars, buildings 296 and 297. Now, this is where  
24 aircraft repair and maintenance took place on the  
25 base.

1           The footprint of site 24 includes the shallow  
2 groundwater unit contamination, as well as the soil  
3 contaminated within the area.

4           This evening we're not going to be  
5 focusing on the soil because that was addressed in an  
6 interim ROD back in 1997. We plan on having a final ROD  
7 for the soil cleanup in the year 2002. So, like I said,  
8 tonight we'll be focusing on the shallow groundwater  
9 contamination for site 24.

10           Additionally, the shallow groundwater unit  
11 varies from approximately 80 to 110 feet below ground  
12 surface. And once again, the primary contaminant of  
13 concern is TCE.

14           Now, I know this is difficult to see, so I  
15 hope you have your handouts with you. But basically,  
16 this is an aerial of site 24, and I'll be flipping back  
17 to that map to put it in perspective for you.

18           But these are the two hangars over here, which  
19 was the source of the contamination where the industrial  
20 activities took place on the base. And the  
21 contamination flowed off base in a westerly direction  
22 like this.

23           To put it into perspective: here is Site  
24 24, shallow groundwater contamination here, and then we  
25 have just some landmarks that I'd like to point out:

1 I-5 right here, the 405 over here, and then Culver Drive  
2 over here. And you can see that the principal  
3 contamination area extends off base approximately 3  
4 miles, like I said.

5 As Dean mentioned, as part of the CERCLA  
6 process, we completed a remedial investigation, or as we  
7 commonly refer to it, an RI.

8 So what is an RI? Well, the objective of the  
9 RI is to evaluate the presence, nature, and extent of  
10 contamination. It includes three components primarily,  
11 an initial investigation, an extensive field  
12 investigation, and also a base-line risk assessment.

13 So what are the components of the initial  
14 investigation? Well, this included document review,  
15 aerial photo reviews, personal interviews, and an  
16 initial soil gas investigation.

17 The extensive field investigation included  
18 first developing a workplan. And this workplan was  
19 reviewed by the BRAC Cleanup Team, and that includes  
20 U.S. EPA, DTSC, as well as the Regional Water  
21 Quality Control Board and the Navy.

22 And before going out into the field, we gained  
23 concurrence from that regulatory group prior to  
24 commencing field work. And once out in the field, we  
25 did extensive soil, groundwater, and soil gas sampling.

1           From this data that we gathered, we put it all  
2 into a risk assessment, which Dr. Temeshy will be  
3 touching on a little bit later on this evening.

4           This RI was conducted between 1992 and 1997,  
5 and the conclusions basically confirmed the  
6 following:

7           First of all, that VOCs in soil and  
8 groundwater originated at site 24, the source area. The  
9 highest concentrations of TCE were found beneath  
10 building 296, that is, one of the hangars that we  
11 previously looked at, and concentrations were 4,850  
12 parts per billion.

13           TCE was also the predominant chemical of  
14 concern, as we discussed, in both soil and groundwater  
15 TCE is an industrial solvent that was used primarily  
16 for cleaning, degreasing, and paint stripping.  
17 Historically, it was common practice to use that.

18           VOCs have migrated from the soil at site 24 to  
19 the shallow groundwater unit and then finally to the  
20 principal aquifer. And also, as we've discussed, the  
21 VOC plume extended three miles west of the station in  
22 the principal aquifer near Culver Drive.

23           Within station boundaries, the TCE is limited  
24 to the shallow groundwater unit, not the principal Groundwater  
25 unit, and That's the shallower unit from 80 to 110 feet below

1 ground surface. Outside the station boundary,  
2 we have contamination in both the shallow and  
3 the principal aquifer. And in the shallow groundwater  
4 unit, water quality is better than the federal and state  
5 water quality standard of 5 parts per billion for TCE.

6 In the principal groundwater unit, the concen-  
7 trations range generally from barely detectable up to 50  
8 parts per billion.

9 Finally, TCE concentrations gradually decrease  
10 as you move away from the source area.

11 Now, this next figure here depicts the  
12 migration of VOCs released from the surface. Over here,  
13 if you can imagine, this is where the hangars are here.  
14 We have a release of TCE to the soil, and you can see it  
15 migrating to the shallow aquifer approximately 80 to  
16 110 feet below ground surface.

17 As it travels downgradient, it eventually  
18 migrates to the regional groundwater plume, which is  
19 deeper,  
20 approximately 200 feet below ground surface.

21 MR. GOULD: Thank you, Content.

22 Okay. As I outlined just previously, the next  
23 step in the process would be the feasibility study  
24 portion where we look at alternatives.

25 But in order to help us determine those

1 alternatives, we need to know, with all the information  
2 that we just gathered from the remedial investigation,  
3 what threat is actually posed to human health and the  
4 environment.

5           So Dr. Andrea Temeshy is going to go ahead and  
6 speak to us tonight on that particular subject. She is  
7 an employee with Bechtel National, and she is  
8 outstanding in her field.

9           DR. TEMESHY: Well, thank you.

10           Before I go through what the results are on  
11 the risk assessment, I want to briefly introduce the  
12 concept of the risk assessment.

13           Basically, what the risk assessment  
14 does is estimate what the potential hazard  
15 to an individual exposed to the chemicals at a site are.  
16 That is, are we going to have a potential for some  
17 adverse health effect?

18           And when we talk about an adverse health  
19 effect, we're talking about could this person develop  
20 cancer, or chemicals also can elicit another type of  
21 effect like non-cancer effects, which could range  
22 anywhere from liver or kidney or systemic toxicity-type  
23 effects.

24           So when we talk about the risks, what we're  
25 doing is we are translating chemical concentrations into

1 an estimate of hazard to human health.

2 So on that, we'll move on to why do we do a  
3 risk assessment. As was stated before by Dean, it is an  
4 integral part of the remedial investigation concept. So  
5 as a first step, we have to be able to do it in  
6 order to be in compliance with guidelines.

7 And again, it's to determine if we have  
8 a problem as far as human health based on exposure to  
9 the chemicals at a site?

10 How are the results of this assessment  
11 used?, If we have a risk, then that will determine  
12 if cleanup is going to be necessary or not at the site.

13 How the risk assessment is done. I'm going to  
14 go through, the steps that I do in order to  
15 quantify risks so that we know all the components that  
16 are utilized.

17 And that is -- the first thing is we have the  
18 chemical contaminants, and those are at a certain  
19 concentration. For example, we have TCE. We've got  
20 concentrations of TCE, and we're going to be using that  
21 in the risk assessment.

22 The next thing is we are going to determine  
23 who's exposed. What is -- what are the potential  
24 receptors at a site? And looking into the future, could  
25 we have a residential receptor at the site? That would

1 be a very conservative scenario.

2           And how would exposure take place? What kind  
3 of pathways? Is this person going to be drinking the  
4 groundwater? And is he going to be using it as a  
5 drinking water source? It's going to be also used for  
6 bathing, so you have dermal contact.

7           And then you would also have the inhalation  
8 because volatile organic chemicals will basically be

9           So then we have the chemicals and the  
10 person exposed to them under different pathways.  
11 All of this information is integrated into a  
12 mathematical model. And within that mathematical model,  
13 we also look at how toxic is this chemical. The  
14 result of Integration would be the risk number.

15           When we talk about the risk number,  
16 we have two different end points. We would have the  
17 cancer end point, and we also have the non-cancer-type  
18 effect. And when we calculate the risk, we're going to  
19 address both end points.

20           Now, one thing to consider is when we're putting  
21 all of this information together, we are going to be very  
22 conservative in our assumptions. And I'm going to go  
23 through an example as to what I mean by "conservative"  
24 in the next slide.

25 We are not going to at any time underestimate the risk.

1 We're always going to be erring in the overestimation of  
2 it. That is, that way we are always protective of human  
3 health. Therefore, the actual risk is always  
4 going to be lower than the one that we are actually  
5 estimating.

6 Now, this is just a quick overhead as to  
7 showing that we've got several things that must occur in  
8 order to quantify the risk.

9 That is, (a), we have to have chemical  
10 contaminants, (b), we have to have a way to release the  
11 chemicals from the media to an area where humans are  
12 going to be exposed. If we have a residential receptor,  
13 then -- that person is going to be exposed to that  
14 groundwater via use of that groundwater as a drinking  
15 water source.

16 We need to have a person that is exposed to  
17 chemical contaminants. If you don't have a person  
18 exposed to, then you don't -- you cannot quantify the risk.  
19 And finally, you've got different exposure pathways for  
20 these contaminants; that is, by eating it, by drinking it,  
21 or by touching it. Now, we've said earlier that the risk  
22 estimates are very conservative and overestimate  
23 in the risk for protection of human health.

24 When we talk about residential exposure,  
25 these are some of the assumptions that I want to present

1 to you that show you how conservative these estimates  
2 are.

3 We are assuming that a resident is basically  
4 at a site exposed to groundwater, in this instance, for  
5 a period of 30 years. And that means this person never  
6 moves. It's there for 30 years, from birth to 30  
7 years.

8 Also, basically, 24 hours a day for 350  
9 days a year. Again, that means that this person does  
10 not leave the house except for 15 days over that year.  
11 So that's a very conservative assumption because this  
12 person does not work, does not leave the house, and that  
13 is very, very conservative.

14 Again, following this conservative  
15 scenario, as far as drinking water, two liters of water  
16 a day are consumed. All of these values, all of these  
17 assumptions, are established by EPA, and we basically  
18 implement them in our risk assessment.

19 So when we talk about the resultant risk numbers,  
20 keep in mind that these are numbers that are based on  
21 conservative assumptions.

22 Now, we've quantified risks, but what do they  
23 mean as far as are they acceptable? Are they unacceptable?

24 We've got established criteria by which to  
25 compare how acceptable or unacceptable these risk numbers

1 are. For cancer risks, we've got a criteria  
2 established by EPA, which means that if it's less than  
3 one in a million, that is, one times 10 to the minus 6  
4  $1 \times 10^{-6}$  for cancer risk, then the risks are considered  
5 acceptable.

6 If they are within one in 10,000 to one in a  
7 million or 10 to the minus 4 to 10 to the minus 6,  
8 again, this is for the cancer risk, then it is within  
9 the risk-management range, and they're in the generally  
10 allowable risk range.

11 Now, what that means is that, at this point,  
12 the stakeholders and the regulatory agencies, will get  
13 together and will integrate with the results with other  
14 factors.

15 For example, are the concentrations at the  
16 site greater than drinking water standards?  
17 All of these factors will be taken into consideration to  
18 determine if remedial action has to be implemented at  
19 the site.

20 If risks are greater than one in 10,000 or  
21 greater than 10 to the minus 4, then that is considered  
22 unacceptable. And at that point, cleanup is warranted.

23 Now, for the non-cancer risks,  
24 there is a threshold of one. And if risks  
25 are less than one, again, that is considered allowable.

1 If they're greater than one, then there is a potential  
2 for adverse health effects to develop.

3 And at that point, then, again, considerations  
4 as to what the contaminant levels are like with respect  
5 to MCLs, in this instance, would be considered as  
6 far as the cleanup.

7 Now, I'm going to  
8 briefly show you what the risk results are  
9 under baseline conditions, that is, prior to any  
10 remedial action. These results are for an individual,  
11 that would be, in this case, a resident exposed to the  
12 groundwater at both Site 18 and Site 24.

13 Site 18 is the principal aquifer, and Site 24  
14 is the shallow groundwater unit. And again, we've got  
15 two different end points. We have the cancer risk, and  
16 we have the non-cancer portion of it.

17 For the cancer risks, under residential  
18 conditions, the principal aquifer results are within the  
19 10 to the minus 6 and 10 to the minus 4 risk range. And  
20 if you flip back to the previous slide, so they are in  
21 this area right here. That means that they're generally  
22 allowable. And at that point, you would integrate other  
23 criteria into whether cleanup is required or not.

24 Now, for the shallow groundwater, the risks  
25 are greater than 10 to the minus 4, and the 10 to the

1 minus 4 is the unacceptable risk range. Again, these  
2 are residential risk results, which means that you've  
3 got somebody exposed to the groundwater via drinking it,  
4 dermal contact, while showering, for example, and then  
5 through the inhalation portion of it while this  
6 groundwater is being used as a potable water source.

7 Finally, the non-cancer health effects, since  
8 we also have to address them. These results are greater  
9 than one. So there is a likelihood of potential adverse  
10 health effects for both the principal aquifer and the  
11 shallow groundwater unit.

12 Now, that we have this information, then  
13 the next step is what does it mean?  
14 For human health risks that are in excess of 10 to the  
15 minus 4, those are not acceptable, which means that they  
16 warrant some sort of remedial action.

17 At the shallow groundwater unit, then,  
18 since the risks are in excess of 10 to the minus 4,  
19 again, these are residential risks, then a remedial action  
20 will be implemented.

21 Now, at the principal aquifer, the risks are in the  
22 10 to the minus 4 (10-4), 10 to the minus 6 (10-6) risk range.  
23 So that is within the risk-management range.

24 However, the VOC concentrations exceed the  
25 federal and state water quality standards, and then that

1 leads towards remedial action.

2 So at both the shallow groundwater unit and the  
3 principal aquifer, you have remedial action based on the  
4 risk and also based on the exceedence of the VOCs for the  
5 MCLs.

6 MR. GOULD: Thank you very much, Doctor. Good.  
7 Good information.

8 Now, next step in the program I mentioned  
9 previously is the feasibility study. That will be --  
10 that and an introduction into the preferred remedy will  
11 be briefed to you by Mr. Andy Piszkin, the former lead  
12 remedial project manager for El Toro, but prior to Content  
13 Arnold.

14 He was involved for some time through all the  
15 investigation stages for a number of years, so he has a  
16 great deal of technical knowledge and background on it.  
17 So I think he's probably perfectly suited to give this  
18 particular portion of the brief.

19 One clarification I want to point out. I  
20 mentioned the signators on the settlement agreement.  
21 There was one more representative on behalf of the Navy.  
22 Department of Justice had negotiated for the Navy, but  
23 we actually had a Navy signator on it. So there were  
24 four signators.

25 So Andy, if you would, please.

1 MR. PISZKIN: Good evening. My name is Andy  
2 Piszkin. And like Dean says, I've been around quite a  
3 while. I started as a remedial project manager in '91,  
4 on El Toro. I feel like this is kind of homecoming night  
5 for me.

6 I've been involved in a lot of the groundwater  
7 studies as well as some of the negotiations for the  
8 agreement that has been signed by the Department of Justice  
9 and the water districts, as well as the Navy.

10 We use the EPA guidance on doing a remedial  
11 investigation/feasibility study. This is what it is,  
12 guidance, but it's got some real good stuff in it. And  
13 that's where the objective of a feasibility study comes  
14 in. It's different than what I have. You've seen  
15 remedial investigation. That's "what's out there." A  
16 risk assessment is "what does that mean?" and  
17 "What does that matter?"

18 And if it matters, then some action has to be  
19 taken, the feasibility study is, "what can you do about  
20 it." And the preferred alternative that we're proposing  
21 tonight for public comment here is what we think is the  
22 best thing to be done because of the risk and because of  
23 what we found.

24 So the feasibility study is trying to combine  
25 a lot of the -- what's the objective of our remedial

1 action. RAOs Remedial Action Objectives is what I call them.  
2 And first, you have to define the problem, what kind of response  
3 actions you need, what kind of tools are out there in the  
4 environment and industry that will help you solve those.

5 Do you have to get the groundwater out?

6 What do you do when you have it? How can you  
7 treat it? Do you have to get it out? Can you treat it  
8 down in the groundwater where it is 200 feet, 400 feet  
9 below the ground surface?

10 How do you treat it? Do you heat it up? Do  
11 you take it off to a landfill? What do you do with it?

12 So you look at all those possible  
13 technologies, and you try to then piece them together in  
14 some kind of a treatment train.

15 Okay. Well, maybe I'll pump it out first.  
16 Then I have it, and I have to treat it somehow. And  
17 I've got A, B, C, D, E way to treat it, and then I have  
18 to do something -- then it has to go somewhere else.  
19 You know, what do you do with it?

20 So you -- you look at all those technologies,  
21 what are those process options, and you put them  
22 together. You do some initial screening, which we have  
23 done, and some things just don't fit for the scenario  
24 that -- of what we have found and what we have to do  
25 with it. So those get kind of screened out being

1 noneffective.

2           Then you conduct detailed analysis. And  
3 under -- it was ironic. Under the -- the last one,  
4 under the guidance, it says "Further define alternatives  
5 as necessary."

6           Well, we spent a lot of time further defining  
7 alternatives as necessary. Because one of the things  
8 that has to happen, you can have the greatest  
9 technology, but if it can't be implemented, it doesn't  
10 go anywhere.

11           So one of the things and the only thing this  
12 settlement agreement that has been signed by a bunch of  
13 parties is that it makes the alternatives that are being  
14 proposed as a joint project with the water districts as  
15 implementable.

16           It will not be implemented unless the Record  
17 of Decision selects Alternative 8A and 10B prime. If  
18 that Record of Decision doesn't get to that point, that  
19 agreement doesn't go any farther. It doesn't happen  
20 even though it's all signed, it allowed us to be here  
21 tonight to say we have a proposed plan that is actually  
22 doable.

23           So the first thing is what's our objectives?  
24 One thing that's not on this slide is prevent exposure  
25 from nontreated water. That was actually our

1 third objective. We want to contain it.  
2 Don't let it go any farther, or at least minimize  
3 the migration of any contaminated groundwater above  
4 drinking water standards.

5 The second one is to reduce, you know, the  
6 concentrations to below drinking water standards. And  
7 the third, like I say, it's not on there, but it's to  
8 prevent anybody from coming into contact with something  
9 that's concentrated above the drinking water standard.

10 And, therefore, like the risk triangle, you  
11 need somebody to be exposed, you need a toxin or a  
12 concentration, and you need a pathway. If you can block  
13 the pathway, you block the risk.

14 On page 9 of the proposed plan, it gives  
15 you -- it's actually table 2, it's a good list of some  
16 of the alternatives that we considered early on like  
17 hydraulic containment.

18 You can put wells in, extraction wells. You  
19 can put in reinjection wells. You can put water into the  
20 ground so the groundwater doesn't flow any farther. You  
21 can install a slurry wall, but this technology was  
22 screened out early because it has to be installed too deep.  
23 In such a large area, it would just be just impractical  
24 and not cost-effective. So that's one of the alternatives  
25 that this just doesn't fit with what we have to work with

1 here.

2 You have some of the removals. You can --  
3 well, you can, you know -- extraction from groundwater  
4 wells. Vacuum-enhanced groundwater is kind of doable.  
5 That is, -- put a vacuum on the extraction well.

6 You have some of the treatment that you can do  
7 in place, and you have some of the treatment process  
8 that you can do once you bring the groundwater up.

9 So this is what we had at our disposal, and we  
10 went through some of these things, some of these  
11 technologies in the feasibility study. And with the  
12 scenario of how large and dilute the principal aquifer  
13 plume is and the area and the concentration and the flow  
14 of the shallow groundwater unit, we have a variety of  
15 alternatives.

16 And we'll go to that next slide.

17 I must say I remember discussing a lot of the  
18 discharge. What do you do with the water once it's  
19 treated? Do you put it in the washes? Do you put it  
20 in Agua Chinon or Bee Canyon Wash?

21 Do you just put it out in the middle of the  
22 runway surface impoundment?

23 Do you reinject it? Do you use it for irrigation or  
24 domestic use?

25 There's a lot of scenarios. There's probably

1 like, you know, 12 scenarios that we dreamed up of let's  
2 really think outside of the box. What can we do with  
3 the water after we treat it? And that was -- that was a  
4 main issue on what's implementable.

5 So here we have -- I believe this is page 14  
6 in the proposed plan, and it really goes through the  
7 alternatives that kind of met the -- you know, passed  
8 the ha-ha test, the ones that are kind of doable, and  
9 they all go to kind of pump and treat.

10 Because of the environment, because there is  
11 an Irvine Desalter Project that in the late 1980s, during  
12 that decade it was on the books as a water supply project,  
13 and I know Richard Bell and Steve Conklin both, or one of  
14 them, will talk more about that after I sit down, but  
15 looking through the alternatives, like alternative 8 --  
16 or I'm sorry -- 2A, that is a Navy stand-alone.

17 We looked at the Navy doing their own large  
18 groundwater pump-and-treat project without the Desalter,  
19 without the local water districts. If that -- if Irvine  
20 desalter project didn't happen, the Navy had to have  
21 some alternatives that they could do on their own, and  
22 that's what 2A is.

23 6A is a combination of using a joint project  
24 with the local water districts. 7A -- A and B are  
25 alternatives that incorporated monitored natural

1 attenuation and some of those results.

2 Well, let's go on to the next slide.

3 We took all those, and there are the nine  
4 criteria of EPA. The first two are critical. They're  
5 called threshold criteria. It's the protection of human  
6 health and the environment, and it has to meet the  
7 applicable laws. Those are the first two.

8 The next five, they're the balancing criteria.  
9 That's the meat of how to -- it's the majority of  
10 criteria to help select a proposed alternative.

11 The last two are modifying criteria. If there  
12 is -- you know, we -- we want state acceptance. We want  
13 public acceptance. And those actually come after this  
14 meeting today and the close of the public comment period  
15 where we take the response -- take the comments and in  
16 the Record of Decision provide a responsiveness summary  
17 to all the comments related to the proposed plan that  
18 the Navy's putting out.

19 So next slide.

20 This is page 19 of the proposed plan, as I  
21 term it, the meatball chart. And I'd have to look at  
22 the other page, page 18. It's nice that they're right  
23 together because page 18 goes through those nine  
24 criteria very specifically. You know, it has italicized  
25 font, which discusses what is looked at under that

1 criteria.

2 For instance, "Short-term effectiveness.  
3 Assesses how well human health and the environment will  
4 be protected from impacts due to construction  
5 implementation of a remedy. Also considers time to  
6 reach cleanup goals."

7 I must admit on the previous slides, two back,  
8 the alternative that we think is the best has one of the  
9 longest time frames when it comes to cleaning up the  
10 principal aquifer. It has 95-plus years. That's one  
11 reason we have this little plus here is it's a little  
12 bit of a misnomer. You have to look at the alternative  
13 that we're proposing as a combination of alternative 8A  
14 as well as 10B prime.

15 If you look at 10B, and prime is just a little  
16 bit of a reduction in the flow, and we look at the  
17 modeling -- the groundwater modeling, it didn't have a  
18 significant impact to the results.

19 10B cleans up the shallow groundwater in  
20 roughly 20 years. That's a big thing because that's the  
21 source of that large dilute regional plume. That's a  
22 big priority for the Navy to get rid of the source as  
23 soon as possible.

24 And so it's the combination of both 8A and 10B  
25 prime is what we're acting on for overall short-term

1 analysis. And like our little asterisks or our little  
2 plus sign says, there's a lot of optimization that's  
3 going to happen when we get into the design.

4 And the groundwater modeling is -- really, the  
5 main focus is comparative analysis. How does it compare  
6 to the other alternatives?

7 There is lots of opportunities to optimize  
8 well placement. And when you're running this thing for  
9 many, many years, as it will be used as an irrigation  
10 supply source, it's not going away, and it will be very  
11 beneficial.

12 So we look at this meatball chart. We don't  
13 have weighted averages. We don't have numbers. But you  
14 can see where it's a full closed-in circle, a good performance.

15 (Note to Readers: Recommend referring to the  
16 Comparative Analysis of Remedial Alternatives in the  
17 Proposed Plan or the public meeting presentation handout.)

18 You can see the preferred alternative has  
19 three -- actually, we have Navy state acceptance in  
20 there, which is nice -- nice as a full circle, best  
21 performance.

22 The big one, I have to say, is  
23 implementability. You see these other three  
24 alternatives. They are joint Navy/water district  
25 projects. But they just -- they did not make the cut,

1 and they did not meet the settlement agreement.

2           So the settlement agreement on the 8A, 10B  
3 prime is key to having something doable. So that's one  
4 of the main reasons we prefer it.

5           Cost-effective, it's got long-term  
6 effectiveness. It's great to be hooked up with a CERCLA  
7 remedy with a long-term local water district because  
8 they're here. They know how to run these things. You  
9 know, it's their business and they're experts and it's  
10 great to team up with them.

11           So here's some of the kudos or some of the  
12 things that are the real benefit of our preferred  
13 proposed remedy.

14           Optimal solution. Given all the factors, all  
15 the technical factors, all the nuances that we've had  
16 with the local water districts, with the regulatory  
17 agencies over quite a many number years, we think it's  
18 the best -- it really is the best solution.

19           It does resolve or satisfy our CERCLA  
20 requirements under the Navy and under our Federal  
21 Facilities Agreement. And the cleanup team, the BRAC  
22 cleanup team, they support it. They've been very  
23 diligent, very patient with the Navy and the local water  
24 districts on getting this settlement agreement that  
25 allows our preferred alternative to be implementable.

1                   So next.

2                   In the proposed plan, you do have some  
3 schematics. They all start looking the same after a  
4 while. But truly, this is different. And I do -- like  
5 Dean said, I would definitely support getting the  
6 handout version of the map that we see over here.

7                   It says "Irvine Desalter Project," where in  
8 the kind of red -- I'm not sure if that's mauve or I  
9 don't know what color -- our proposed alternative is.

10                  The light blue line is not what the Navy's  
11 proposing. That is the water district's drinking water,  
12 potable water system, that's outside of our  
13 VOC-contaminated plume.

14                  So with that, I'm going to give it back to  
15 Dean.

16                  MR. GOULD: Thank you, Andy. Terrific.

17                  Well, the evening certainly wouldn't be  
18 balanced unless we had presentations by the water  
19  
20  
21  
22  
23  
24  
25

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

districts that we're partnered with. And in just a moment, we'll have Mr. Steve Conklin from the Orange County Water District as well as Mr. Richard Bell from the Irvine Ranch Water District come up and give their perspective on the remedies being proposed and the historical perspective of what has transpired to date and offer a little more insight as far as the nuances to the implementation of the remedy we've been talking about so far.

If you would, Steve.

MR. CONKLIN: Thank you, Dean.

And good evening. My name is Steve Conklin with the Orange County Water District, and I'm very pleased to be here.

Andy said he started working on the project in 1991. I actually started working on it in 1989 when I started with the water district over 12 years ago.

Roy Herndon, our district hydrogeologist with the district, you started before I did.

MR. HERNDON: 1988.

MR. CONKLIN: 1988. So we have a long history with this project.

So Roy, myself, and the water district board

1 of directors are very pleased we've reached this point.  
2 We're very supportive of the project and very anxious to  
3 move forward with this very implementable and very  
4 technologically sound project that will meet the needs  
5 of ourselves, our partners, and the various regulatory  
6 agencies.

7           The water district is the groundwater  
8 guardian. We were created in 1933 by special action of  
9 the state legislature to protect and preserve the Orange  
10 County groundwater basin.

11           It's a very valuable resource. It's the water  
12 that's under our feet right here. It's the water that  
13 provides the needs of over 2 million people, that  
14 stretches from Los Alamitos all the way down to Irvine,  
15 from Anaheim and Fullerton.

16           That whole area there is -- about 70 percent  
17 of the water that those 2 million people use comes from  
18 the ground. This water has to be protected. It's an  
19 invaluable resource, and this project does protect this  
20 very important resource for us.

21           The water district is an independent  
22 monitoring authority. Our purpose is the groundwater  
23 basin. And with that, whatever -- whatever it takes,  
24 that's our purpose -- and our existence is to  
25 protect the groundwater basin.

1           The project, by treating the contaminants here  
2 at the site, it prevents the contaminants from moving  
3 farther downstream and potentially contaminating other  
4 groundwater. This water has its natural movement,  
5 more or less, from east to the west. It would be moving  
6 from the Irvine area actually on through Santa Ana and  
7 some of these other areas. And these areas are  
8 underlain by groundwater. If this contaminant continued to  
9 move it would contaminate that water as well.

10           So it's very important to pull the water out  
11 here, treat it, and then be able to use it.

12           This project is very valuable in that it's  
13 taking water, which is otherwise not usable, treating  
14 it, and making it into a very valuable resource. It's  
15 making us more water independent and not dependent so  
16 much on Metropolitan Water District and from water from  
17 out of the area. So it's making use of water right here  
18 and making the water available for us and for our  
19 children and for our children's children.

20           So with that, I'd like to turn it over to  
21 Richard Bell, my partner in the project, from Irvine  
22 Ranch Water District.

23           MR. BELL: Thank you, Steve.

24           It's a pleasure to be here tonight. I concur  
25 with the comments Steve made.

1           Both water districts' boards of directors back  
2 in June, after many years of effort, support the project.  
3 are very, Our districts are very enthusiastically behind  
4 the project, and we have been working very diligently on  
5 this project for many years.

6           I started with the district -- since we're  
7 giving a little history of each of our involvement with  
8 this project, I started here four years ago and got very  
9 involved with the project at that time. About half  
10 my time is devoted in one way or another to this  
11 project in negotiation and project  
12 development.

13           A little side note, 20 years ago,  
14 I was the regional manager for a Regional Water Quality  
15 Management Program for Southern California back in the  
16 late '70s when VOCs were first discovered in  
17 groundwater. At that time, we knew  
18 nothing about VOCs in the Irvine Area since this area was  
19 agricultural.

20           (Interruption by reporter.)

21           MR. BELL:

22  
23           One of the things that I'd like to talk about  
24 is our perspective on the project and how we got here.

25

1           The first slide is titled "Two Projects  
2 in One." That's an important point to understand. The  
3 project is both a nonpotable system, which is a CERCLA  
4 remedy that Andy addressed, and we also have a potable  
5 system.

6 And I'll show you them in a minute on the maps.

7           The nonpotable system basically takes water  
8 from the VOC Contamination plume, which is extracted, treated,  
9 and then would be used in a recycled nondrinking-water system  
10 primarily for landscape irrigation, and other nonpotable  
11 uses.

12 It is part of the CERCLA remedy.

13           The potable system are wells which are located  
14 safely beyond the plume, outside the plume, and outside  
15 upgradient of the influence of pumping from the plume.  
16 This water will be treated to remove salts and  
17 nitrates, for use in our drinking water system.

18           And we need to note that the potable project,  
19 is separate and  
20 not part of the CERCLA remedy.

21           Next slide.

22           It was very important early on in the process to  
23 get our public involved. A few years ago, we  
24 actually conducted some very extensive focus groups with  
25 our customers and community leaders.

1           And what we found from that process was  
2           that our community and the leaders in the community  
3           very much supported the cleanup of the project, but  
4           they preferred that the treated water from the plume  
5           be used for landscape irrigation. And that's how the  
6           project was basically configured. We developed the  
7           project into two components at that time.

8           One thing we do like to make clear is  
9           that the groundwater cleanup project and the  
10          groundwater supply project do not affect the ultimate  
11          use of MCAS El Toro. It really has no bearing on that  
12          decision at all.

13          The plume that Andy showed in his picture  
14          basically is the same as we show here in color.  
15          This is the source area site 24 or the origin of  
16          the VOCs. They spread basically in the shallow unit and  
17          then dropped down into the principal, deeper aquifers  
18          and have been detected out as far as Culver and Drive.

19          But we have designed a system that has two  
20          wells here in the major -- or the hottest spot of the  
21          plume for extraction.

22          We also maintain a well here at the toe of the  
23          plume to help provide containment of the plume so it doesn't  
24          get beyond this point. We want to protect this area  
25          downgradient of the plume. That's what Steve talked to earlier.

1           The water would be pumped from these wells,  
2     conveye by a pipeline to a central treatment plant here where  
3     the water will be cleaned and then from that point will  
4     be put into our nonpotable irrigation system.

5           We also have, which is separate from the --  
6     the CERCLA remedy, is our potable system, which would be  
7     outside the plume, would be some wells located along the  
8     Southside of the Interstate 5 Freeway.

9           That water, as I mentioned earlier in this  
10    Part of the basin has higher salts from past agricultural  
11    activities and natural sources.

12           This water will be pumped from these wells to  
13    the same treatment plant location, but into a separate  
14    facility, where it will be desalted and disinfected  
15    it and pumped it in the potable system.

16    Not part of CERCLA remedy.

17           The treatment system that will be used for the  
18    nonpotable project will include primarily two types of  
19    treatment processes. One is reverse osmosis, which will  
20    desalt the water to levels where we can use it for irrigation  
21    supply, and the second would be a packed aeration tower  
22    for air stripping to remove the volatile organic  
23    contaminants.

24           Those -- processes are both the best  
25    available technology. They're proven technology and

1 been used in many different locations, and they're very  
2 reliable processes.

3           The air that will be stripped out, which will  
4 contain the VOCs will be further treated through a granular  
5 activated carbon unit, to absorb all the VOCs in the air.  
6 The treated air -- will be free of contaminants so there will  
7 be zero discharges from this facility to the environment.

8           And after this water is treated, it will be  
9 disinfected and put into our system.

10           This is the same chart that's on the  
11 proposed plan on page 16, I believe, that Andy  
12 showed.

13           As basically he said, the water from the  
14 shallow groundwater unit on base at site 24, contains  
15 the high concentrations of contaminants.

16           The shallow groundwater unit will be pumped by  
17 the Navy and conveyed to a pipeline, where we'll come over  
18 in a pipeline. We'll take custody of that water. That water  
19 will be treated by reverse osmosis and also go through  
20 the air stripper, the off-gases will go through carbon  
21 treatment, and the purified water will be disinfected and  
22 put it into our irrigation system.

23           The deeper, is off base, water which has  
24 lower concentrations of contaminants, will be partially  
25 desalted And all that water will also be air stripped,

1 and the vapor treated, and then the water will be  
2 disinfected and put into our system.

3 So that basically gives you a picture of how  
4 the flow streams are treated in the process.

5 One of the things that's very important is to explain  
6 how we ensure both public health and environment  
7 are protected And one of the key points is the extraction  
8 wells in the principal aquifer prevent the plume from  
9 being pulled towards the drinking water  
10 wells.

11 We went through excessive groundwater modeling  
12 studies to prove that point and to ensure ourselves  
13 that that would be the case.

14 And as I mentioned earlier, all the water,  
15 100 percent air stripped will be.  
16 Then all the highly contaminated water will also  
17 receive reverse osmosis.

18 Again, there will be no air emissions from the  
19 project, and the wastewater brines from the treatment stages  
20 or steps will be disposed to a brine-line system. We'll  
21 convert a pipeline into a brine line that goes to the  
22 regional wastewater collection system so it doesn't  
23  
24  
25

1 go into our reclamation system. Here, we reclaim our  
2 water. It is important we need to keep excess salts out of  
3 our reclaimed water sources and keep the water as pure as we can.

4 So the brine goes through a regional system.  
5 Ensuring protection for the drinking water project is  
6 done through several methods.

7 One, we will install an enhanced groundwater  
8 monitoring program and network in the project area so  
9 we can know in advance what's happening. Groundwater will be  
10 monitored and tested throughout the project life and  
11 in the plant on a continuous basis so we know exactly  
12 how the plant is operating at all times.

13 As I mentioned, reverse osmosis is  
14 a proven technology. It's used to purify bottled water.  
15 It's widely known, and it's a safe process.

16 And another thing we make clear is that we  
17 actually remove the salts and minerals for the drinking  
18 water side to better than what's required for drinking  
19 water standards. That's our goal, and that's what we plan  
20 to do.

21 The last slide.

22 In summary, the project benefits, from the perspective  
23 of a water supplier, can be summarized by four main points.  
24 One, it cleans and protects the groundwater basin that's been  
25 damaged over the years and is currently unusable for municipal uses.

1           Second, it basically provides a new,  
2 locally controlled drought-resistant  
3 high-quality groundwater supply for both our potable and  
4 our nonpotable systems. So we're getting the water  
5 supply that we need, and it develops unused local supplies  
6 and provides drought-protection benefits. By having our supply  
7 here, it reduces our reliance on imported water.

8           The third point is there will be no impact on  
9 our -- on our ratepayers. Funding by the Navy the  
10 nonpotable system and from the Metropolitan Water District on  
11 the potable system will make the project feasible side.  
12 This will keep our costs in line or less than what we  
13 would pay for imported water.

14           And fourth, the project is environmentally  
15 beneficial, as I mentioned earlier.

16           And that's basically all I have on -- from the  
17 Irvine Ranch Water District water perspective on the  
18 project.

19           MR. GOULD: Thank you very much, Steve and  
20 Richard. I appreciate it.

21           Before I provide closing remarks on this  
22 particular portion, I want to afford the regulatory  
23 representatives here tonight the opportunity to give  
24 their agency's perspective on the preferred alternative  
25 and the proposed plans that are being presented to you

1 tonight.

2           So I'll start off asking Ms. Nicole Moutoux,  
3 representing U.S. EPA, who is also the lead -- lead  
4 regulatory agency of what is known as the BRAC Cleanup  
5 Team, the BCT for El Toro, if you would like to make  
6 some comments.

7           MS. MOUTOUX: Yes.

8           My name is Nicole Moutoux. I work for the  
9 Environmental Protection Agency.

10           Basically, EPA is in support of the Navy's  
11 proposal for cleaning up the groundwater at sites 18 and  
12 24 because it will be, once in place, protective of  
13 human health in the environment, as well as restore the  
14 beneficial uses of the groundwater.

15           And I've been on the team not as long as  
16 everyone else, but we believe that it's time for this  
17 cleanup to happen.

18           MR. GOULD: Thank you, Nicole.

19           Ms. Triss Chesney with DTSC.

20           MS. CHESNEY: My name is Triss Chesney, and I'm  
21 with the California Environmental Protection Agency,  
22 Department of Toxic Substances Control, also known at  
23 DTSC.

24           DTSC concurs with the proposed remedy because  
25 it addresses groundwater contamination by reducing the

1 VOC concentrations to meet water quality standards,  
2 controlling VOC migration, and preventing domestic use  
3 of contaminated groundwater until cleanup goals are  
4 achieved.

5 The proposed remedy is protective of human  
6 health and the environment and meets state regulatory  
7 requirements.

8 MR. GOULD: And the third regulatory agency  
9 representative would be Ms. Patricia Hannon of the  
10 Regional Water Quality Control Board.

11 MS. HANNON: My name is Patricia Hannon. I'm also  
12 with California EPA, Regional Water Quality Control  
13 Board, Santa Ana region. And we concur with the  
14 proposed remedy.

15 We've been waiting a long time for this to  
16 happen, and we're very thrilled that it's going to  
17 work. It hopefully will work and restore beneficial  
18 uses to this.

19 MR. GOULD: Thank you.

20 There's a couple of closing comments  
21 before we open it up for comments.  
22 Next step, public comment  
23 period.

24 Okay. Well, certainly we're kicking that off  
25 here tonight. But the formal comment period, if you're

1 looking at page 2 in the proposed plan that's available,  
2 you see that it talks about the public meeting being  
3 tonight, November 13th. But there is a 30-day public  
4 comment period ranging November 7th to December 7th.  
5 That's an ominous day. During that period, we are  
6 gladly receiving public comments on this preferred  
7 alternative.

8           So I know there's a lot of information being  
9 put out tonight. Maybe you need to go home and review  
10 some of the documents or come up with some questions,  
11 develop some questions for us, or perhaps share what  
12 you've learned tonight with some people that you know,  
13 coworkers, people in the community, anybody that you  
14 would like to get their input on and bounce it off  
15 them. By all means, you can then submit the comments to  
16 me. I would be more than happy to receive those  
17 comments.

18           As I mentioned, anybody who responds to us  
19 with comments we'll gladly respond in writing formally  
20 giving you a detailed response to the questions that you  
21 may have. So I do encourage you to please take  
22 advantage of that. And anyone you know that would be  
23 interested in providing comment also, solicit them to do  
24 the same.

25           Once the comment period is ended, and assuming

1 that the proposed alternative that we've talked to you  
2 about this evening is, in fact, the preferred  
3 alternative that is ultimately selected, we'll go ahead  
4 and put that into a Record of Decision and publish  
5 that.

6 And once that is signed after review of the  
7 regulatory agencies and our partners, we'll go ahead and  
8 finalize that document, and then it becomes final. Then  
9 this remedy is the one that we'll go ahead and move  
10 forward with, and the remedial design will then take  
11 place.

12 This is a little bit of a unique instance in  
13 that remedial design will actually be produced by the  
14 water districts. And then once a design is complete,  
15 we'll move forward with the actual action, meaning the  
16 treatment of the contaminated groundwater.

17 So that is essentially it as far as the formal  
18 presentation goes.

19 So as I mentioned, I think you're going to get  
20 the idea that we want comments. Here's at least the  
21 second opportunity, aside from the informal session.  
22 Here's a second part for you to go ahead right now, go  
23 ahead and speak up, and we do have a microphone  
24 available for anybody who would like to provide  
25 comments.

1           Now, there's a couple different ways we can do  
2 this. You can go ahead and give them right now, if  
3 that's your preference, or you can come up afterwards  
4 and give them directly to the court reporter here. Or,  
5 as I mentioned, you can submit them in writing tonight,  
6 or you can just go home and think about it and submit  
7 them in writing. That way, there's a lot of different  
8 options.

9           We'll open it now. We can't provide responses  
10 right now unless it's an administrative issue. But if  
11 it's technical or things of that nature, we'll respond  
12 in writing to those.

13           So is there anybody who would like to provide  
14 a comment right now in this particular format?

15           MR. MILLER: I had a couple of questions.

16           MR. GOULD: Please state your name and spell it  
17 out so our court reporter can get that, please.

18           MR. MILLER: Okay. My name is Mark Miller, and I  
19 live in Mission Viejo. I got the notice in the paper  
20 and came to the meeting tonight.

21           MR. GOULD: Terrific.

22           MR. MILLER: And I was just looking at the  
23 proposed plan groundwater cleanup folder. And I notice  
24 on the bottom of page 16 where it says "Preferred Remedy  
25 Conceptual Design Alternatives 8A and 10B," on the

1 bottom, it says "During low periods" -- or "During  
2 periods of low recycled water demand, only shallow  
3 groundwater will be treated and either injected into an  
4 IDP injection well or stored in the IDP reservoir."

5           And I was wondering if the greatest  
6 contamination is in the -- the deep aquifers, why they  
7 wouldn't take the more contaminated water and treat it  
8 instead of the water out of the shallow well.

9           MR. GOULD: Okay. Thank you.

10          MR. MILLER: And one other question I had --

11          MR. GOULD: Please.

12          MR. MILLER: -- the plume is mapped out. And  
13 they -- they state there will be three deep extraction  
14 wells and then one shallow groundwater unit on-station,  
15 I guess, on the Marine base.

16               And I was curious with the scrubber that is  
17 being designed to be in place, will there be any design  
18 parameter if the plume should expand where other wells  
19 could be added on and the scrubber would work to a  
20 larger capacity or will be designed if -- on that  
21 contingency?

22          MR. GOULD: Very good. Thank you.

23          MR. MILLER: Thank you.

24          MR. GOULD: All right. Anyone else?

25          MR. STORIE: My name is Blake Storie. I'm a

1 resident of Laguna Niguel, and I'm sure my wife is as  
2 well in favor of any type of cleanup effort.

3 Just looking at table 3 on page 14 -- you have  
4 to understand we're very new to this this evening -- the  
5 estimated remedial time in shallow groundwater is the  
6 quickest of the options you have there, which is good  
7 news, I would think.

8 But the reverse on the estimated remediation  
9 time of the principal aquifer, much -- is the longest of  
10 all the options. I'm just curious as to why that would  
11 be, why you would select that.

12 MR. GOULD: That's a fair question. Thank you.

13 MRS. BOOT-STORIE: I had a couple questions.

14 My name is Carol Boot-Storie. I'm a resident.  
15 I want to make a statement.

16 MR. GOULD: If you could just spell your last  
17 name, please.

18 MRS. BOOT-STORIE: B-o-o-t, dash, S-t-o-r-i-e.

19 First of all, I just want to say thank you  
20 all for being here. Sometimes you don't realize how  
21 much people appreciate your efforts given the turnout  
22 here. But thank you all for all your hard work, many,  
23 many years of hard work put together here.

24 A couple of questions. On the 93 years, I  
25 know that there was a mention of greater than 4800 parts

1 per billion at one point. But in some of these cases,  
2 you mentioned greater than 500 parts per billion.

3 Is there a time estimated that would say in 20  
4 years, you would have the source down to 250 parts per  
5 billion or down to 10 parts per billion? Is there a  
6 time line, and how does that time line play out so that  
7 90 -- 90 percent is salt in 20 years, and the remainder  
8 goes down from there? So that question.

9 And is there a location where the cost  
10 associated with each of these alternatives is  
11 presented? And so we can sort of look at that and see  
12 if that's -- okay. That's probably in there already.

13 And then just a general question. Is there  
14 something that precipitated -- I know five years is a  
15 long time for the negotiations.

16 Is there something that precipitated a final  
17 date for that, whether it be political or whether it be  
18 a regulatory agency that made that determination? Could  
19 that have happened sooner? I know there are some smiles  
20 going on there. Is there something that said, "Here's  
21 the date, and here's why there's the date"? I'm  
22 interested in knowing that.

23 And I think that would probably do it for the  
24 moment. Thank you.

25 MR. GOULD: Great. Thanks.

1                   Any others?

2                   Okay. Well, certainly not the last  
3 opportunity to provide public comments. As I mentioned,  
4 please do speak to those perhaps in your neighborhood,  
5 those you work with, and encourage them to provide  
6 comments as well.

7                   If that is it, then we'll go ahead and close  
8 out this portion. We will still stick around for a  
9 little bit just in case something else comes up in this  
10 meeting, you have some other informal questions, or you  
11 care to fill out one of the written forms here or you  
12 just want to pick up some additional information.

13                   But short of doing all that, on behalf of all  
14 the speakers this evening, I definitely want to thank  
15 those community members that did come here this evening,  
16 especially the new faces.

17                   It really is refreshing to see the new  
18 interested folks coming out and spending their evening  
19 here. Wish we would have had more. But short of that,  
20 at least you folks chose to be involved. And we really  
21 do appreciate that likewise.

22                   So thank you very much for that. And let's  
23 go ahead and close that out. Thank you.

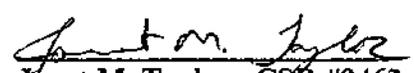
24                   (Whereupon, the presentation/question session  
25 was concluded at 8:27 p.m.)

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

**REPORTER'S CERTIFICATE**

**THE UNDERSIGNED SHORTHAND REPORTER  
DOES HEREBY DECLARE:  
THAT THE FOREGOING WAS TAKEN BEFORE ME AT THE  
TIME AND PLACE THEREIN SET FORTH AND WAS  
RECORDED STENOGRAPHICALLY BY ME AND WAS  
THEREAFTER TRANSCRIBED.**

**IN WITNESS WHEREOF, I HAVE SUBSCRIBED MY NAME  
THIS 31<sup>st</sup> DAY OF December, 2001.**

  
**Janet M. Taylor, CSR #9463**

# **ATTACHMENT C**

---

## **WELL PERMITTING REGULATIONS, FORM, AND INFORMATION**

## ARTICLE 2. CONSTRUCTION AND ABANDONMENT OF WATER WELLS

### Sec. 4-5-14. Purpose.

It is the purpose of this article to control the construction and reconstruction of wells to the end that the groundwater of this County will not be impaired in quality and that water obtained from such wells will be suitable for the purpose for which used and will not jeopardize the health, safety or welfare of the people of this County, and to provide for the destruction of abandoned wells or wells found to be public nuisances to the end that such wells will not impair the quality of groundwater or otherwise jeopardize the health, safety or welfare of the people of this County. (Ord. No. 2607, § 1, 7-18-72)

### Sec. 4-5-15. Definitions.

As used in this article, the following words shall have the meanings provided in this section:

**Abandoned and abandonment.** The terms "abandoned" or "abandonment" shall apply to a well which has not been used for a period of one year, unless the owner declares in writing, to the Well Standards Advisory Board, his intention to use the well again for supplying water or other associated purpose (such as an observation well or injection well) and receives approval of such declaration from the Board. All such declarations shall be renewed annually and at such time be resubmitted to the Board for approval. Test holes and exploratory holes shall be considered abandoned twenty-four (24) hours after construction work has been completed, unless otherwise approved by the Health Officer.

**Agricultural well.** A water well used to supply water for irrigation or other agricultural purposes, including so-called stock wells.

**Cathodic protection well.** Any artificial excavation in excess of fifty (50) feet constructed by any method for the purpose of installing equipment or facilities for the protection, electrically, of metallic equipment in contact with the ground, commonly referred to as a cathodic protection well or a deep anode.

**Community water supply well.** A water well used to supply water for domestic purposes in systems subject to chapter 7 of part I of division 5 of the California Health and Safety Code.

**Construct, reconstruct (construction, reconstruction).** To dig, drive, bore, drill or deepen a well, or to re-perforate, remove, replace or extend a well casing.

**Destruction.** The proper filling and sealing of a well that is no longer useful so as to assure that the groundwater is protected and to eliminate a potential physical hazard.

**Electrical grounding well.** Any artificial excavation in excess of fifty (50) feet constructed by any method for the purpose of establishing an electrical ground.

**Health Officer.** The Orange County Health Officer or his designee.

**Individual domestic well.** A water well used to supply water for domestic needs of an individual residence or commercial establishment.

**Industrial well.** A water well used to supply an industry on an individual basis.

**Observation well.** A well used for monitoring or sampling the conditions of a water-bearing aquifer, such as water pressure, depth, movement or quality.

**Permit.** A written permit issued by the Health Officer permitting the construction, reconstruction, destruction or abandonment of a well.

**Person.** Any person, firm, corporation or governmental agency.

**Public nuisance.** The term "public nuisance," when applied to a well, shall mean any well which threatens to impair the quality of groundwater or otherwise jeopardize the health or safety of the public.

**Saltwater (hydraulic) barrier well.** A well used for extracting water from or injecting water into the underground as a means of preventing the intrusion of saltwater into a fresh water-bearing aquifer.

**Test or exploratory hole.** An excavation used for determining the nature of underground geological or hydrological conditions, whether by seismic investigation, direct observation or any other means.

**Well.** Any artificial excavation constructed by any method for the purpose of extracting water from or injecting water into the underground, for providing cathodic protection or electrical grounding of equipment, for making tests or observations of underground conditions, or for any other similar purpose. Wells shall include, but shall not be limited to, community water supply wells, individual domestic wells, industrial wells, agricultural wells, cathodic protection wells, electrical grounding wells, test and exploratory holes, observation wells and saltwater (hydraulic) barrier wells, as defined herein, and other wells whose regulation is necessary to fulfill the purpose of this article as determined by the Well Standards Advisory Board. Wells shall not include:

- (a) Oil and gas wells, geothermal wells or other wells constructed under the jurisdiction of the State Department of Conservation, except those wells converted to use as water wells;
- (b) Wells used for the purpose of dewatering excavations during construction, or stabilizing hillsides or earth embankments; or
- (c) Other wells whose regulation is not necessary to fulfill the purpose of this article as determined by the Well Standards Advisory Board. (Ord. No. 2607, § 1, 7-18-72)

#### Sec. 4-5-16. Well Standards Advisory Board.

A board consisting of five (5) members shall be appointed by the Board of Supervisors. One of the members appointed shall be a person employed in a supervisory capacity by a water purveyor in the County of Orange whose system relies to a significant extent upon groundwater; one shall be a registered civil engineer under the laws of the State of California who is experienced in sanitary engineering and who is qualified in the field of water supply; one shall be a person licensed in accordance with the provisions of the Contractors License Law, chapter 9, division 3 of the Business and Professions Code of the State of California; one shall be a person who is qualified in the field of water quality; and one shall be a regis-

Supp. No. 15

tered geologist under the laws of the State of California who is qualified in the field of groundwater hydrology. One of the aforementioned persons shall be a representative of the Orange County Water District and one shall represent the Orange County Water Pollution Department.

Members shall serve for a three-year term and until the qualification of a successor, except that the first members shall serve staggered terms, as determined by the drawing of lots, in the following manner: One member shall serve for a one-year term of office; two (2) members shall serve for a three-year term of office. All terms shall end on the first Monday in January of the year in which such term is to expire. All members shall serve at the discretion of the Board of Supervisors; and any member or members of the Board, Committee or Commission may have his membership terminated by a majority vote of the Board of Supervisors. A vacancy thereby created shall be filled in the same manner as the original appointment.

Traveling and other expenses incurred by each Board member in the performance of his official duties shall be reimbursed at a rate of ten dollars (\$10.00) per meeting. (Ord. No. 2607, § 1, 7-18-72; Ord. No. 3038, § 3, 2-14-78)

#### Sec. 4-5-17. Acts prohibited; permit required.

No person shall, within the unincorporated area of the County of Orange, construct or reconstruct any well unless such construction or reconstruction is carried out pursuant to and in conformance with a written permit issued for that purpose by the Health Officer as provided in this article.

Nor shall any such person abandon a well unless it has been destroyed pursuant to and in conformance with a written permit issued by the Health Officer.

Nor shall any such person violate the terms of any order issued by the Well Standards Advisory Board or the Health Officer, issued pursuant to this article. (Ord. No. 2607, § 1, 7-18-72)

#### Sec. 4-5-18. Permits.

Applications for permits shall be made to the Health Officer containing such information as he shall require.

Each application shall be accompanied by a fee which shall be established by the Board of Supervisors on the basis of the cost incurred in enforcing the provisions of this article. Fifty (50) per cent of the fee shall be returned to the applicant should the permit be denied or if the permit is canceled within sixty (60) days after issuance and no work has been done. A permit shall remain in effect for one year from date of issuance.

Permits may be issued subject to any condition or requirement found by the Health Officer to be necessary to accomplish the purposes of this article.

A permit may be canceled or the conditions amended by the Health Officer if he determines that to proceed with the work would result in a public nuisance or the permit holder has violated the terms of the permit or this article. (Ord. No. 2607, § 1, 7-18-72)

#### Sec. 4-5-19. Completion of work.

The permittee shall notify the Health Officer in writing upon completion of the work and no work shall be deemed to have been completed until such written notification has been received. A final inspection of the work shall be made by the Health Officer and no permittee shall be deemed to have complied with this article or his permit until such inspection has been performed. (Ord. No. 2607, § 1, 7-18-72)

#### Secs. 4-5-20—4-5-24. Reserved.

#### Sec. 4-5-25. Notice; cancellation or denial of permit.

In the event a permit is denied or canceled, the applicant or permit holder shall be given written notice by the Health Officer, which notice shall specify the reasons for his action and shall notify the applicant or permit holder of his right to request a hearing before the Well Standards Advisory Board within ten (10) days. (Ord. No. 2607, § 1, 7-18-72)

#### Sec. 4-5-26. Notice; public nuisance.

In the event the Health Officer determines that a well constitutes a public nuisance, he shall mail a written notice to the landowner and the permit holder, if other than the landowner. A copy of the notice shall be posted

on the affected property. The notice shall state the specific facts giving rise to such nuisance; the corrective measures deemed necessary; and time, date and place at which a hearing shall be held by the Well Standards Advisory Board relating thereto, which date shall be not less than ten (10) nor more than thirty (30) days after the date such notice is mailed. The notice shall state that in the event the Board determines that a public nuisance exists a special assessment shall be imposed upon the land for any costs of abatement. (Ord. No. 2607, § 1, 7-18-72)

#### Sec. 4-5-27. Immediate abatement.

If the Health Officer finds that immediate action is necessary to prevent impairment of the groundwater or a threat to the health or safety of the public, he may abate the nuisance without giving notice. Within twenty-four (24) hours after initiating such abatement, the Health Officer shall give notice of a hearing before the Well Standards Advisory Board in the manner prescribed in section 4-5-26. (Ord. No. 2607, § 1, 7-18-72)

#### Sec. 4-5-28. Board hearing.

At the time fixed for the hearing, the Well Standards Advisory Board shall hear and consider all relevant testimony and evidence offered by the landowner, and by any other interested person. In the event the Board finds that a public nuisance exists, it shall direct the Health Officer to take any necessary action to protect the groundwater or the health and safety of the public, unless the situation is corrected by the landowner on or before a date to be specified by the Board. The costs of such corrective work by the Health Officer shall become a special assessment upon the land pursuant to section 4-5-29.

If the Board finds that a permit was improperly denied or canceled, it shall order the Health Officer to issue or reinstate such permit. (Ord. No. 2607, § 1, 7-18-72)

#### Sec. 4-5-29. Abatement costs a special assessment.

Upon a finding by the Well Standards Advisory Board that a well constitutes a public nuisance, all cost of abatement carried out under the terms of this article shall constitute a charge and special assessment upon the parcel of land involved. If such costs are not paid

within sixty (60) days, they shall then be declared a special assessment against that parcel as provided in Government Code, section 25845. Such special assessment shall be collected at the same time and in the same manner as ordinary County taxes are collected and shall be subject to the same penalties and the same procedures and sale in case of delinquency as provided for ordinary County taxes. The County shall retain the additional and independent right to recover its costs by way of civil action against the owner and person in possession or control, jointly or severally. (Ord. No. 2607, § 1, 7-18-72)

#### Sec. 4-5-30. Standards.

Standards for the construction, reconstruction, destruction, or abandonment of wells shall be the standards recommended in the State Department of Water Resources Bulletin No. 74, Chapter II and future amendments thereto. Standards for the construction, reconstruction, destruction or abandonment of cathodic protection wells and electrical grounding wells shall be the standards recommended in the State De-

partment of Water Resources Bulletin No. 74-1, and future amendments thereto. Well standards may be modified by the Health Officer, with the advice and concurrence of the Well Standards Advisory Board, where required to cope with the local geological and groundwater conditions. (Ord. No. 2607, § 1, 7-18-72; Ord. No. 2691, § 1, 7-17-73)

#### Sec. 4-5-31. Penalty.

Any person who violates the terms of this article or any permit issued hereunder shall be guilty of a misdemeanor, punishable by a fine not exceeding five hundred dollars (\$500.00) or by imprisonment not exceeding six (6) months, or by both such fine and imprisonment. Such person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any such violation is committed, continued or permitted, and shall be subject to the same punishment as for the original offense. (Ord. No. 2607, § 1, 7-18-72)



# COUNTY OF ORANGE HEALTH CARE AGENCY

## REGULATORY HEALTH SERVICES ENVIRONMENTAL HEALTH

MICHAEL SCHUMACHER, Ph.D.  
DIRECTOR

MIKE SPURGEON  
DEPUTY AGENCY DIRECTOR  
REGULATORY HEALTH SERVICES

JACK MILLER, REHS  
DIRECTOR  
ENVIRONMENTAL HEALTH

MAILING ADDRESS:  
2009 EAST EDINGER AVENUE  
SANTA ANA, CA 92705-4720

TELEPHONE: (714) 667-3800  
FAX: (714) 972-0749

E-MAIL: [environhealth@hca.co.orange.ca.us](mailto:environhealth@hca.co.orange.ca.us)

**SUBJECT: County Requirements for Well Permits**

Dear Consultant/Contractor/Driller:

The Orange County Well Ordinance (County Ordinance No. 2607) requires that a permit be obtained prior to the construction or destruction of any well. In unincorporated County areas and in twenty-six of thirty-one Orange County cities, the Orange County Health Officer is responsible for enforcement of the well ordinance. In the remaining five cities (Anaheim, Buena Park, Fountain Valley, Orange and San Clemente), well ordinances are enforced by city personnel.

Permits are specifically required for all wells and soil borings except:

1. Vadose zone monitoring systems which are regulated by the administrative authority for enforcement of the Underground Storage Tank Laws and Regulations.
2. Wells used for the purpose of dewatering excavations during construction, or stabilizing hillsides or earth embankments.
3. Soil borings which meet all of the following conditions:
  - a) less than 50 feet in depth;
  - b) do not enter into groundwater;
  - c) do not penetrate significant confining material beds.

To expedite the permit approval process, all the necessary attachments and applicable fees should be submitted with the permit application. The required attachments include a site plan showing the locations of all wells (proposed and existing), potential sanitary hazards and a well construction diagram. The diagram should include, at a minimum, materials of construction, depth of seals, borehole diameter, size of casing, depth to first groundwater and total depth of wells.

A permit shall remain in effect for one year from date of issuance.

**PERMIT APPLICATION FEES** (as of 8-1-99)

**CONSTRUCTION**

	<u>Fee</u>
Water Well (Domestic, Irrigation or Industrial)	\$467.00
Cathodic Protection Well	\$398.00
Monitoring, Observation, Extraction or Injection Well, or Soil Boring	
Initial (First) Well	\$260.00
Each Additional (same permit number, same site)	\$132.00
Probe Surveys	\$260.00

**DESTRUCTION**

All Wells (each)	\$83.00
------------------	---------

**REFUND AND LATE LEES**

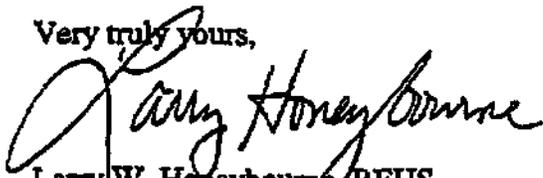
In the event the permit is denied or if the permit is canceled within sixty (60) days after issuance and no work has been performed, fifty percent (50%) of the fee shall be returned to the applicant. To avoid a twenty-five percent (25%) late charge, applicants are required to file for and receive approved permits prior to initiation of construction. Permit fees are not transferable between sites.

The County requires notification of at least **forty-eight hours** (48 hrs.) prior to beginning construction. Completion reports and well logs must be submitted to this Agency upon completion of work. The completion report should include the permit number, total number of wells, installed, location of wells, and as built details of well construction (e.g., depth of seals, perforation intervals, and groundwater depth).

Failure to comply with any condition of an approved permit or any aforementioned requirement is a violation of the Orange County Well Ordinance and a misdemeanor.

If you have any questions or wish to obtain a well permit application or information, please fee free to contact the County of Orange Health Care Agency, Water Quality Section at (714) 667-3657 or 667-3758.

Very truly yours,



Larry W. Honeybourne, REHS  
Environmental Health Engineering Specialist  
Water Quality Section  
Environmental Health

LWH:dap

WATER WELLS

## 16.1 GENERAL

The District has an important interest, along with other appropriate regulatory agencies, in monitoring the groundwater basin located within its boundaries to obtain information as to its quantity, quality and other characteristics on an historical and ongoing basis. Many wells have been constructed and operated within the Dietrich for agricultural purposes by private users. From time to time, due to increasing urbanization, some of these wells are no longer needed as production wells. The purpose of this section is to regulate the construction and reconstruction of all existing and future water wells, to provide for the destruction or other use of abandoned wells, and to provide for the initiation and completion of corrective measures relative to wells within the District, to accomplish the following:

- (1) To protect the quality of the groundwater within the District;
- (2) To protect the health, safety, and welfare of the residents of the District;
- (3) To protect the capability of the District to produce and distribute water for the use, benefit and protection of the residents of the District;
- (4) To avoid premature destruction of wells that can be converted to monitoring or production use.

## 16.2 DEFINITIONS

- (1) "Destruction" of a well means the complete filling and sealing of the well in accordance with the procedures outlined in the standards incorporated into this Section.
- (2) "Well" means any excavation constructed by any method for the purpose of extracting water from or injecting water into the underground, for providing cathodic protection or electrical grounding of equipment, for making tests or observations of underground conditions, or for any other similar purpose. Wells shall include, but shall not be limited to, community water supply wells, individual domestic wells, industrial wells, agricultural wells, cathodic protection wells, electrical grounding wells, test and exploratory holes, observation wells, saltwater barrier wells, and other wells whose regulation is necessary to fulfill the purpose of this chapter as determined by the Manager. Wells shall not include:
  - [a] Oil and gas wells, geothermal wells, or other wells constructed under the jurisdiction of the State Department of Conservation, except any such wells converted to use as water wells;
  - [b] Wells used for the purpose of dewatering excavations during construction, monitoring high groundwater during construction, monitoring or ascertaining the existence of groundwater contamination, or stabilizing hillsides or earth embankments; or
  - [c] Wells less than 50 feet in depth or 6 inches in diameter.
  - [d] Other wells whose regulation is not necessary to fulfill the purpose of this chapter as determined by the Manager.

## IRVINE RANCH WATER DISTRICT

- (3) A well shall be presumed to be "abandoned" when it has not been used for its intended purpose for a period of one year.

### 16.3 PROHIBITED ACTS -- PERMITS REQUIRED

- (1) No person, firm, or private or public corporation or agency shall construct or reconstruct any well within the boundaries of the District unless such construction or reconstruction is carried out pursuant to and in conformance with a written permit issued for that purpose by the Manager as provided in this Section.
- (2) No owner or operator of an existing well shall allow it to remain in an unused condition except in accordance with Section 16.4. An used well determined to be abandoned shall be destroyed pursuant to and in conformity with the requirements of the District as set forth in this Section unless the Manager determines that the District desires to acquire and equip the well for monitoring or production purposes.

### 16.4 UNUSED WELLS - - DETERMINATION OF NONABANDONMENT

- (1) If a well has not been used for any of the purposes set forth in the definition of "well" for a period of one year, such well shall be presumed to have been abandoned, and the burden of proof shall thereupon be upon the owner or operator of the well to establish to the satisfaction of the Manager that the well has not been abandoned and that the owner and operator intends to continue to use the well for the intended purposes. The Manager shall require a written declaration under penalty of perjury concerning intended future use to be filed by the owner or operator of the well before the Manager determines that the well has not been abandoned. Application for the renewal of a determination of nonabandonment shall be required to be presented to the Manager by the owner or operator at the beginning of each calendar year. Such renewal applications shall be accompanied by a new written declaration filed under penalty of perjury. Test holes and exploratory holes shall be considered abandoned twenty-four hours after construction work has been completed unless otherwise determined by the Manager.
- (2) In the event the Manager determines that a well is indeed abandoned, unless the Manager determines that the District desires to acquire and equip the well for monitoring or production purposes, the well shall be destroyed within thirty days in accordance with the provisions of this chapter. However, the owner shall be given written notice of this determination by the Manager. The notice shall specify the reasons for this decision and shall notify the owner of his right to request a hearing before the Board of Directors within ten days.

### 16.5 PERMITS

- (1) Applications for permits to construct, reconstruct, or destroy any well shall be made to the Manager and shall contain or provide such information as he shall require.
- (2) Each application shall be accompanied by a fee which shall be established by the Board of Directors. A permit shall remain in effect for one year from the date of issuance.
- (3) Permits may be issued subject to any condition or requirement found by the Manager to be necessary to accomplish the purposes of this chapter.

## IRVINE RANCH WATER DISTRICT

- (4) A permit may be canceled or the conditions amended by the Manager if he determines that to proceed with the work would result in a violation of the terms of the permit or of this Section.
- (5) In the event that a permit is denied or canceled, the applicant or permit holder shall be given written notice by the Manager, which notice shall specify the reasons for his action, and shall notify the applicant or permit holder of his right to request a hearing before the Board of Directors within ten days.

### 16.6 COMPLETION OF WORK -- NOTICE TO MANAGER -- INSPECTION

The permittee shall notify the Manager in writing upon completion of the work performed under the permit, and no work shall be deemed to have been completed until such written notification has been received. A final inspection of the work shall be made by the Manager, and no permittee shall be deemed to have complied with the provisions of this chapter of his permit until such inspection has been performed and the work approved by the Manager.

### 16.7 NOTICE UPON DETERMINATION OF THREAT TO WATER QUALITY, HEALTH OR SAFETY

In the event the Manager determines that a well threatens to impair the quality of the groundwater or otherwise jeopardize the health or safety of the public, he shall send written notice to the owner and shall post a copy of the notice on the property. The notice shall state the specific facts relative to the condition, the corrective measures deemed necessary, and the date on or before which such measure shall be completed. The owner shall also be notified of his right to request a hearing before the Board of Directors within thirty days from the date such notice is issued.

### 16.8 IMMEDIATE ABATEMENT OF THREAT TO WATER QUALITY, HEALTH OR SAFETY

If the Manager finds that immediate action is necessary to prevent impairment of the groundwater or a threat to the health or safety of the public he may correct the condition without giving notice. The District may charge the cost of the corrective measure to the owner. However, within twenty-four hours after initiating such corrective measure, the Manager shall notify the owner of the time, date and place at which a hearing shall be held by the Board of Directors relating thereto; which date shall be not less than ten nor more than thirty days after the date of such notification.

### 16.9 BOARD OF DIRECTORS HEARING

- (1) At the time fixed for a hearing before the Board of Directors concerning an abandoned well, a permit, or a threat to water quality, health or safety, as provided for in this chapter, the Board of Directors shall hear and consider all relevant testimony and evidence offered by the property owner and by any other interested person.
- (2) If the Board of Directors determines that an unused well was incorrectly classified as abandoned or that a permit was improperly denied or canceled, it shall direct the Manager to reclassify the well or to issue or reinstate the permit.
- (3) If the Board of Directors finds that a threat to water quality, health or safety, as determined by the Manager, does exist, then it shall direct the Manager to take any necessary action to protect the groundwater or the health and safety of the public unless the situation is corrected by the owner.

## IRVINE RANCH WATER DISTRICT

on or before a date to be specified by the Board of Directors. The cost of such corrective measures by the Manager shall be charged to the owner or operator.

- (4) In instances where the Manager has corrected a condition under the immediate correction provision of Section 16.8, the Board of Directors shall ascertain and review the pertinent facts concerning the correction. If the Board of Directors determines that the Manager's actions were justified, then it shall direct that the cost be charged to the owner or operator.

### 16.10 STANDARDS FOR CONSTRUCTION, RECONSTRUCTION OR DESTRUCTION

Standards for the construction, reconstruction, or destruction of wells shall be the standards recommended in the State Department of Water Resources Bulletin No. 74, Chapter II, and future amendments thereto. Standards for the construction, reconstruction, or destruction of cathodic protection wells shall be the standards recommended in the State Department of Water Resources Bulletin No. 74-1, and future amendments thereto.

### 16.11 VIOLATION -- PENALTY

Any violation or failure to comply with any of the provisions of this Section shall be handled as provided in herein and shall also be subject to Section 14 as applicable.

### 16.12 AGREEMENTS

The District may enter into agreements with property owners concerning the drilling or abandonment of wells and/or other matters covered in this Section, and providing for alternate or modified methods of meeting certain of the requirements contained herein. In such cases, the agreement(s) will govern as to the applicability of the affected requirements, in the area(s) subject to such agreements.

### 16.13 NO LIABILITY ASSUMED

Notwithstanding the provisions of this Section permitting or requiring the District or Manager to issue permits, make determinations and/or take corrective measures relative to construction, reconstruction abandonment and destruction of wells and quality of groundwater, the District assumes no liability to the property owners or operators of wells or any third parties, for the making of or failure to make any such determination, or the taking of or failure to take any such measure, or the issuing of or failure to issue any such permit.



# **ATTACHMENT D**

---

## **MEMORANDUM OF AGREEMENT BETWEEN THE UNITED STATES DEPARTMENT OF THE NAVY AND THE CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL**

**Please note that a copy of the Memorandum of Agreement Between the United States Department of the Navy and the California Department of Toxic Substances Control is attached for informational purposes only and as a reference for the convenience of the reader of the Record of Decision. Contents of this memorandum are not subject to comment nor deemed to be an enforceable component of this Record of Decision.**

# **Memorandum of Agreement Between The United States Department of the Navy and The California Department of Toxic Substances Control**

Use of Model "Covenant to Restrict Use of Property" at Installations Being Closed and Transferred by the United States Department of the Navy

1. Background
  - a. The purpose of this Memorandum of Agreement (MOA) is to formalize the use of two model environmental restriction covenants (attached) that have been drafted during negotiations between representatives of the United States Department of the Navy (DON) and the California Department of Toxic Substances Control (DTSC).
  - b. Under CERCLA Sec. 104, as delegated to DON by E.O.12580, and implemented pursuant to the National Contingency Plan (NCP - 40 CFR Sec. 300 et seq.) and 10 USC Sec. 2701, et seq., the cleanup of hazardous substances, pollutants and contaminants is required to be at a level that protects human health and the environment. As a result, this protection can be achieved at certain sites by the imposition of "institutional controls" (i.e., ICs - legal mechanisms to protect human health and the environment by restricting access or exposure to the contaminants in question) with or without underlying "engineering controls" (i.e., ECs-engineered mechanisms such as a cap on a landfill, designed to physically insure access or exposure to the contaminants in question is prevented). Collectively these ICs and ECs are called "land use controls" (LUCs).
  - c. In the case of property being closed and transferred by DON to a nonfederal entity, it is necessary to insure that these LUCs stay in place and are honored by all future owners and occupants of the property in question, for as long as contamination is present at levels that do not permit unrestricted use. One key way such LUCs can be maintained is by DON's retention of sufficient legal title and interest to insure continuing enforcement of the terms of the LUCs. This retention would entail burdening such conveyances of title with deed covenants insuring that the deed transferring such property contain a formal restriction - a restrictive covenant - on the use of the property that will "run with the land," and is enforceable against the "servient estate" (i.e., all future owners of the land) and is retained by the United States, as represented by DON, acting as holder of the "dominant estate." In addition, DON can convey a separate and similar restrictive covenant to DTSC as provided in Section 2 below.
  - d. In the State of California, such a restriction on the use of land, to protect human health and the environment is recognized by Section 1471 of the California Civil Code. This statute characterizes such a restrictive covenant as an "environmental restriction" and requires such words to be placed in the title of the document creating such an interest. DON has agreed to include such restrictive language in the deeds it executes where it imposes LUCs as a remedy under applicable law.
  - e. Similar to CERCLA, State environmental protection laws recognize the availability of using LUCs as remedies to protect human health and the environment. Currently, DTSC's authority under Chapter 6.5 and 6.8 of Division 20 of the California Health and Safety Code, provides statutory avenues to impose LUCs at a cleanup site to insure that the LUCs are honored by future owners. Chapter 6.5 is generally used when the cleanup site in question is one subject to the State's authorities under the hazardous waste facilities law, and Chapter 6.8 is generally used when the cleanup site in question is one subject to the State's equivalent to the federal CERCLA program.

- f. In the case of property being closed and transferred to a nonfederal entity by DON where a cleanup remedy has used LUCs as a remedy as described above, DON and DTSC have a mutual interest in insuring that the "environmental restriction" imposed on the land is enforced for however long the protection of public health and the environment requires such restrictions.
- g. As a result, DON and DTSC agree that it is in both parties' and the public's interests, that DTSC be in a position to enforce the "environmental restrictions" that the DON will be imposing on these transferring parcels of property. To this end, in addition to retaining the power to enforce protective covenants, DON agrees to convey a separate power to enforce such restrictive covenants to DTSC equivalent to DON'S power to enforce any "environmental restrictions" burdening the transferring property by entering into a "Covenant to Restrict Use of Property." Under both Chapter 6.5 and Chapter 6.8, DTSC has the authority to monitor and enforce such "environmental restrictions" conveyed to it by the owner of property on which such an "environmental restriction" has been found necessary. Therefore, in consideration of DON's conveying such an interest, DTSC may implement as appropriate the various statutory authorities it possesses under Chapter 6.5 and Chapter 6.8 (as applicable) to insure these "environmental restrictions" are honored by all future owners and occupants.

2. Terms of Understanding:

- a. DON and DTSC agree that in all future property transfers to a nonfederal agency, where DON is acting on behalf of the United States as the transferring or disposing agent, the applicable model "Covenant to Restrict Use of Property" attached to this MOU will be used throughout California when the proposed remedy involves imposing an IC (except those "early transfers" where 1) the transferee will perform the cleanup, and 2) the cleanup includes an IC in the remedy, and 3) has executed an order or enforceable agreement with DTSC or has entered into a Sec. 25222.1 agreement with DTSC, that calls for the transferee entering into a "Covenant to Restrict Use of Property" directly with DTSC).
- b. DON and DTSC have entered into a number of Federal Facility Agreements and Federal Site Remediation Agreements for DON property. These Agreements generally call for coordination of the DON's satisfaction of its corrective action obligations under the Resource Conservation and Recovery Act (RCRA) and Health and Safety Code section 25200,10 with its responsibilities under CERCLA section 120(i), EO 12580, the Defense Environmental Restoration Program and the NCP. The Agreements recognize that the DON may satisfy some or all of its corrective action obligations through CERCLA response actions. Where such corrective action at hazardous waste management units is being satisfied through CERCLA, Attachment A shall be used. Attachment B is the model which will be used for hazardous waste management facilities not addressed in Federal Site Remediation or Federal Facility Agreements.
- c. When issuing Proposed Plans for public comment, DON will attach a copy of this MOU and the appropriate model "Covenant to Restrict Use of Property" so as to assure the public that the specific LUC being proposed will be enforced, in part, by DON'S retained power to enforce the deed covenants and conveyance of the power to enforce protective deed covenants to DTSC contemporaneously with the execution of the deed transferring DON'S interests to the new owner.
- d. In using these models to draft the appropriate "Covenant to Restrict Use of Property," DON'S and DTSC's personnel will work collaboratively to develop the specific information applicable to the given site called for by Articles I (Statement of Facts) and IV (Restrictions) of the attached models. A final "Covenant to Restrict Use of Property" that is ready for signature for a given site,

will be prepared in time to allow it to be executed contemporaneously with the execution of the deed transferring DON'S non-retained interests in the property to the new owner. In the case of "early transfers" where DON is performing the cleanup after the transfer, and is imposing an LUC at the time of the "early transfer" In support of its ongoing cleanup activities, the Parties recognize that the contents of Articles I and IV of the model covenants for such sites will likely not be as detailed as that suggested in the attached models. The degree of detail contained within the model covenant will be the information available as to the cleanup site, although the covenants must be adequate to protect human health and the environment to allow an early transfer. The form of remedy and any additional associated IC will be more fully developed once the remedy is selected and implemented.

- e. The Parties recognize that given the need to tailor the terms of the "environmental restriction" to the remedy that is finally selected after seeking public comment on the Proposed Plan, the terms of the final "Covenant to Restrict Use of Property" may vary greatly from the draft proposal. The Parties recognize that the public should be given specific notice of this fact in the Proposed Plan.
- f. The Parties recognize that remedies proposed by the DON will be submitted to DTSC for concurrence. However, there may be unresolved disagreements at some cleanup sites concerning the remedy being proposed by DON including, in particular, the scope and nature of the LUCs, and the terms of any underlying, proposed "Covenant to Restrict Use of Property." In such situations the Parties will use their best efforts to resolve all disputes Informally. If the Parties are ultimately unable to resolve the issue in dispute, DON and DTSC reserve any rights they might have to take any action available under applicable state or federal law.
- g. Either Party may terminate its involvement in this Agreement by giving thirty (30) days written notice to the other Party. Upon receipt of notice and the expiration of thirty days termination shall occur by operation of law.

Attachment A: Model Site Mitigation Program “Environmental Restriction Covenant and Agreement”

Attachment B: Model Hazardous Waste Management Program/State Regulated Unit “Environmental Restriction Covenant and Agreement”

Approved as to form:

Approved as to form:

# MODEL SITE MITIGATION PROGRAM

## DEED RESTRICTION

RECORDING REQUESTED BY:

[Covenantor's Name]

[Street Address]

[City], California [Zip Code]

WHEN RECORDED, MAIL TO:

Department of Toxic Substances Control

Region \_\_\_\_\_

[Street Address]

[City], California [Zip Code]

Attention: [ Name of Branch Chief], Chief

[Branch Designation]

---

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

### COVENANT TO RESTRICT USE OF PROPERTY ENVIRONMENTAL RESTRICTION

*(Re: [Insert parcel number(s) and name of site property to be restricted.] )*

---

---

This Covenant and Agreement ("Covenant") is made by and between the United States of America acting by and through the Department of the Navy ("DON") (the "Covenantor"), the current owner of property situated in [city], County of [ ], State of California, described in Exhibit "A", attached hereto and incorporated herein by this reference (the "Property"), and the State of California acting by and through the Department of Toxic Substances Control (the "Department"). Pursuant to Civil Code section 1471©), Health and Safety Code Sections 25222.1 and 25355.5 the Department has determined that this Covenant 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 Health and Safety Code ("H&SC") section 25260. In addition, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 104 (42 USC Section 9604), as delegated to the Covenantor by E.O.12580, ratified by Congress in 10 USC Sec. 2701, et seq., and implemented by the National Oil and Hazardous Substances Pollution Contingency Plan (NCP -40 CFR Part 300) and implementing guidances and policies, the Covenantor has also determined that this Covenant is

ATTACHMENT A

reasonably necessary to protect present or future human health or safety or the environment as the result of the presence on the land of hazardous substances, pollutants and contaminants as defined in CERCLA Section 101 (42 USC Section 9601). The Covenantor and the Department, collectively referred to as the "Parties", therefore intend that the use of the Property be restricted as set forth in this Covenant, in order to protect human health, safety and the environment.

The Covenantor retains sufficient legal title and interest in the subject property to insure continuing enforcement of the protective covenants and agreements contained within this Covenant to Restrict the Use of Property. Further in any subsequent transfers or conveyance of title to nonfederal entities the DON shall burden the property with additional deed covenants that insure that any subsequent deed or transfer contains the protective covenants and right of access and power to conduct monitoring of wastes retained on site. Those covenants and agreements shall be enforceable against the servient estate in that those protective covenants shall run with the land to all successors and assigns.

## ARTICLE 1

### STATEMENT OF FACTS

1.01 The Property, totaling approximately [ acres] [ square yards] is more particularly described and depicted in Exhibit "A", attached hereto and incorporated herein by this reference. ***[Exhibit "A" must include the legal description of the property used by the county recorder. This must include the particular description of the boundaries of the area to be subject to a particular use restriction. If the property does not already have a legal description (it generally will not if it is a portion of a larger piece of property) a survey will be required.]*** The Property is located in the area now generally bounded by ***[include narrative description of the area; this will typically be street names: e.g., Main Street on the north, Maple Street on the east, etc.]*** County of [ ], State of California.

1.02 ***[Use this paragraph if imposing additional restrictions on a portion of the Property, for example on a capped portion, or if for any other reason it is necessary to precisely identify any portion of the property, such as an area with groundwater monitoring wells. The purpose of this paragraph is to give the***

*precise location of such areas where use restrictions generally will apply. Renumber following paragraphs accordingly.] A limited portion of the Property is more particularly described in Exhibit " B" which is attached and incorporated by this reference ("Capped Property") as defined below [or "(other identified) Property"]. [Exhibit B must include a legal description of the exact area(s) being restricted and any necessary diagram(s). This will generally require a legal survey and engineering drawing for the Cap or other area to be further restricted.] The [Capped (or other description)] Property is located in the area now generally bounded by [ ]. [include language that generally describes the Capped or other identified Property.] The [Capped (or other identified) Property is also more specifically described as encompassing [ ] County Assessor's Parcel No.(s) [ ].*

1.03 *[Briefly describe the remedial measures implemented at the Property, including, if applicable, installation of a cap and construction and ongoing operation and maintenance of a groundwater treatment system, in order to identify the remaining contaminants and physical remedial measures on the Property that necessitate this deed restriction. This paragraph should also briefly discuss the regulatory context for the DON facility. Reference should be made to any applicable Federal Facility Agreement (FFA) or Federal Facility Site Remediation Agreement(FFSRA) and any corrective action obligations under RCRA or Chapter 6.5 of Division 20 of the Health and Safety Code covered by the FFA or FFSRA. This paragraph should refer to, and give the approval date for, the RAP, ROD, RAW or other decision document that selected the remedial measures at the Property and required this Covenant]*

*SAMPLE [For a facility which has an FFA or FFSRA and hazardous waste management units]:* The DON and the Department entered into a Federal Facility Agreement (FFA) on [date]. Pursuant to that FFA, the DON may satisfy some or all of its corrective action obligations under the Resource Conservation and Recovery Act (RCRA)(42 USC 6901 et seq) or California Health and Safety Code section 25200.10 through CERCLA response actions. *[Proceed to additional SAMPLES as appropriate.]*

*SAMPLE [For a property with remaining contamination, but no cap, O&M, or other ongoing response activities]:* The Property is [a portion of a site] being remediated pursuant to a Record of Decision (ROD) pursuant to the Defense Environmental Restoration Program (DERP), 10 U.S.C. section 2701 et seq, and

CERCLA; and a Remedial Action Plan (RAP) pursuant to Chapter 6.8 of Division 20 of the H&SC, under the oversight of the Department. The ROD/RAP provides that a deed restriction be required as part of the site remediation, because lead, which is a hazardous substance, as defined in H&SC section 25316, and a hazardous material as defined in H&SC section 25260 remains at depths of 10 feet or more below the surface of the Property. The DON circulated the ROD/RAP, for public review and comment. The ROD/RAP was approved by the DON and concurred in by the Department on [date], pursuant to which the Property was excavated to a depth of 10 feet, graded, then backfilled with clean soil.

*SAMPLE [For a property with ongoing operation and maintenance of a monitoring or treatment system and/or cap. The exact provisions of this paragraph will vary depending upon the facts of the particular site or facility. The paragraph below is illustrative of the kind of information that should be included. Note specifically there is reference to a signed Operation and Maintenance Agreement.]: [Covenantor] [or party responsible for the activity, if different from Covenantor] is remediating the Property under the supervision and authority of the Department. The Property is [ a portion of a site] being remediated pursuant to a Record of Decision (ROD) pursuant to the Defense Environmental Restoration Program (DERP), 10 U.S.C. section 2701 et seq; and a Remedial Action Plan (RAP) pursuant to Chapter 6.8 of Division 20 of the H&SC. Because hazardous substances, as defined in H&SC section 25316, which are also hazardous materials as defined in H&SC section 25260, including volatile organic compounds, total petroleum hydrocarbons, chlorinated benzenes and polychlorinated biphenyls, remain in the soil and groundwater in and under portions of the Property, the Remedial Action Plan provides that a deed restriction be required as part of the site remediation. The DON circulated the ROD/RAP for public review and comment. The ROD/RAP were approved by the DON and concurred in by Department on [date]. Remediation includes installing and maintaining a synthetic membrane cover ("Cap") over the Capped Property. The Cap consists of a low permeability synthetic membrane and other associated layers, as more particularly described in the engineering drawing attached as Exhibit "B" hereto. The response action also includes the installation and operation of: (1) a passive gas collection system on the Capped Property which removes volatile organic compounds migrating upward from under the Cap, (2) a vapor*

extraction system, which remediates certain volatile organic compound-impacted soils, and (3) groundwater monitoring wells ("Monitoring Wells"). The location of the gas collection system, vapor extraction system, and Monitoring Wells are shown on Exhibit " B". *[This exhibit will have been identified in paragraph 1.02.]* The operation and maintenance of the Cap, gas collection system, vapor extraction system, and Monitoring Wells is pursuant to an Operation and Maintenance Manual incorporated into the Operation and Maintenance Agreement between [Covenantor] *[or name of other entity]* and the Department dated [ ]. *[If an O&M Agreement has not been signed, the approval date for the O&M Manual or Plan should be referenced.]*

1.04 *[This paragraph should set out specific information about the risk assessment findings relevant to the contaminants of concern remaining at the property, essentially the basis for the restrictions imposed by this covenant The Restrictions in Paragraphs 4.01, and any requirement for Soil Management Activity and any Prohibited Activity must be linked to the contaminants and risk assessment as discussed in this paragraph. The following paragraph is given for purposes of illustration. Each site will have different facts; those should be developed in a manner similar to the sample paragraph given here. Land use must be consistent with the approved RAW, RAP or ROD and the health risk assessment]*

*SAMPLE:* As detailed in the Final Health Risk Assessment *[or other appropriate document]* as proposed by the Covenantor and approved by the Department on *[date]*, all or a portion of the surface and subsurface soils within 10 feet of the surface of the Property contain hazardous substances, as defined in H&SC section 25316, which include the following metal contaminants of concern in the ranges set forth below: arsenic (0.3 to 38.1 parts per million ("ppm"), beryllium (2.6 ppm), copper (4.6 to 756 ppm, and nickel (7.3-105 ppm). In addition, there are low pH soils. Based on the Final Risk Assessment the Department and the Covenantor have concluded that use of the Property as a residence, hospital, school for persons under the age of 21 or day care center would entail an unacceptable cancer risk to the users or occupants of such property operated or occupied. The Department and the Covenantor have further concluded that the Property, as remediated, and operated or occupied subject to the restrictions of this Covenant, does not present an unacceptable threat to human safety or the environment, if limited to *[as applicable: commercial and industrial, parks, open space, [or other appropriate]]* use.

*SAMPLE: [Note: Groundwater restrictions in Paragraph 3.04 must be based on a discussion of what contaminants are found in groundwater at the site, and what the drinking water standards are.]*

Groundwater at the Property is found 15 to 20 feet below ground surface. Contaminants in the groundwater include benzene (50-123 ppm), chromium (75-213 ppm) and TCE (350-780 ppm). California drinking water standards are benzene at 0.08 ppm, chromium at 30 ppm and TCE at 5 ppm. The Department and the Covenantor concludes that the groundwater presents an unacceptable threat to human health and safety absent an environmental restriction to eliminate exposure to such levels of groundwater.

## ARTICLE II

### DEFINITIONS

2.01 Department. "Department" means the State of California by and through the Department of Toxic Substances Control and includes its successor agencies, if any.

2.02 Owner. "Owner" shall include the Covenantor's successors in interest, and their successors in interest, including heirs and assigns, during his or her ownership of all or any portion of the Property.

2.03 Occupant. "Occupant" means Owners and any person or entity entitled by ownership, leasehold, or other legal relationship to the right to occupy any portion of the Property.

2.04 Covenantor. "Covenantor" shall mean the United States acting through the Department of the Navy (DON).

## ARTICLE III

### GENERAL PROVISIONS

3.01 Restrictions to Run with the Land. This Covenant sets forth protective provisions, covenants, restrictions, and conditions (collectively referred to as "Restrictions"), subject to which the Property and every portion thereof shall be improved, held, used, occupied, leased, sold, hypothecated, encumbered, and/or conveyed. These Restrictions are consistent with the separate restrictions placed in the deed by and in favor of the Covenantor, conveying the Property from the Convenantor to its successor in interest described above. Each and every Restriction: (a) runs with the land in perpetuity pursuant to H&SC sections 25222.1 25355.5(a)(1)©

and Civil Code section 1471; (b) inures to the benefit of and passes with each and every portion of the Property; ©) shall apply to and bind all subsequent Occupants of the Property; (d) is for the benefit of, and is enforceable by the Department; and (e) is imposed upon the entire Property unless expressly stated as applicable only to a specific portion thereof.

3.02 Binding upon Owners/Occupants. Pursuant to H&SC sections 25222.1, 25355.5(a)(1)©), this Covenant binds all Owners of the Property, their heirs, successors, and assignees, and the agents, employees, and lessees of the owners, heirs, successors, and assignees. Pursuant to Civil Code section 1471(b), all successive owners of the Property are expressly bound hereby for the benefit of the Department.

3.03 Written Notice of Hazardous Substance Release. The Owner shall, prior to the sale, lease, or rental of the Property, give written notice to the subsequent transferee that a release of hazardous substances has come to be located on or beneath the Property, pursuant to Health and Safety Code section 25359.7. Such written notice shall include a copy of this Covenant. *[This last sentence is optional, to be used at sites where it is important that buyers and tenants be specifically aware of the ongoing remediation and their obligations.]*

3.04 Incorporation into Deeds and Leases. The Restrictions set forth herein shall be incorporated by reference in each and all deeds and leases for any portion of the Property.

3.05 Conveyance of Property. The Owner shall provide notice to the Department not later than thirty (30) days after any conveyance of any ownership interest in the Property (excluding mortgages, liens, and other non-possessory encumbrances). The Department shall not, by reason of this Covenant alone, have authority to approve, disapprove, or otherwise affect a conveyance, except as otherwise provided by law, by administrative order, or by a specific provision of this Covenant.

#### ARTICLE IV

#### RESTRICTIONS

*[The following examples are intended to be illustrative. Not all of them will be applicable. The restrictions for a particular property should have a direct relationship to what the Health Risk Assessment said was appropriate for use at the site. The restrictions must also protect the integrity and physical accessibility of,*

*and legal rights of access to, any ongoing remediation facilities at the site.]*

4.01 Prohibited Uses. The Property shall not be used for any of the following purposes: *[Note: These prohibitions must be based on the appropriate decision documents as set forth in Paragraphs 1.03 and 1.04]*

*[Sample provisions:]*

- (a) A residence, including any mobile home or factory built housing, constructed or installed for use as residential human habitation.
- (b) A hospital for humans.
- (c) A public or private school for persons under 21 years of age.
- (d) A day care center for children.

4.02. Soil Management *[Note: The basis for the soil restrictions must be in Paragraphs 1.03 and 1.04]*

*[Sample provisions]*

(a) No activities that will disturb the soil [at or below [ ] feet below grade] (e.g., excavation, grading, removal, trenching, filling, earth movement or mining) shall be allowed on the Property without a Soil Management Plan and a Health and Safety Plan approved by the Department.

(b) Any contaminated soils brought to the surface by grading, excavation, trenching or backfilling shall be managed in accordance with all applicable provisions of state and federal law.

(c) The Owner shall provide the Department written notice at least fourteen (14) days prior to any building, filling, grading, mining or excavating in the Property [more than [ ] feet below the soil surface] [which will remove more than [ ] cubic yards of soil].

4.03 Prohibited Activities. *[This paragraph will not be applicable to all sites. If not used, renumber accordingly. If there are groundwater restrictions, the basis must be in Paragraphs 1.03 and 1.04]* The following activities shall not be conducted at the Property:

*[Sample provisions]*

- (a) Raising of food (agricultural products intended for human consumption or use, including but not

limited to food, cattle, fibers, including cotton).

(b) Drilling for [drinking irrigation] water, oil, or gas [without prior written approval by the Department].

[or] (b) Extraction of groundwater for purposes other than site remediation or construction dewatering.

***[The following paragraphs are samples of restrictions that may be applicable when there is a cap, vapor and/or gas collection system, and/or groundwater monitoring system.]***

4.04 Non-interference with Cap [and Vapor Extraction System (VES)] and [Groundwater Capture System (GCSY)].

***[Sample provisions:]***

(a) Activities that may disturb the Cap (e.g. excavation, grading, removal, trenching, filling, earth movement, or mining) shall not be permitted on or within \_\_\_\_\_ feet of the Capped Property without prior review and approval by the Department. ***[Similar restrictions may be appropriate for other ongoing remediation systems.]***

(b) All uses and development of the Capped Property shall preserve the integrity ***[(if appropriate:)]*** and physical accessibility of the Cap. ***[Extend to other systems as appropriate.]***

(c) The Cap shall not be altered without written approval by the Department.

(d) The Owner shall notify the Department of each of the following: (i) the type, cause, location and date of any damage to the Cap and (ii) the type and date of repair of such damage. Notification to the Department shall be made as provided below within ten (10) working days of both the discovery of any such disturbance and the completion of any repairs. Timely and accurate notification by any Owner or Occupant shall satisfy this requirement on behalf of all other Owners and Occupants. ***[Extend to other systems as appropriate.]***

4.05 Access for Department. The Department shall have reasonable right of entry and access to the Property for inspection, monitoring, and other activities consistent with the purposes of this Covenant as deemed necessary by the Department in order to protect the public health or safety, or the environment.

## ARTICLE V

### ENFORCEMENT

5.01 Enforcement. Failure of the Owner or Occupant to comply with any of the Restrictions specifically applicable to include grounds for the Department to require that the Owner modify or remove any improvements ("Improvements" herein shall mean all buildings, roads, driveways, and paved parking areas) 7 constructed or placed upon any portion of the Property in violation of the Restrictions. Violation of this Covenant by the Owner or Occupant may result in the imposition of civil and/or criminal remedies including nuisance or abatement against the Owner or Occupant as provided by law. The State of California shall have all remedies as provided at in California Civil Code Section 815.7 as that enactment may be from time to time amended.

## ARTICLE VI

### VARIANCE AND TERMINATION

6.01 Variance. The Owner, or with the Owner's consent, any Occupant, may apply to the Department for a written variance from the provisions of this Covenant. Such application shall be made in accordance with H&SC section 25233. The Department will grant the variance only after finding that such a variance would be protective of human, health, safety and the environment.

6.02 Termination. The Owner, or with the Owner's consent, any Occupant, may apply to the Department for a termination of the Restrictions or other terms of this Covenant as they apply to all or any portion of the Property. Such application shall be made in accordance with H&SC section 25234. No termination or other terms of this Covenant shall extinguish or modify the retained interest held by the United States.

## ARTICLE VII

### MISCELLANEOUS

7.01 No Dedication Intended. Nothing set forth in this Covenant shall be construed to be a gift or dedication, or offer of a gift or dedication, of the Property, or any portion thereof to the general public or anyone else for any purpose whatsoever.

7.02 Recordation. The Covenantor shall record this Covenant, with all referenced Exhibits, in the

County of [name of county ] within ten (10) days of the Covenantor's receipt of a fully executed original.

7.03 Notices. Whenever any person gives or serves any Notice ("Notice" as used herein includes any demand or other communication with respect to this Covenant), each such Notice shall be in writing and shall be deemed effective: (1) when delivered, if personally delivered to the person being served or to an officer of a corporate party being served, or (2) three (3) business days after deposit in the mail, if mailed by United States mail, postage paid, certified, return receipt requested:

To Owner: *[include name and address of Owner and name of person to receive service]*

To Department: *[title and address of Regional Branch Chief.]*

Any party may change its address or the individual to whose attention a Notice is to be sent by giving written Notice in compliance with this paragraph.

7.04 Partial Invalidity. If any portion of the Restrictions or other term set forth herein is determined by a court of competent jurisdiction to be invalid for any reason, the surviving portions of this Covenant shall remain in full force and effect as if such portion found invalid had not been included herein.

7.05 Statutory References. All statutory references include successor provisions.

IN WITNESS WHEREOF, the Parties execute this Covenant.

Covenantor: **[name of Covenantor]**

By: \_\_\_\_\_  
Title: [signatory's name and title]

Date: \_\_\_\_\_

Department of Toxic Substances Control

By: \_\_\_\_\_  
Title: [signatory's name and title]

Date: \_\_\_\_\_

Approved as to form:

Date: \_\_\_\_\_ By: \_\_\_\_\_

Approved as to form:

Date: \_\_\_\_\_ By: \_\_\_\_\_

STATE OF CALIFORNIA )

)

COUNTY OF \_\_\_\_\_)

On this \_\_\_\_\_ day of \_\_\_\_\_, in the year \_\_\_\_\_, before me

\_\_\_\_\_, personally appeared \_\_\_\_\_,

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose

name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same

in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or

the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature \_\_\_\_\_

**MODEL HAZARDOUS WASTE MANAGEMENT PROGRAM**

**DEED RESTRICTION**

RECORDING REQUESTED BY:

[Covenantor's Name]  
[Street Address]  
[City], California [Zip Code]

WHEN RECORDED, MAIL TO:

Department of Toxic Substances Control  
Region \_\_\_\_\_  
[Street Address]  
[City], California [Zip Code]  
Attention: [ Name of Branch Chief], Chief  
[Branch Designation]

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

**COVENANT TO RESTRICT USE OF PROPERTY**

**ENVIRONMENTAL RESTRICTION**

(Re: *[Insert parcel number(s) and name of site property to be restricted]*)

This Covenant and Agreement ("Covenant") is made by and between the United States of America acting by and through the Department of Navy or "DON" (the "Covenantor"), the current owner of certain property situated in [city], County of \_\_\_\_\_, State of California, described in Exhibit " A", attached hereto and incorporated herein by this reference (the "Property"), and the State of California acting by and through the Department of Toxic Substances Control (the "Department"). Pursuant to Civil Code section 1471 ©), the Department has determined that this Covenant 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 Health and Safety Code ("H&SC") section 25260. In addition, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 104 (42 USC Section 9604), as delegated to the Covenantor by E.O.12580, ratified by Congress in 10 USC Sec. 2701, et seq., and implemented by the National Oil and Hazardous Substances Pollution Contingency Plan (NCP - 40 CFR Part 300) and implementing

guidances and policies, the Covenantor (DON) has also determined that this Covenant is reasonably necessary to protect present or future human health and safety and the environment as the result of the presence on the land of hazardous substances, pollutants and contaminants as defined in CERCLA Section 101 (42 USC Section 9601).

The Covenantor and the Department, collectively referred to as the "Parties", therefore intend that the use of the Property be restricted as set forth in this Covenant, in order to protect human health, safety and the environment.

The Covenantor retains sufficient legal title and interest in the subject property to insure continuing enforcement of the protective covenants and agreements contained within this Covenant to Restrict the Use of Property. Further in any subsequent transfers or conveyance of title to nonfederal entities the DON shall burden the property with additional deed covenants that insure that any subsequent deed or transfer contains the protective covenants and right of access and power to conduct monitoring interest contained herein and of wastes retained on site. Those covenants and agreements shall be enforceable against the servient estate in that those protective covenants shall run with the land to all successors and assigns.

## ARTICLE I

### STATEMENT OF FACTS

1.01 The Property, totaling approximately [ acres] [ — square yards] is more particularly described and depicted in Exhibit " A", attached hereto and incorporated herein by this reference. *[Exhibit "A" must include the legal description of the property used by the county recorder. This must include the particular description of the boundaries of the area to be subject to a specific use restriction. A survey may be required].* The Property is located in the area now generally bounded by *[include narrative description of the area; this will typically be street names: e.g. Main Street on the north, Maple Street on the east, etc.]* County of [ ], State of California.

1.02 *[Use this paragraph if imposing additional restrictions on a portion of the Property, for example on a capped portion, or if for any other reason it is necessary to precisely identify any portion of the property, such as an area with groundwater monitoring wells. The purpose of this paragraph is to give the precise*

*location of such areas where use restrictions will apply. Renumber following paragraphs accordingly]* A limited portion of the Property is more particularly described in Exhibit "B" which is attached and incorporated by this reference ("Capped Property" or "(other identified] Property"). *[Exhibit B must include a legal description of the exact area(s) being restricted and any necessary diagram(s). This will generally require a legal survey and engineering drawing for the Cap or other area to be further restricted.]* The [Capped or (other identified)] Property is located in the area now generally bounded by\_\_\_\_\_. *[include language that generally describes the Capped or other identified Property]* The [ Capped or { other identified}] Property is also more specifically described as encompassing xxxx County Assessor's Parcel numbers ---.

1.03 *[Briefly describe the regulatory oversight of the facility by the Department and the CERCLA decisions including any applicable Federal Facility Agreement (FFA) or Federal Facility site Remediation Agreement (FFSRA) and implementing activities of the Covenantor, the remedial activities that have occurred at the Property, including, if applicable, installation of a cap and construction and ongoing operation and maintenance of a groundwater treatment system. This paragraph should refer to the Closure Report or other decision document such as a ROD which approved the remedial activities at the Property and required this Covenant. The paragraph needs to identify the contaminants and physical remedial measures on the Property which necessitate this deed restriction.]*

Since [date] the Department [or, the Department's predecessor in interest (California Department of Health Services)] authorized this [treatment], [storage], [disposal] facility ("Facility") pursuant to an [interim status document] [permit]. Under this authorization the Site was a hazardous waste facility, regulated by the Department, subject to the requirements of the California Hazardous Waste Control Law ("HWCL"), at Health and Safety Code ("H&S Code") section 25100 et seq., and the federal Resource Conservation and Recovery Act ("RCRA"), at 42 U.S.C. section 6901 et seq. Pursuant to the closure requirements of the HWCL, including H&S Code section 25246 and post-closure notices provisions of Title 22 California Code of Regulations [section 66265.119(b) for interim status hazardous waste facilities] [or 66264.119(b) for permitted hazardous waste facilities]] [or, if restrictions required for permit: corrective action requirements of the HWCL, including

H&S Code Section 25200.10] the Department is requiring this Covenant as part of the [facility closure] [corrective action] [permitting] of the facility. The Department circulated a [Closure Plan] [Remedial Measures Study] [ other appropriate document, which contained a Final Health Risk Assessment [and/or Remedial Goals document], together with a draft [Environmental Impact Report] [Negative Declaration] pursuant to the California Environmental Quality Act, Public Resources Code section 21000 et seq for public review and comment from [date] to [date]. Because hazardous wastes, which are also hazardous materials as defined in Health and Safety Code sections 25117 and 25260, including [list hazardous wastes] remain in the [soil] and [groundwater] at the Property, the [Closure Plan] [Remedial Measures Study] provided that a deed restriction would be required as part of the facility remediation. The Department approved the [Closure Plan] [Remedial Measures Study] [other appropriate document] together with the [environmental document] on [date].

Pursuant to these documents, the Property was [*describe remedial actions taken which relate to what is left on the property. This description must include installation of any physical remedial measures. The description must identify what contaminants remain on the Property.*]

SAMPLE: Hazardous wastes, which are also hazardous materials as defined in H&S Code sections 25117 and 25260, and are CERCLA hazardous substances, pollutants or contaminant, including xxxx and yyyy, remain in the soil and groundwater at the Property. Remediation includes installing and maintaining a synthetic membrane cover ("Cap") over the Capped Property. The Cap consists of a low permeability synthetic membrane and other associated layers over the hazardous wastes and materials, as more particularly described in the engineering drawing attached as Exhibit "B" hereto. The Remedial Measure also includes the installation and operation of: (1) a passive gas collection system ("GCS") on the Capped Property which removes miscellaneous gas/vapors migrating upward from under the Cap, (2) a vapor extraction system ("VES"), which remediates certain volatile organic compound-impacted soils, and (3) groundwater monitoring wells ("Monitoring Wells"). The location of the GCS, VES and Monitoring Wells are shown on the map attached as exhibit "---". The operation and maintenance ("O&M") of the Cap, GCS, VES, and Monitoring Wells is pursuant to an O&M Manual incorporated into the O&M Agreement between [Covenantor] [*or name of other entity*] and the

Department dated September 20, 1995. *[if an O&M Agreement has not been signed, the approval date for the O&M Manual or Plan should be referenced]*

1.04 *[This paragraph should set out specific information about the risk assessment findings relevant to the contaminants of concern remaining at the property, essentially the basis for the restrictions imposed by this covenant. The Restrictions in Paragraphs 4.01, and any requirement for Soil Management Activity and any Prohibited Activity must be linked to the contaminants and risk assessment as discussed in this paragraph. The following paragraph is given for purposes of illustration. Each site will have different facts; those should be developed in a manner similar to the sample paragraph given here. You must consult with the assigned toxicologist about what are the appropriate land uses.]*

SAMPLE: As detailed in the Final Health Risk Assessment *[or other appropriate document]* as proposed by the Covenantor and approved by the Department on [date], all or a portion of the surface and subsurface soils within 10 feet of the surface of the Property contain hazardous wastes and hazardous materials, as defined in H&S Code section 25117 and 25260, which include one or more of the following metal contaminants of concern in the ranges set forth below: arsenic (0.3 to 38.1 parts per million ("ppm")), beryllium (2.6 ppm), copper (4.6 to 756 ppm, and nickel (7.3-105 ppm). In addition, there are low pH soils. Based on the Final Risk Assessment the Department and the Covenantor have concluded that use of the Property as a residence, hospital, school for persons under the age of 21 or day care center would entail an unacceptable cancer risk to the users or occupants of such property. The Department and the Covenantor have further concluded that the Property, as remediated, and operated or occupied subject to the restrictions of this Covenant, does not present an unacceptable threat to human safety or the environment, if limited to *[as applicable: commercial and industrial use, parks, open space, [or other appropriate] use]*.

SAMPLE *[Note: Groundwater restrictions in Paragraph 3.04 must be based on a discussion of what contaminants are found in groundwater at the site, and what drinking water standards are.]*: Groundwater at the Property is first found at 15 to 20 feet below ground surface. Contaminants in the groundwater include benzene (50-23 ppm), chromium (75-213 ppm) and TCE (350-780 ppm). California drinking water standards are

benzene at .08 ppm, chromium at 30 ppm and TCE at 5 ppm. The Department and the Covenantor concludes that the groundwater presents an unacceptable threat to human health and safety absent an environmental restriction to eliminate exposure to such levels of groundwater.

## ARTICLE II

### DEFINITIONS

2.01 Department. "Department" shall mean the State of California by and through the California Department of Toxic Substances Control and shall include its successor agencies, if any.

2.02 Owner. "Owner" shall include the Covenantor's successor's in interest, and their successors in interest, including heirs and assigns, during his or her ownership of all of any portion of the Property.

2.03 Occupant. "Occupant" shall mean Owners and any person or entity entitled by ownership, leasehold, or other legal relationship to the right to occupy any portion of the Property.

2.04 Covenantor. "Covenantor" shall mean the United States acting through the Department of the Navy (DON).

## ARTICLE III

### GENERAL PROVISIONS

3.01 Restrictions to Run With the Land. This Covenant sets forth protective provisions, covenants, restrictions, and conditions (collectively referred to as "Restrictions"), upon and subject to which the [Property] [Capped Property] [Restricted Property] and every portion thereof shall be improved, held, used, occupied, leased, sold, hypothecated, encumbered, and/or conveyed. These Restrictions are consistent with the separate restrictions placed in the deed by and in favor of the Covenantor, conveying the Property from the Covenantor to its successor in interest described above. Each and every one of the Restrictions: (a) shall run with the land in perpetuity pursuant to H&SC sections 25202.5, and 25202.6, and Civil Code section 1471; (b) shall inure to the benefit of and pass with each and every portion of the Property; (c) shall apply to and bind all subsequent Occupants of the Property; (d) are for the benefit of, and shall be enforceable by the State of California; and (e) are imposed upon the entire Property unless expressly stated as applicable only to a specific portion thereof.

3.02 Binding Upon Owners/Occupants. Pursuant to Health and Safety Code section 25202.5(b), this Covenant shall be binding upon all of owners of the land, their heirs, successors, and assignees, and the agents, employees, and lessees of the owners, heirs, successors, and assignees. Pursuant to Civil Code section 1471(b), all successive owners of the Property are expressly bound hereby for the benefit of the covenantee(s) herein.

3.03 Written Notice of Hazardous Substance Release. The Owner shall, prior to the sale, lease, or rental of the Property, give written notice to the subsequent transferee that a release of hazardous substances has come to be located on or beneath the Property, pursuant to Health and Safety Code section 25359.7. Such written notice shall include a copy of this Covenant. *[This last sentence is optional, to be used at sites where it is important that buyers and tenants be specifically aware of the ongoing remediation and their obligations]*

3.04 Incorporation into Deeds and Leases. The Restrictions set forth herein shall be incorporated by reference in each and all deeds and leases for any portion of the Property.

3.05 Conveyance of Property. Covenantor agrees that the Owner shall provide notice to the Department not later than thirty (30) days after any conveyance of any ownership interest in the Property (excluding mortgages, liens, and other non-possessory encumbrances). The Department shall not, by reason of this Covenant alone, have authority to approve, disapprove, or otherwise affect such conveyance. *[This paragraph is optional, to be used, for example, at sites with groundwater treatment systems that will require access by the Department and by the entity responsible for O&M.]*

#### ARTICLE IV

#### RESTRICTIONS

*[The following examples are intended to be illustrative. Not all of them will be applicable. The restrictions for a particular property should have a direct relationship to what the Health Risk Assessment said was ok/appropriate for use at the site. The toxicologist must be involved with drafting the Restrictions. The restrictions must also protect the integrity of, and access to, any ongoing remediation facilities at the site.]*

4.01 Prohibited Uses. The Property shall not be used for any of the following purposes: *[Note: These prohibitions must be based on the facts and Health Risk Assessment as set forth in Paragraph 1.04]*

[sample provisions]

(a) A residence, including any mobile home or factory built housing, constructed or installed for use as residential human habitation.

(b) A hospital for humans.

(c) A public or private school for persons under 21 years of age.

(d) A day care center for children.

4.02 Soil Management [Note: The basis for the soil restrictions must be in Paragraph 1.04]

[sample provisions]

(a) No activities which will disturb the soil/at or below xxx feet below grade/(e.g., excavation, grading, removal, trenching, filling, earth movement or mining) shall be permitted on the Property without a Soil Management Plan and a Health and Safety Plan submitted to the Department for review and approval.

(b) Any contaminated soils brought to the surface by grading, excavation, trenching or backfilling shall be managed in accordance with all applicable provisions of state and federal law.

(c) The Owner will provide the Department written notice at least fourteen (4) days prior to any building, filling, grading, mining or excavating in the Property [more than feet below the soil surface] [which will remove more than cubic yards of soil].

4.03 Prohibited Activities. [This paragraph will not be applicable to all sites. If not used, renumber accordingly. If there are groundwater restrictions, the basis must be in Paragraph 1.04] The following activities shall not be conducted at the Property:

[sample provisions]

(a) No raising of agricultural products intended for human consumption or use, including but not limited to food. cattle, fibers including, cotton) shall be permitted on the property.

(b) No drilling for [drinking/IRRIGATION] water, oil, or gas shall be permitted on the Property [without prior written approval by the Department] [or] (b) No groundwater shall be extracted on the Property for purposes other than site remediation or construction dewatering. [The following paragraphs are samples of restrictions that maybe applicable when there is a cap, vapor and/or gas collection system, and/or

*groundwater monitoring system.]*

4.04 Non-interference with Cap [and VES] and [GCS].

*[sample provisions]*

(a) No activities which will disturb the Cap (e.g. excavation, grading, removal, trenching, filling, earth movement, or mining) shall be permitted on or within \_\_\_\_\_ feet of the Capped Property without prior review and approval by the Department. *[Similar restrictions may be appropriate for other ongoing remediation systems.]*

(b) All uses and development of the Capped Property shall preserve the integrity of the Cap. *[Extend to other systems as appropriate.]*

(c) Any proposed alteration of the Cap shall require written approval by the Department.

(d) The Owner shall notify the Department of each of the following: (i) The type, cause, location and date of any disturbance to the Cap which could affect the ability of the Cap to contain subsurface hazardous wastes or hazardous materials in the Capped Property, and (ii) the type and date of repair of such disturbance. Notification to the Department shall be made as provided below within ten (10) working days of both the discovery of any such disturbance(s) and the completion of any repairs. Timely and accurate notification by any Owner or Occupant shall satisfy this requirement on behalf of all other Owners. *[Extend to other systems as appropriate.]*

4.05 Access for Department. The Department shall have reasonable right of entry and access to the Property for inspection, monitoring, and other activities consistent with the purposes of this Covenant as deemed necessary by the Department in order to protect the public health and safety and the environment.

## ARTICLE V

### ENFORCEMENT

5.01 Enforcement. Failure of the Owner or Occupant to comply with any of the Restrictions specifically applicable to it shall be grounds for the Department, by reason of this Covenant, to require that the Owner modify or remove any improvements ("Improvements" herein shall include all buildings, roads,

driveways, and paved parking areas, constructed or placed upon any portion of the Property constructed in violation of the Restrictions). Violation of this Covenant by the Owner or Occupant may result in the imposition of civil and/or criminal remedies including nuisance or abatement against the Owner or Occupant as provided by law. The State of California shall have all remedies as provided in California Civil Code, Section 815.7, as that enactment may be from time to time amended.

## ARTICLE VI

### MODIFICATION AND TERMINATION

6.01 Modification. Any Owner or, with the Owner's written consent, any Occupant of the Property or any portion thereof may apply to the Department for a written modification from the provisions of this Covenant. Such application shall be made in accordance with H&S Code section 25202.6. The Department will grant the modification only after finding that such a modification would be protective of human health, safety and the environment.

6.02 Termination. Any Owner, and/or, with the Owner's written consent, any Occupant of the Property, or any portion thereof, may apply to the Department for a termination of the Restrictions or other terms of this Covenant as they apply to all or any portion of the Property. Such application shall be made in accordance with H&S Code section 25202.6. The Department will grant the termination only after finding that such a termination would be protective of human health, safety and the environment. No termination of the Restrictions or other terms of this Covenant shall extinguish or modify the retained interest held by the United States.

## ARTICLE VII

### MISCELLANEOUS

7.01 No Dedication Intended. Nothing set forth in this Covenant shall be construed to be a gift or dedication, or offer of a gift or dedication, of the Property, or any portion thereof to the general public or anyone else for any purpose whatsoever.

7.02 Recordation. In accordance with HSC Section 25235, the Department will record this Covenant, with all referenced Exhibits, in the County of [name of county ] within ten (10) days of the Department's receipt

of a fully executed original.

7.03 Notices. Whenever any person gives or serves any notice ("Notice" as used herein includes any demand or other communication with respect to this Covenant), each such Notice shall be in writing and shall be deemed effective: (1) when delivered, if personally delivered to the person being served or to an officer of a corporate party being served, or (2) three (3) business days after deposit in the mail, if mailed by United States mail, postage paid, certified, return receipt requested:

To Owner: *[include name and address of Owner and name of person to receive service]*

To Department: *[include name, address, and appropriate name of Department person to be served]*

Any party may change its address or the individual to whose attention a notice is to be sent by giving written notice in compliance with this paragraph.

7.04 Partial Invalidity. If any portion of the Restrictions or other term set forth herein is determined by a court of competent jurisdiction to be invalid for any reason, the surviving portions of this Covenant shall remain in full force and effect as if such portion found invalid had not been included herein.

7.05 Statutory References. All statutory references include successor provisions.

IN WITNESS WHEREOF, the Parties execute this Covenant.

"Covenantor"

Date: \_\_\_\_\_ By: \_\_\_\_\_

"Department"

Date: \_\_\_\_\_ By: \_\_\_\_\_

Approved as to form:

Date: \_\_\_\_\_ By: \_\_\_\_\_

Approved as to form:

Date: \_\_\_\_\_ By: \_\_\_\_\_

STATE OF CALIFORNIA )

)

COUNTY OF \_\_\_\_\_)

On this \_\_\_\_\_ day of \_\_\_\_\_, in the year \_\_\_\_\_, before me

\_\_\_\_\_, personally appeared \_\_\_\_\_,

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose

name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same

in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or

the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature \_\_\_\_\_

# **ATTACHMENT E**

---

**COPY OF SETTLEMENT AGREEMENT AMONG  
THE SETTLING FEDERAL AGENCIES (SFA),  
ORANGE COUNTY WATER DISTRICT (OCWD), AND  
IRVINE RANCH WATER DISTRICT (IRWD) IN REGARD  
TO FORMER MARINE CORPS AIR STATION (MCAS) EL  
TORO GROUNDWATER REMEDIATION**

**Please note that a copy of the Settlement Agreement for groundwater at Former MCAS El Toro is attached for informational purposes only and as a reference for the convenience of the reader of the Record of Decision. Contents of this agreement are not subject to comment nor deemed to be an enforceable component of this ROD.**

**SETTLEMENT AGREEMENT  
AMONG THE SETTLING FEDERAL AGENCIES (SFA),  
ORANGE COUNTY WATER DISTRICT (OCWD), AND  
IRVINE RANCH WATER DISTRICT (IRWD)  
IN REGARD TO FORMER MARINE CORPS AIR STATION (MCAS) EL TORO  
GROUNDWATER REMEDIATION**

**TABLE OF CONTENTS  
FOR**

**SETTLEMENT AGREEMENT AMONG THE SETTLING FEDERAL AGENCIES (SFA),  
ORANGE COUNTY WATER DISTRICT (OCWD), AND  
IRVINE RANCH WATER DISTRICT (IRWD)  
IN REGARD TO FORMER MARINE CORPS AIR STATION (MCAS) EL TORO  
GROUNDWATER REMEDIATION**

Section	Page
AGREEMENT	1
RECITALS	1
I. GENERAL	5
A. Resolution	5
B. Efficacy of This Settlement Agreement	6
C. Reservation	6
II. DEFINITIONS	6
III. OCWD/IRWD AGREEMENT TO DESIGN, CONSTRUCT, OPERATE, AND MAINTAIN THE CCMI	10
A. OCWD's and IRWD's Obligations To Design, Construct, and Operate and Maintain the Principal Aquifer Components of the CCMI	10
1. OCWD's and IRWD's Joint Responsibility for Principal Aquifer Components	10
2. Settlement Agreement Relationship to ROD	10
3. Design or Operation of Principal Aquifer Components Not To Be Modified	10
4. Response to Additional Contamination	10
B. OCWD/IRWD Commitment To Accept and Treat SGU Groundwater	14
1. OCWD To Own Groundwater	14
2. VOC Treatment Contract	14
3. Response to Additional Contamination	14
4. Temporary Shutdown of SGU Extraction System	14
5. Permanent Termination Not Permitted Under Contract	15
6. Permanent Shutdown Permitted Under Contract	15
C. OCWD/IRWD Commitment for FFA Deliverables	15
1. OCWD/IRWD To Prepare Required Documents	15
a. Primary Document Deliverables	15
b. Secondary Document Deliverables	15
2. DoN Responsible for All Other FFA Documents	16
3. FFA Documents To Be Submitted to DoN	16
D. Performance Assurance	16
E. Pollution Insurance	17
F. OCWD/IRWD Responsibility for Permits, Licenses, etc.	17
IV. THE UNITED STATES' OBLIGATION TO REIMBURSE OCWD/IRWD FOR PAST AND FUTURE RESPONSE COSTS RELATING TO THE DESIGN, CONSTRUCTION, OPERATION, AND MAINTENANCE OF THE CCMI	17

A.	Payment by the United States	17
B.	Reversionary Trust	18
1.	Establishment of Trust	18
2.	Trust Agreement	18
3.	Trust Agreement Accounts	18
4.	Facility Account	18
5.	Operations & Maintenance Account	18
6.	Contingency Fund Account	18
7.	General Procedures for Payment of Reimbursement and Payment Requests	18
8.	Specific Procedures and Criteria for Requests for Reimbursement and Payment From Facility Account and Operations & Maintenance Account	19
9.	Specific Procedures and Criteria for Requests for Reimbursement and Payment From Contingency Fund Account	19
10.	Funds Remaining in the Trust	23
11.	Termination or Breach of This Agreement	23
12.	ROD Amendment	23
V.	OBLIGATION OF DON AND OCWD/IRWD TO SEEK APPROVAL OF THE ROD	23
VI.	ACCESS FOR CONSTRUCTION, OPERATION AND MAINTENANCE, AND MONITORING PURPOSES	24
VII.	OTHER PROVISIONS	26
A.	Ownership of CCMI	26
B.	Release and Covenant Not To Sue	26
C.	Indemnification	27
D.	Reservation of Rights	27
E.	Contribution Protection	28
F.	Dispute Resolution Procedures	28
G.	Access to Information	29
H.	Water Rights	30
I.	Retention of Records	30
J.	Mutual Cooperation	30
K.	Antideficiency Act	30
L.	Federal Tort Claims Act	31
M.	Notice	31
N.	Amendment	32
O.	Interpretation	32
P.	Integration and Effective Date	33
Q.	Signatories	33

## **LIST OF APPENDICES**

1. Federal Facility Agreement
2. List of ECLs.
3. List of Chemicals Detected at Former MCAS El Toro.
4. Primary Components of Modified IDP.
5. Map of On-station and Off-station Facilities.
6. Payment Schedules.
7. Refund Schedule.
8. SGU Contract.

## AGREEMENT

This Settlement Agreement (hereinafter referred to as "Settlement Agreement" or "Agreement") is made and entered into by and among the Orange County Water District ("OCWD"), a Special Governmental District organized under and existing pursuant to the Orange County Water District Act, Ch. 924, Stats. 1933, as amended, the Irvine Ranch Water District ("IRWD"), and the Settling Federal Agencies ("SFA") (defined as including the United States, its agencies, departments, and instrumentalities and hence including the Department of the Navy ["DoN"] but excluding the United States Environmental Protection Agency in its regulatory capacity), concerning water supply development and groundwater remediation in areas on and adjacent to the former United States Marine Corps Air Station ("MCAS") El Toro facility in Orange County, California.

## RECITALS

- A. WHEREAS, the former MCAS El Toro facility has been placed by the United States Environmental Protection Agency ("USEPA") on the National Priorities List ("NPL") promulgated by USEPA pursuant to Section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, ("CERCLA"), 42 U.S.C. Section 9605;
- B. WHEREAS, DoN, of which the United States Marine Corps ("USMC") is a component, USEPA, and the State of California Environmental Protection Agency ("CALEPA") have entered into a Federal Facility Agreement ("FFA") pursuant to Section 120 of CERCLA, 42 U.S.C. Section 9620, requiring that DoN, through the USMC, investigate and remediate releases of hazardous substances at the former MCAS El Toro NPL site ("Site") (a copy of the FFA is attached as Appendix 1);
- C. WHEREAS, pursuant to the FFA, DoN has prepared Work Plans for Remedial Investigation/ Feasibility Studies ("RI/FSs") for Operable Units 1 and 2A of the Site ("OUI" and "OU2A"), and these Work Plans have been approved by USEPA and CALEPA and require that DoN investigate and characterize the nature and extent of DoN's releases of hazardous substances, pollutants or contaminants to groundwater at the Site, and that DoN evaluate remedial alternatives addressing such releases;
- D. WHEREAS, OCWD is a local government agency and political subdivision of the State of

California and has the statutory authority and duty to manage, regulate, replenish, and protect the quality of the groundwater supplies within its boundaries for the beneficial use of the approximately two million (2,000,000) residents and water users who rely upon those groundwater resources to satisfy all or a portion of their beneficial water needs;

E. WHEREAS, IRWD is a California Water District formed and existing pursuant to California Water Code Section 34,000, et seq., and owns and operates a water distribution system for the purpose of distributing and selling potable and non-potable water to its customers and water users within its service area (the City of Irvine and other lands within the central portion of Orange County, California within the boundaries of OCWD jurisdiction);

F. WHEREAS, it is OCWD's and IRWD's position that the releases of volatile organic compounds ("VOCs") to soil and groundwater from DoN's operations at the Site have interfered with the ability of OCWD and IRWD to manage and use such groundwater;

G. WHEREAS, OCWD and IRWD have proposed a water supply development project (hereinafter referred to as the Irvine Desalter Project or "IDP") serving the following purposes: (1) interception, containment, and treatment of total dissolved solids ("TDS") and nitrate contaminant plumes in deep groundwater referred to as the "Principal Aquifer" ("PA") originating from agricultural and natural sources; and (2) development of a water supply system drawing from the PA for the beneficial use of their customers;

H. WHEREAS, OCWD/IRWD modified the original purposes and design of the IDP (the Modified IDP) by planning for the design, construction, and operation of two separate groundwater pump-and-treat systems: 1) a Non-Potable System which incorporates containment, extraction, and treatment of groundwater from within the VOC contaminant plume addressed in DoN's proposed remedial action for OU1 and OU2A and 2) a Potable System which will be constructed and operated outside of the VOC contaminant plume (see the attached Appendix 4 for a general description of the Modified IDP and its components and assets and the attached Appendix 5 for a general map);

I. WHEREAS, OCWD and IRWD have elected to proceed with the Modified IDP contingent upon

the United States' financial participation to address VOC-related CERCLA costs at the Modified IDP Non-Portable System, with OCWD and IRWD bearing all other Modified IDP costs including, but not limited to, cost related to the remediation/treatment of non-VOCs including, but not limited to, TDS and nitrates (e.g., the cost of reverse osmosis treatment), the cost of water supply infrastructure development, and the cost of pipelines from the Modified IDP to irrigation or other discharge of treatment groundwater, except as otherwise provided in this Agreement;

J. WHEREAS, Former MCAS El Toro has been closed pursuant to the Defense Base Closure and Realignment Act, P.L. 101-510, 104 Stat. 1808 (10 U.S.C. Section 2687), and DoN believes it is in the public interest to arrange with local government for the construction and long-term operation of certain components of Former MCAS El Toro remedial action;

K. WHEREAS, DoN supports the Modified IDP to the extent that it addresses VOC contamination, provides for the beneficial use of treated groundwater, and allows mutual cost savings through the United States' compensation of OCWD and IRWD for the VOC treatment and related expenses and through avoidance of reinjection costs;

L. WHEREAS, DoN has developed a number of remedial alternatives to address the VOC contamination in the groundwater zones underlying the Site, the SGU, and the PA;

M. WHEREAS, DoN's remedial alternatives for the PA are presented in, among other documents, the nine-volume MCAS El Toro OU-1 RI/FS Report dated August 9, 1996, which includes the OUI IAFS [Interim Action Feasibility Study] Report (Vol. IV) and the OUI IAFS Addendum (Vol. IX), and the CERCLA Proposed Plan for Remedial Action at OU1/OU2A; and DoN's remedial alternatives for the SGU are presented in, among other documents, the single volume MCAS El Toro OU2A FS Report dated December 5, 1997;

N. WHEREAS, DoN's preferred remedy for the PA is Alternative 8A (as described in the CERCLA Proposed Plan for Remedial Action at OU1/OU2A), and DoN's preferred remedy for the SGU is Alternative 10B' (as described in the "Simulation of Remedial Alternatives" section of Appendix D of the OU2A FS Report);

O. WHEREAS, DoN will draft and request that USEPA and CALEPA concur upon the issuance of a

Proposed Plan and Record of Decision (the "ROD") identifying and selecting Alternative 8A and Alternative 10B' as remedial action for groundwater at OUI and OU2A, respectively;

P. WHEREAS, the Alternative 8 and Alternative 10B' combined remedial action is comprised of the following basic assets of the Modified IDP Non-Potable System (hereinafter referred to as the "CERCLA Component of the Modified IDP" or "CCMI)(see the attached Appendices 4 & 5):

1. PA Assets (Alternative 8A), with response costs to be reimbursed by the United States pursuant to this Agreement, consisting of:

(a) Extraction Wells IRWD-78, ET-1, and ET-2, and Injection Well IDP-1 located within the VOC plume in the PA.

(b) Pumping and pipeline conveyance system from Wells IRWD-78, ET-1, and ET-2 to the CERCLA VOC treatment system located at the Central Treatment Plant (reference red line on Appendix 5 map), and the pumping and pipeline conveyance system from the CERCLA Non-Potable VOC treatment system located at the Central Treatment Plant to Injection Well IDP-1 (reference blue line on Appendix 5 map).

(c) Separate CERCLA Non-Potable VOC treatment system (including air strippers and off-gas granular-activated carbon units) located at the Central Treatment Plant for VOC-contaminated groundwater extracted from both SGU and PA groundwater.

2. SGU Assets (Alternative 10B') designed, constructed, operated and paid by DoN, consisting of:

(a) DoN's extraction wells for interception and removal of VOC-contaminated groundwater in the Shallow Groundwater Unit (SGU).

(b) DoN's pumping and pipeline conveyance from those extraction wells to the Non-Potable pipeline conveyance system's point of connection at the former MCAS El Toro station boundary.

3. Shared CCMI/non-CCMI Component Assets at the Central Treatment Plant (see Appendix 4 for brief description: costs allocated proportionately between the United States and OCWD/IRWD in settlement).

Central Treatment Plant site real property, buildings, site improvements, telemetry, transformers and other electrical improvements, and central monitoring and control systems.

4. DoN's monitoring wells associated with the remediation of the VOC plume in the SGU and PA;

Q. WHEREAS, past and future response costs incurred and to be incurred for construction, operation, and maintenance have been identified for the CCMI;

R. WHEREAS, in a settlement agreement dated August 4, 1993, the United States resolved its alleged liability for response costs incurred in constructing ten groundwater monitoring wells (MCAS Nos. 1 through 10), and in exchange for the United States' reimbursement of those response costs, the United States was fully and forever released from liability for those costs;

S. WHEREAS, in a settlement agreement dated September 3, 1996, the United States resolved its alleged liability for response costs incurred in constructing and operating groundwater extraction well ET-1 through December 31, 1995, and in exchange for the United States' reimbursement of those response costs, the United States was fully and forever released from liability for those costs;

T. WHEREAS, the past response costs incurred and future response costs to be incurred by OCWD/IRWD as set forth in Whereas Clause Q in these Recitals in constructing, operating, and maintaining and otherwise implementing the CCMI component of the remedial action required in the anticipated ROD are necessary costs consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) based upon currently available information; and

U. WHEREAS, the parties agree that this Settlement Agreement is fair, reasonable, and in the public interest;

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants set forth herein, the Parties mutually agree as follows:

I. GENERAL.

A. Resolution. The SFA, OCWD, and IRWD desire to amicably resolve and settle any and all past, present and future claims or causes of action that OCWD and IRWD may have against the United States under Sections 107 and 113 of CERCLA, 42 U.S.C. Sections 9607 & 9613, and all other applicable Federal, State or local laws or regulations for response costs incurred and to be incurred by OCWD and IRWD for groundwater

remediation and water supply development projects as a result of the actual or threatened release of hazardous, toxic, or solid wastes, substances, pollutants or contaminants at or from Former MCAS El Toro without litigation and without admission of fact or liability by the United States, OCWD, or IRWD.

B. Efficacy of This Settlement Agreement. The Parties' obligations under this Settlement Agreement shall become effective upon signature by all the parties; furthermore, the Parties' obligations hereunder shall commence immediately (or shall commence as specified herein) and shall continue to completion if: (1) the ROD has received concurrence from USEPA and CALEPA or otherwise has become finalized as provided under the FFA (Attachment 1), and (2) Alternative 8A and Alternative 10B' are selected for OU1 and OU2, respectively. If the ROD is not so finalized or if a remedial action is selected for groundwater at OU1 and OU2A other than Alternative 8A for OU1 and Alternative 10B' for OU2A, this Settlement Agreement shall be null and void, and OCWD/IRWD shall receive no payments under or as a result of this Settlement Agreement

C. Reservation. DoN fully reserves its rights to select and USEPA fully reserves its rights to concur upon remedial actions as provided by CERCLA, the NCP, and the FFA.

## II. DEFINITIONS .

Unless otherwise expressly provided herein, terms used in this Agreement that are defined in CERCLA or in regulations promulgated under CERCLA have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Agreement or in the Appendices attached hereto and incorporated hereunder, the following definitions will apply and will control over any other definition:

"Agreement" or "Settlement Agreement" means this Settlement Agreement, including all Appendices hereto. In the event of a conflict between this Settlement Agreement and any Appendix, the body of this Settlement Agreement will control.

"Alternative 8 A" means the remedial alternative of that name as described in the CERCLA Proposed Plan for Remedial Action at OU1/OU2A.

"Alternative 10B'" means the remedial alternative of that name as described in the OU2A FS Report dated December 5,1997.

"CALEPA" means the California Environmental Protection Agency and its departments, agencies, boards, bureaus, and other components and their successors.

"CCMI means the " CERCLA Component of the Modified IDP" as more fully set forth in Whereas Clause P. of the Recitals.

"Claim" means any past, present or future claim against the United States for contribution, cost recovery or other liability or financial payment with respect to any past, present, or future civil claim, counterclaim, cross claim, indemnity, demand, liability, duty, damage, debt, lien, loss, judgment, cause of action, or other chose in action, administrative or judicial, at law or in equity, under Federal, State, or local law, whether known or unknown, fixed or contingent, suspected or unsuspected or associated in any way with or pertaining to the actual or threatened release of hazardous, toxic, or solid wastes, substances, pollutants, or contaminants at or from Former MCAS El Toro, or associated in any way with the CERCLA remedial action addressed in the ROD or the Modified IDP.

"Day" means a calendar day unless expressly stated to be a working day. "Working day" means a day other than a Saturday, Sunday, or federal holiday. In computing any period of time under this Agreement, where the last day would fall on a Saturday, Sunday or federal holiday, the period will run until the close of business of the next working day.

"DoN" means the United States Department of the Navy and all of its components, agencies, and bureaus, including but not limited to the United States Marine Corps, the Naval Facilities Engineering Command, and their successors.

"Evaluation Concentration Levels" or "ECLs" as set forth in Appendix 2 will be used as evaluation criteria for Temporary Shutdown procedures under Paragraphs III. AAb. and III. B. 3.

"Federal Facility Agreement" or "FFA" means the agreement attached as Appendix 1.

"FFA Deliverables" means the documents that DoN is obligated to prepare pursuant to the FFA, as identified in Sections 7.3 and 7.4 of the FFA.

"Former MCAS El Toro" means the former Marine Corps Air Station El Toro located in Orange County, California.

"Future Response Costs" means all necessary response costs that OCWD and IRWD incur that are consistent with the NCP after the effective date of this Agreement in conducting the Work under this Agreement relating in any way to any claims that OCWD or IRWD may have against the United States concerning the subject matter of this Agreement

"IRWD" means the Irvine Ranch Water District and its successors.

"Modified IDP" means the Irvine Desalter Project as modified to accept and treat for VOC removal some of the groundwater that DoN must remediate as part of DoN'S remedial action for groundwater at OUI and OU2A, as more particularly described in Appendix 4.

"OCWD" means the Orange County Water District and its successors. "Off-station" means locations outside the security fence lines of Former MCAS El Toro on the effective date of this Agreement as indicated on the appended map (Appendix 5).

"On-station" or "Station" means locations inside the security fence lines of Former MCAS El Toro on the effective date of this Agreement as indicated on the appended map (Appendix 5).

"Operate and Maintain" and "Operation and Maintenance" means operation and maintenance of the CCMi pursuant to the Operation and Maintenance Plan to be developed by OCWD/IRWD. and to receive concurrence from USEPA and CALEPA or otherwise finalized pursuant t to the FFA.

"OU1" (Site 18) means DoN's remedial action to address the release of VOCs from Former MCAS El Toro into regional groundwater, as more particularly described in Vol. IV, Sections 1.5 and 1.5.2 of the OUI Interim RI/FS Report dated August 9,1996.

"OU2A" (Site 24) means DoN's remedial action to address the release of VOCs from the former MCAS EL Toro VOC source area into the SGU, as more particularly described in the OU2A FS Report.

"Paragraph" means a discrete segment of this Agreement preceded by a letter or an Arabic numeral, as distinguished from a " Section," which refers to a discrete segment of this Agreement preceded by a Roman numeral.

"Party" means OCWD, IRWD, or the SFA, and "Parties" means OCWD, IRWD, and the SFA, including its officers, employees, agents, and contractors.

"Past Response Costs" means all necessary response costs that OCWD and IRWD incurred that are consistent with the NCP on or prior to the effective date of this Agreement relating in any way to any claims that OCWD or IRWD may have against the United States concerning the actual or threatened release of hazardous, toxic, or solid wastes, substances, pollutants, or contaminants at or from Former MCAS El Toro including but not limited to CERCLA response costs.

"Permanent Termination" means the permanent cessation of construction and/or operation of the Modified IDP by OCWD or IRWD for any reason.

"Principal Aquifer" or "PA" means groundwater in the lowermost unconsolidated sediment layers beneath and extending beyond Former MCAS El Toro, generally below the level of the SGU, as more fully described in Section 1.7.1 (Geologic Framework) of the OU1 IAFS Report (Vol. IV).

"Record of Decision" or "ROD" means concurrence from USEPA and CALEPA or other FFA finalization of the ROD that DoN is expected to issue in calendar year 2001, selecting Alternative 8A and Alternative 10B' as the former MCAS El Toro Remedial Action for groundwater at OU 1 and OU2A, respectively. Subject to Paragraph I. C., above, a Record of Decision selecting any alternative other than or altering Alternative 8A (described in the CERCLA Proposed Plan for Remedial Action at OU1/OU2A and Whereas Clauses N and P in the Recitals hereof) and Alternative 10B' (described in the OU2A FS Report dated December 5, 1997, and Whereas Clauses N and P hereof) is not, for purposes of this Agreement, the ROD.

"Remedial Goals" means federal and any more stringent State drinking water maximum contaminant levels (MCLs).

"Section" means a discrete segment of this Agreement preceded by a Roman numeral, as distinguished from a "Paragraph," which refers to a discrete segment of this Agreement preceded by a letter or an Arabic numeral.

"Settling Federal Agencies" or "SFA" means the United States, including its agencies, departments, and instrumentalities and hence including DoN, but excluding USEPA in its regulatory capacity.

"Shallow Groundwater Unit" or "SGU" means groundwater in the uppermost unconsolidated sediment

layers beneath and extending beyond Former MCAS El Toro, as more fully described in Section 1.7.1 (Geologic Framework) of the OUIAFS Report (Vol. IV).

"Site" means the former MCAS EL Toro NPL site.

"State" means the State of California.

"Temporary Shutdown" means the temporary cessation of operation of the Modified IDP by OCWD and/or IRWD.

"United States" means the United States of America including its agencies, departments, and instrumentalities.

"USEPA" means the United States Environmental Protection Agency and any successor departments or agencies of the United States.

"VOC Plume" means that plume of VOC-contaminated groundwater as described in the OU1 IAFS Report (Vol. IV) and the OU2A FS Report.

### III. OCWD/IRWD AGREEMENT TO DESIGN, CONSTRUCT, OPERATE, AND MAINTAIN THE CCMI.

#### A. OCWD's and IRWD's Obligations To Design, Construct and Operate and Maintain the Principal Aquifer Components of the CCMI.

1. OCWD and IRWD are jointly and severally responsible for and will design, construct, operate and maintain the PA Components of CCMI in accordance with this Agreement, the ROD and the requirements set forth in the former MCAS El Toro FFA and FFA deliverables set forth in Section 8.2 of the FFA that receive concurrence from USEPA and CALEPA or otherwise become finalized pursuant to the FFA Including, but not limited to, the schedules set forth therein.
2. This Agreement does not alter DoN's obligations to comply with the ROD, FFA and FFA deliverables as provided by law.
3. OCWD/IRWD will not modify the design or operation of the PA Components of the CCMI except as set forth in the finalized FFA deliverables and ROD.
4. Response to Additional Contamination.

a. Except as otherwise provided in this Agreement or in Connection with short term routine maintenance, the parties agree that payments made to OCWD/IRWD by the United States under this Agreement are made with the express assumption and understanding that OCWD/IRWD will provide uninterrupted operation of the CCMI. OCWD/IRWD will not temporarily shut down or permanently terminate operations of the PA Components of the CCMI except in accordance with the procedures set forth, below. For purposes of this Agreement, DoN acknowledges that annual extractions from the principal aquifer component of the CCMI may be seasonal. Such extractions shall be consistent with the Proposed Plan, ROD, and FFA deliverables.

b. Temporary Shutdown of the CCMI.

i. In the event that contaminants not listed in Appendix 3 are detected in extracted groundwater in area groundwater monitoring or extraction well locations, or in the event that concentration or equivalent mass levels for the contaminants listed in Appendix 2 are detected at the point of connection of DoN's SGU groundwater conveyance pipeline (see Appendix 5) or the CCMI central VOC Treatment Plant intake that exceed ECLs for those contaminants as set forth in Appendix 2, the Party discovering said contaminants or levels will promptly notify in writing the other Parties, the FFA signatories, California Department of Toxic Substances Control (DTSC), California Department of Health Services (DHS), and the Santa Ana Regional Water Quality Control Board (RWQCB), and OCWD/IRWD then may, without further notice, temporarily shut down operation for the CCMI in accordance with the following.

ii. Within seven (7) calendar days following such initial notification, the Parties, the FFA signatories, and DHS will determine whether through adjusting flow rates, blending, or similar measures:

(a) The CCMI can continue to adequately treat extracted groundwater to ensure compliance with applicable Federal and State water quality standards at the point of distribution into the water supply infrastructure following treatment, or

(b) In the absence of Federal or State water quality standards, the

continued supply of CCMI water poses no potential health threat to the public.

iii. If the standards in Paragraphs III. A. 4. b. ii.(a) or (b) can be met, OCWD/IRWD will immediately resume operations; notify in writing DoN and the FFA signatories; and, if the operation of the CCMI must be permanently modified in any way that is inconsistent with the ROD or FFA deliverables (e.g., minimum flow rates), OCWD/IRWD must obtain DoN's and the FFA signatories' approval within ninety (90) calendar days.

iv. In the event that OCWD/IRWD determine that the standards set forth in Paragraphs III. A4. b. n.(a) or (b) cannot be met, OCWD/IRWD may continue temporary shutdown of the CCMI and will develop and submit a Response Plan within sixty (60) calendar days for approval by DoN and concurrence by USEPA and CALEPA (including DTSC, DHS, and RWQCB). The Response Plan will propose all practicable means available to minimize the extent and duration of termination of all or a portion of the CCMI IDP groundwater extraction and/or treatment activities. The Response Plan also will specify a timetable for resumption of operations.

v. If the approved Response Plan under Paragraph III. A4.b.iv. provides that the CCMI will continue to operate but that additional treatment technology at the CCMI central VOC treatment plant will be required beyond VOC treatment and reverse osmosis technologies, the United States will not be responsible for any costs associated with such additional treatment technology except as otherwise provided in this Agreement, including but not limited to the terms and conditions of Paragraph IV.B.6. and Paragraphs VII. B. and VII.C. of this Agreement.

vi. OCWD/IRWD will resume full operation of the CCMI groundwater extraction and/or treatment activities as provided in the approved Response Plan or, in the alternative, upon approval of resumption of operations by USEPA and DHS.

c. Permanent Termination of the CCMI.

i. OCWD/IRWD will not permanently terminate operation of the CCMI unless it has demonstrated, and DoN has approved and USEPA and CALEPA (including DTSC, DHS, and

RWQB) have concurred in writing, either that a Force Majeur condition exists as set forth in Section 10 of the FFA (Appendix 1) or, in the alternative, that treatment of extracted groundwater to meet Federal and State drinking water quality standards and adequately protect human health and the environment is technically impracticable from an engineering perspective consistent with the substantive criteria set forth at 40 CFR Section 300.430(f)(1)(ii)(c)(3) and the NCP preamble at 55 Fed. Reg . 8748 (March 8, 1990). The availability to OCWD/IRWD of water from sources other than the PA and CCMI at a lower cost to OCWD/IRWD and its customers (taking into consideration groundwater treatment costs) will not be considered in evaluating technical impracticability.

ii. In the event of permanent termination of operations of the CCMI by OCWD/IRWD for any reason and a determination by the FFA signatories pursuant to the FFA that further active remediation of the PA by DoN is required, OCWD/IRWD will compensate the United States in accordance with Appendix 7. In the event of permanent termination of operations of the CCMI by OCWD/IRWD for any reason and a determination by the FFA signatories pursuant to the FFA that monitored natural attenuation is an appropriate remedial action for the PA and that further active remediation of the PA by DoN is not required, OCWD/IRWD will not compensate the United States in accordance with Appendix 7. OCWD/IRWD acknowledge that the ROD for OU1 and OU2A should provide that, based upon currently available information, it is anticipated that the backup, contingency remedial action for VOC contamination in the PA will consist of monitored natural attenuation in the event the CCMI is terminated for any reason.

iii. OCWD/IRWD will immediately notify in writing the Trustee of the Reversionary Trust established pursuant to Paragraph FV-B. of this Agreement of the permanent termination of the CCMI. In the event of such permanent termination, OCWD/IRWD will not submit additional Reimbursement Requests to the Reversionary Trust Trustee as provided in Paragraph IV. B. and the Trustee will not reimburse OCWD/IRWD.

d. Any temporary shutdown or permanent termination that does not satisfy the terms of this Paragraph III. A. 4. will constitute a breach of this Agreement.

e. The ROD will incorporate this Paragraph III. A. 4. by reference.

B. OCWD/IRWD Commitment To Accept and Treat SGU Groundwater.

1. As described herein, OCWD will enter into a contract (Appendix 8) to accept, take ownership of, and treat groundwater extracted by DoN from the SGU and delivered by DoN to OCWD/IRWD.

2. VOC Treatment Contract.

a. DoN, subject to the availability of funds, and OCWD will enter into a contract under which OCWD/IRWD will agree to provide uninterrupted VOC removal services for groundwater extracted by DoN from the former MCAS El Toro on-station SGU. OCWD will accept and take ownership of the groundwater extracted by DoN from the former MCAS El Toro on-station SGU and delivered by DoN to OCWD for VOC treatment pursuant to the terms and conditions of the contract and as provided in the ROD and FFA deliverables.

b. After treatment, OCWD will be responsible for the disposal and/or discharge of the SGU groundwater consistent with the ROD and applicable laws and regulations. After treatment, no costs associated with the disposal and/or discharge of the SGU groundwater will be a basis for recovery by OCWD/IRWD.

c. Payment for Services.

OCWD's services to be performed under the contract will be considered utility services. Payment for utility services will be made pursuant to terms and conditions of the contract.

3. Response to Additional Contamination.

The contract will include procedures and substantive criteria for addressing the appropriateness of temporary shutdown and permanent termination. by OCWD of SGU treatment activities.

4. DoN may temporarily shut down operation of the SGU extraction system without prior notice to OCWD. Such shutdown may be for any reason deemed necessary by DoN. When such shutdown occurs, the Contracting Officer will provide OCWD with written notice of the shutdown and its anticipated duration as soon as reasonably practicable. Under no circumstances will such shutdown be grounds for recovery under the Changes Clause of the contract.

5. Permanent Termination Not Permitted Under Contract.

Subject to Paragraph III. B. 6. below, permanent termination by OCWD of SGU VOC treatment activities required by the contract will be deemed a breach of the contract and this Settlement Agreement unless DoN is relieved of its obligation under the FFA and ROD to remediate VOC contamination in the SGU by an amendment to the ROD. In the event of a termination of services contrary to this provision, in addition to any other remedies covered by the contract, the United States will be entitled to recover from OCWD all costs incurred by DoN in obtaining alternate VOC remediation services over and above the amount to be paid to the contractor for the connection charge and service rate at the time the services are terminated pursuant to the contract payment schedule. In the event of such termination, the connection charge and service rate for the performance period in which the contract was breached as well as all future connection charges and service rates as set forth in the contract will not be paid to OCWD.

6. Permanent Shutdown Permitted Under Contract. Notwithstanding any other provision of the contract, a permanent shutdown will not be considered a breach of the contract if DoN is relieved of its obligation under the FFA and ROD to remediate VOC contamination in the SGU by an appropriate amendment of the ROD. If such shutdown occurs during the base contract (ten-year-period), OCWD will be paid the balance of the connection charge according to the contract, and the service rate will be reduced on a pro rata basis based on the volume of SGU groundwater accepted and treated during the performance period prior to the termination of services by DoN.

C. OCWD/IRWD Commitment for FFA Deliverables.

1. Upon issuance and finalization of the ROD pursuant to the FFA, OCWD/IRWD will prepare draft and draft final documents for all of the following documents that the FFA requires DoN to prepare after finalization of the ROD pursuant to the FFA and that address the CCMI components of the ROD:

a. Primary document deliverables identified in Section 7.3 of the FFA:

- RD Work Plan
- RA Work Plan
- Preliminary Remedial Design
- Final Remedial Design
- Construction Quality Assurance Plan

- Construction Quality Control Plan
- Contingency Plan
- Project Closeout Reports
- Operation and Maintenance Plan

(b) Secondary document deliverables identified in Section 7.4 of the FFA:

- Well Closure Methods and Procedures.

2. DoN will be responsible for preparing all other FFA documents.

3. The FFA documents identified above as OCWD/IRWD's responsibility shall adequately address USEPA and CALEPA comments on draft deliverable documents as provided in Section 7.7 of the FFA and shall be submitted to DoN in accordance with the schedule upon which DoN and OCWD/IRWD agree and in accordance with Section 8.2 of the FFA. OCWD/IRWD and DoN will cooperate to finalize the language of draft final deliverable documents in order to address all FFA requirements and address USEPA and CALEPA comments. OCWD/IRWD will submit these draft and draft final documents in a timely manner to allow DoN to review the document prior to submittal of the documents to USEPA and CALEPA as provided in the schedule developed and approved in accordance with Sections 7.7, 7.8, 7.9, 7.10, and 8.2 of the FFA. DoN will ensure that its comments are provided to OCWD/IRWD as early as reasonably possible to avoid delay in submittals. Any delay by OCWD/IRWD in providing these documents in a timely manner, which thereby causes delay by DoN in submitting the FFA deliverables to USEPA and CALEPA as provided under the FFA, will be considered a breach of this Agreement.

D. Performance Assurance.

Within sixty (60) calendar days of the date of CERCLA ROD finalization, OCWD/IRWD will establish and maintain financial security in the amount of the total estimated cost of the CCMI for the term of this Agreement less the amount then paid to OCWD/IRWD by the United States pursuant to this Agreement. This financial security will be in the form of a highly-rated performance bond guaranteeing performance of the CCMI. The bond will be presented to DoN and be subject to DoN approval.

E. Pollution Insurance.

Within one year of the date of CERCLA ROD finalization, OCWD/IRWD will obtain pollution insurance in the minimum amount of \$20,000,000 (or a lesser amount if agreed in writing among the parties) that reasonably covers risk concerning the CCMI, (except for risks associated with the SGU assets, which are addressed in the SGU contract), and OCWD/IRWD will maintain said insurance for forty years, unless commercially impracticable (with prior written notice of such asserted impracticability).

F. OCWD/IRWD Responsibility for Permits, Licenses, etc.

Except with regard to DON'S obligations as provided in the FFA, OCWD/IRWD will be responsible for obtaining all locally-issued licenses, permits, and approvals necessary for construction and operation of the CCMI, and will be the lead agency responsible for compliance with the California Environmental Quality Act, Public Resources Code sections 21000 et seq., as necessary to construct and operate the CCMI.

IV. THE UNITED STATES' OBLIGATION TO REIMBURSE OCWD/IRWD FOR PAST AND FUTURE RESPONSE COSTS RELATING TO THE DESIGN. CONSTRUCTION. OPERATION. AND MAINTENANCE OF THE CCMI.

A. Payment by the United States.

As compensation for OCWD/IRWD's obligations under the preceding Paragraphs and to resolve potential liability to OCWD/IRWD for response costs, the United States agrees as follows:

1. The United States, on behalf of the SFA, will pay the agreed total amount of Fourteen Million Nine Hundred Eleven Thousand Dollars (\$14,911,000) into Facility and Operations & Maintenance Accounts in a Reversionary Trust established pursuant to IV. B. of this Settlement Agreement, as compensation for past and future response costs incurred and to be incurred by OCWD/IRWD relating to the off-station components of the CCMI. This payment by the United States will be made within one hundred and eighty (180) calendar days following finalization of the ROD pursuant to the FFA.

2. The United States, on behalf of the SFA, also will pay the agreed amount of Five Million Two Hundred Fifty Thousand Dollars (\$5,250,000) into a Contingency Fund Account in the Reversionary Trust

established pursuant to Section IV. B. of this Settlement Agreement, as a settlement premium for purposes of resolving certain past, present, and future claims pertaining to or associated in any way with the actual or threatened release of hazardous, toxic or solid wastes, substances, pollutants, or contaminants (including but not limited to VOCs, TDS, and nitrates) at or from Former MCAS El Toro, the CCMI, or the Modified IDP as provided in Paragraphs VII. B. and VII. C. of this Agreement. This payment by the United States will be made within one hundred and eighty (180) calendar days following finalization of the ROD pursuant to the FFA. The eligible uses and eligible payments from this account are set forth more specifically in Paragraph IV. B below. (If CERCLA ROD finalization is not until July 2002, then the \$5,250,000 will be increased to \$5,792,000, with the amount of the incremental increase to be divided proportionally among the Contingency Fund Account components in IV. B.9.; if not until July 2003, then proportionally increased to \$6,351,000; if not until July 2004, then proportionally increased to \$6,926,000; if not until July 2005, then proportionally increased to \$7,518,000; and if CERCLA ROD finalization is not until July 2006 or beyond, then the amount will be renegotiated in good faith to account for escalation of costs.)

B. Reversionary Trust.

1. Within 90 days of funding, the United States will establish a Reversionary Trust to hold the funds described in Paragraphs IV. A. 1 and 2. of this Settlement Agreement.
2. The Reversionary Trust will be created pursuant to a Trust Agreement between the United States, as grantor, and a suitable financial institution to be selected by the United States as Trustee. The Trustee will have the powers, duties, and responsibilities set forth in the Trust Agreement, including responsibility for maintaining financial and accounting records relating to the Trust and making payments in accordance with this Settlement Agreement to OCWD/IRWD.
3. The Trust Agreement will provide for establishment and administration of three separate accounts: the "Facility Account," the "Operations & Maintenance Account," and the "Contingency Fund Account."
4. The Facility Account will be established in the amount of Seven Million Five Hundred

Seventy Two Thousand Dollars (\$7,572,000) for purposes of reimbursing OCWD/IRWD for initial capital construction expenditures for off-station components of the CCMI that address PA contamination and serving as the exclusive source of Trust funds for reimbursement of such expenditures.

5. The Operations & Maintenance Account will be established in the amount of Seven Million Three Hundred Thirty Nine Thousand Dollars (\$7,339,000) for purposes of reimbursing OCWD/IRWD for operations and maintenance expenditures for the off-station components of the CCMI that address PA contamination and serving as the exclusive source of Trust funds for reimbursement of such expenditures.

6. The Contingency Fund Account will be established in the amount of Five Million Two Hundred Fifty Thousand Dollars (\$5,250,000). The Contingency Fund Account will be used for phased payment as provided below in Paragraphs IV. B. 9.(a) and (b). The schedule for payment is structured to provide larger payments to OCWD/IRWD within the first ten years of operation of this Agreement to more adequately address risk relating to PA groundwater extracted from Modified IDP off-station groundwater extraction wells, repair and replacement, and other contingencies relating to the Modified IDP. (See also IV. A. 2.)

7. General Procedures for Payment of Reimbursement and Payment Requests From Reversionary Trust Funds.

Any request for reimbursement or payment from Reversionary Trust funds will be submitted by OCWD/IRWD to the Trustee, with copies to the United States Department of Justice (DoJ) and DoN, and will specify the account under which reimbursement is being sought and the specific basis for payment. The Trustee will pay the request unless the United States submits written objection to the request for reimbursement within thirty (30) calendar days of the United States' receipt of the request. Absent objection from the United States, the Trustee will pay the reimbursement within sixty (60) calendar days of receipt of the request for reimbursement. The Trustee will review all requests to ensure compliance with this Settlement Agreement. If the United States submits written objection to payment within thirty (30) calendar days of receipt of the request for reimbursement as provided above, OCWD/IRWD may invoke the dispute resolution procedures by providing written objection as provided in Paragraph VII. F. of this Agreement. In the event of such dispute, the Trustee will withhold

reimbursement to OCWD/IRWD. In the event that OCWD/IRWD prevails in such dispute, they will be entitled to prompt payment following the final dispute resolution decision.

8. Specific Procedures and Criteria for Requests for Reimbursement and Payment From Facility Account and Operations & Maintenance Account.

Requests for reimbursement will be submitted by OCWD/IRWD to the Trustee, with copies to the United States (DoJ and DoN) and, subject to Paragraph IV. B. 7., will be paid by the Trustee, commencing three months after establishment of the Trust or one year after ROD finalization (whichever occurs earlier), and then in accordance with and consistent with the Facility Payment and Operations & Maintenance Payment schedules set forth in Appendix 6, which is hereby incorporated by reference into this Agreement.

9. Specific Procedures and Criteria for Requests for Reimbursement and Payment From Contingency Fund Account.

There are two types of payments from the Contingency Fund Account: 1) Installment Payments which are addressed in Paragraph IV. B. 9. a. below and 2) Conditional Payments which are addressed in Paragraphs IV. B. 9. b. and c. below. The Installment Payments are payments of fixed amounts in three increments spaced ten years apart beginning approximately one year after ROD finalization. The Conditional Payments are reimbursements of certain additional specified costs that OCWD/IRWD might incur and are subject to maximum dollar amounts during three consecutive periods. Requests for Contingency Fund Account Payments will be submitted by OCWD/IRWD to the Trustee, with copies to the United States (DoJ and DoN), and will conform to the following eligibility criteria and limitations and, subject to Paragraph IV. B. 7., will be paid by the Trustee in accordance with the schedules for payment set forth below. (See also IV. A. 2.)

a. Installment Payment Eligibility Criteria and Payment Schedule.

The Trustee will pay Installment Payments from the Contingency Fund Account to OCWD/IRWD in the following amounts on the following schedule upon receipt of OCWD/IRWD's advance request for payment:

- i. One Million Five Hundred Thousand Dollars (1,500,000) on or about one year after ROD finalization, and

- ii. One Million Dollars (\$1, 000,000). on or about eleven years after ROD finalization, and
- iii. One Million Dollars (\$1,000,000) on or about twenty-one years after ROD finalization.

b. Conditional Payment Maximum Total Dollar Amounts.

OCWD/IRWD may request that the Trustee pay Conditional Payments from the Contingency Fund Account for eligible costs under Paragraph IV. B. 9. C in amounts not to exceed the following maximum total dollar amounts for the following time periods:

- i. A maximum total dollar amount not to exceed One Million Seven Hundred Fifty Thousand Dollars (\$1,750,000) during the time period beginning upon one year after ROD finalization and ending not later than eleven years after that ROD date.

- ii. A maximum total dollar amount not to exceed One Million Dollars (\$1,000,000) during the time period beginning upon eleven years after ROD finalization and ending not later than twenty-one years after that ROD date.

- iii. A maximum total dollar amount not to exceed One Million Dollars (\$1,000,000) during the time period beginning upon twenty-one years after ROD finalization and ending not later than forty years after that ROD date.

c. Conditional Payment Eligibility Criteria.

The following categories of contingency costs will be eligible for reimbursement by Conditional Payments from the Contingency Fund Account, subject to the maximum total dollar amounts set forth in Paragraph IV. B. 9. b., above:

- i. Deductible payments that are related to:
  - a. Claims filed against OCWD/IRWD by entities other than OCWD/IRWD or the United States relating to releases of hazardous substances, pollutants, or contaminants attributable to DoN activities from facilities owned or operated by DoN at the former MCAS El Toro location, or

b. CERCLA response costs, which are necessary and consistent with the NCP, which are incurred by OCWD/IRWD at the off-station Principal Aquifer components of the Modified IDP as a result of the release of hazardous substances, pollutants, or contaminants attributable to DoN activities from facilities owned or operated by DoN at the former MCAS El Toro location that are detected in and extracted from the PA by off-station groundwater wells, and which address the following new or previously unknown conditions or information:

1. Hazardous substances, pollutants, or contaminants that do not appear on the list of chemicals in Appendix 3 to this Settlement Agreement and that are identified after the effective date of this Agreement;

2. Concentration levels of hazardous substances, pollutants or contaminants exceeding the ECL values for the CCMI central VOC Treatment Plant intake set forth in Appendix 2 to this Settlement Agreement that are identified in monitoring data collected and analyzed at the CCMI central VOC Treatment Plant intake after the date of finalization of the ROD; or

3. Legally enforceable Federal or State water quality standards that address hazardous substances, pollutants or contaminants included in the list in Appendix 2 to this Settlement Agreement and that are more stringent than those in effect as of the effective date of this Agreement.

ii. CCMI Repair/Replacement costs for unanticipated breakdowns that have not been covered by Operations & Maintenance Account payments and that are above and beyond ordinary and necessary maintenance and repair for the following:

a. CCMI VOC Treatment Plant (100% cost reimbursable), or

b. CCMI extraction wells, pumps, and pipelines from off-station PA extraction wells to the CCMI VOC Treatment Plant (100% cost reimbursable).

iii. pollution insurance.

iv. new groundwater monitoring wells.

v. escalated construction and/or operating costs, due to a ROD finalization

after July 2002.

10. All funds remaining in the Reversionary Trust after forty years of operation and maintenance of the CCMI will revert expeditiously to the United States Treasury.

11. In the event of a permanent termination of the CCMI under Paragraph III. A. 4. C. or breach of this Settlement Agreement, all funds remaining in the Reversionary Trust will revert expeditiously to the United States Treasury.

12. If the ROD is amended and the amendment is finalized pursuant to the FFA so that VOC treatment of PA groundwater is no longer required under the amended ROD, the obligation of the United States to reimburse OCWD/IRWD under this Agreement will be terminated. Under such circumstances, the United States will notify the Trustee, who will make no further payments to OCWD/IRWD from the Reversionary Trust, and OCWD/IRWD will make no further requests for reimbursement. All funds then remaining in the Reversionary Trust will revert expeditiously to the United States Treasury.

V. OBLIGATION OF DON AND OCWD/IRWD TO SEEK APPROVAL OF THE ROD.

A. DoN will use its best efforts to draft and obtain USEPA and CALEPA concurrence as to the ROD as well as finalization of the ROD pursuant to the FFA as soon as reasonably possible, consistent with the FFA schedule and any amendments thereto.

B. OCWD/IRWD will assist and support DoN in proposing and submitting to USEPA and CALEPA as provided under the FFA a Draft and Draft Final Proposed Plan and ROD for OU1 and OU2A based upon Alternative 8A as the remedial action for the PA and Alternative 10B' as the remedial action for the SGU, respectively. Based upon currently available information, it is anticipated that the "back-up" contingency remedial action for VOC contamination in the PA will consist of monitored natural attenuation in the event that the CCMI is permanently terminated for any reason.

C. DoN will provide OCWD/IRWD with reasonable advance notice and an opportunity to participate in any meetings or telephone conferences with USEPA and CALEPA, subject to the concurrence of USEPA and CALEPA, in support of DoN's efforts to obtain approval of the ROD; provided, however, that such meeting or telephone conference has not been scheduled to discuss legally privileged matters within the scope of

the attorney-client communication, attorney work product, or deliberative process privileges.

D. DoN will provide OCWD/IRWD with reasonable advance notice and opportunity to review and comment on drafts of all documents pertaining to efforts to gain approval of the ROD except for legally privileged matters within the scope of the attorney-client communication, attorney work product, or deliberative process privileges.

E. OCWD/IRWD will provide DoN with reasonable advance notice and an opportunity to participate in any meetings or telephone conferences addressing non-privileged matters (not within the scope of the attorney-client communication, attorney work product, or deliberative process privileges) between OCWD and IRWD on the CCMI.

F. OCWD/IRWD will provide DoN with reasonable advance notice and opportunity to review and comment on all drafts of documents pertaining to efforts to gain approval of the ROD.

G. DoN will give OCWD and IRWD notice of final and complete concurrence by USEPA and CALEPA upon the ROD or finalization of the ROD pursuant to the FFA.

VI. ACCESS FOR CONSTRUCTION, OPERATION AND MAINTENANCE, AND MONITORING PURPOSES.

A. At no cost to OCWD or IRWD, the United States will provide OCWD/IRWD with reasonable access to the Site so long as the United States owns the Site and to any DoN-owned or controlled property as necessary for OCWD/IRWD to design, construct, and operate and maintain the CCMI including, without limitation, necessary rights-of-way or easements for the construction, operation and maintenance of the CCMI. In the event the United States sells or leases the Station, the United States will reserve and record in such sale or lease agreement at no cost to OCWD or IRWD, continuing access, rights-of-way licenses and easements as necessary for OCWD/IRWD to construct, operate and maintain the CCMI. The United States will inform all prospective purchasers and lessees that a CERCLA remedial action will be operating pursuant to a ROD with USEPA and CALEPA and that OCWD/IRWD will have the right, upon reasonable notice and so as not to unreasonably interfere with the purchaser's or lessee's operations, to take soil samples on the Station, with the purpose of confirming that no current operations have resulted in the release of hazardous substances that could

impact the treatment system.

B. During the term of this Settlement Agreement, OCWD/IRWD will provide DoN, USEPA, and CALEPA with reasonable access, during normal business hours, to the CCMI facilities and to all records that are not within the scope of the attorney-client communication, attorney work product, or deliberative process privileges and that are relevant to the construction and operation and maintenance of those facilities, for purposes of evaluating OCWD's and IRWD's compliance with this Settlement Agreement. OCWD/IRWD also will provide DoN, USEPA, and CALEPA with reasonable access, during normal business hours, to sample pre-treated and treated groundwater, and groundwater collected in groundwater monitoring wells.

C. DoN will provide OCWD and IRWD with a copy of analytical data reports for all validated analytical data collected by DoN and its authorized representatives and contractors in groundwater monitoring wells and on-station extraction wells required by the ROD, within sixty (60) calendar days after such reports become available to DoN.

D. OCWD and IRWD will provide DoN with copies, of analytical data reports for all analytical data collected by OCWD and IRWD in groundwater monitoring wells and CCMI production wells, within sixty (60) days after such reports become available to OCWD and IRWD.

E. In the event that monitoring activities undertaken pursuant to this Settlement Agreement cause damage to one or more of the monitoring or production wells or create a condition in a well that prevents the future intended use of the well within the scope of this Agreement (e.g., equipment lodged), then the entity responsible for causing the damage or creating said condition will promptly remedy the condition at its sole cost to ensure that the intended use of the well satisfies all applicable federal, state and local regulatory operation, maintenance, quality assurance/quality control, and safety standards.

F. In the event that monitoring or sampling equipment used by any party to this Settlement Agreement at a monitoring or production well that is the subject of this Agreement is lost or damaged during well monitoring activities by one of the parties, then it will be the responsibility of the party that owns the equipment to retrieve and/or repair its own equipment.

VII. OTHER PROVISIONS.

A. Ownership of CCMI.

OCWD and IRWD will own and hold sole and exclusive title to the CCMI and related facilities described in Recital P except for the SGU Assets designed, constructed and operated by DoN described in Recital P. 2, and DoN's Monitoring Wells described in Recital P. 4.

B. Release and Covenant Not To Sue.

1. In consideration of the terms and conditions set forth in this Agreement, and contingent upon the United States' full and final payment of the sums specified in Paragraphs IV. A. 1. and IV. A. 2. into the Reversionary Trust as specified above, OCWD/IRWD hereby expressly and intentionally, forever and fully releases, discharges, and covenants not to sue the United States, or its past and present officers, employees, agents, contractors, and successors, with respect to any past, present, or future claims pertaining to or associated in any way with the actual or threatened release of hazardous, toxic or solid wastes, substances, pollutants, or contaminants (including but not limited to VOCs, IDS, and nitrates) at or from Former MCAS El Toro, the CCMI, the Modified IDP, or the PA.

2. This Release will not bar the following:

(a) any proceeding or dispute arising under this Agreement, or any action to enforce this Agreement, or recover damages for its breach; or

(b) any claim for compensation under the Changes Clause of the SGU contract arising from extracted groundwater from the SGU provided by DoN to OCWD/IRWD for treatment as provided under the SGU contract (Appendix 8); or

(c) any claim arising from SGU groundwater pollution caused in whole or in part by the deliberate or negligent acts of the United States after the date of execution of this Agreement on property owned by DoN or any other instrumentality of the United States Government at the time of such acts (this will not be construed to cover any claim relating to the actual or threatened release of hazardous, toxic or solid wastes, substances, pollutants or contaminants that originate in the SGU groundwater and migrate into the PA);

or

(d) any claim for pollution in the Modified IDP Potable System caused by DoN activity on DoN property and not attributable to OCWD/IRWD's unauthorized activity, provided that: 1) such pollution was caused by a chemical not listed in Appendix 3 and 2) OCWD/IRWD has exhausted insurance deductibles and all legally enforceable insurance coverage (OCWD/IRWD shall take reasonable and good faith steps to enforce said insurance coverage through binding arbitration or trial court judgment).

C. Indemnification.

Subject to Paragraph VII. B. 2., OCWD and IRWD hereby agree to indemnify and hold the United States harmless from (and to defend the United States, solely at the discretion of the United States Attorney General, against) any and all past, present or future claims by any person or entity not a party to this Settlement Agreement, to the extent such claims:

1. Are related in any way to the Modified IDP;
2. Are attributable to VOCs or other hazardous, toxic or solid wastes, substances, pollutants or contaminants located in or extracted from an area defined as the maximum past, present, or future geographic reach (whether in length, width, or depth) of the detectable VOC contaminant plume in the SGU and PA included in OU1 and OU2A; or
3. Are related in any way to CERCLA remedial action required under the FFA for groundwater in OU1 and OU2A (with the sole exception of SGU groundwater extraction costs incurred by remediation contractors of the United States for OU2A).

D. Reservation of Rights.

1. In signing this Settlement Agreement, the SFA do not admit and expressly deny any and all allegations of liability concerning actual or threatened releases at or from or the presence at the former MCAS El Toro facility of hazardous, toxic or solid wastes, substances, pollutants or contaminants under Federal and State law. In signing this Agreement, OCWD and IRWD do not endorse or agree with the SFA's denial of allegations of liability.

2. Nothing in this Agreement is intended or should be construed to release any entity not involved in this Agreement from any liability of any sort, including, but not limited to, liability for past, present or future response and/or remediation costs, or from liability for damages for injury to, destruction of, or loss of natural resources arising from the release or threatened release of any hazardous substances from the former MCAS El Toro facility, or otherwise.

E. Contribution Protection.

As of the effective date of this Settlement Agreement, the Parties agree that the United States is entitled to any protection from contribution actions or claims as may be provided in Section 113(f) of CERCLA, 42 U.S.C. Section 9613(f), federal common law, or other applicable law, for matters addressed in the Agreement.

F. Dispute Resolution Procedures.

1. In the event of a dispute between the SFA and OCWD/IRWD concerning any project or activity undertaken in accordance with this Settlement Agreement, the objecting Party will submit its objection in writing to the other Party. The Parties then will attempt to resolve the dispute within thirty (30) working days of receipt of written objection. If agreement is not reached during this period, the following individuals will meet and confer within thirty (30) working days in an effort to resolve the dispute:

- (a) Commanding Officer  
Southwest Division Naval Facilities Engineering Command  
1220 Pacific Highway  
San Diego, CA 92132
- (b) Chief  
Environmental Defense Section  
United States Department of Justice  
601 D Street, N.W.  
Washington, DC 20004
- (c) General Manager  
Orange County Water District  
10500 Ellis Avenue  
Fountain Valley, CA 92708
- (d) General Manager  
Irvine Ranch Water District  
15600 Sand Canyon Avenue  
P. O. Box 6025  
Irvine, CA 92716-6025

Such representatives may be changed from time to time as the Parties see fit and at their sole discretion. Notice of the change will be provided to the other Party. The period for negotiation may be extended by mutual agreement of the Parties.

2. In the event that the delay necessary to resolve a dispute is unacceptable because of an imminent and substantial endangerment to human health or the environment, or because DoN has been placed under an enforceable commitment to take certain action by specified dates by USEPA and/or CALEPA, or because it will substantially interfere with the conduct of national defense activities, either Party may disregard these dispute resolution procedures. Absent such circumstances, the Parties agree to exhaust administrative remedies under these dispute resolution procedures before pursuing any legal or equitable remedies they might have under this Settlement Agreement.

3. CERCLA remedial action selection decisions by DoN and FFA deliverable documents set forth in Paragraph III. C. 1.(a) of this Settlement Agreement that are finalized pursuant to the procedures for finalization under the FFA, including those that receive concurrence from USEPA and CALEPA, will not be subject to these dispute resolution procedures. OCWD and IRWD retain such rights as they may have to challenge such remedy selection decisions pursuant to Section 113 of CERCLA as provided by law in the event this Agreement does not take effect as provided in Section I.

4. These dispute resolution procedures will not apply to disputes arising under the contract addressed under Paragraph III. B. of this Settlement Agreement. Contract dispute resolution procedures will be addressed in that contract.

G. Access to Information.

1. The Parties will provide to each other, upon request, copies of all documents and information within their possession or control that are not within the scope of the attorney-client communication, attorney work product, or deliberative process privileges and that relate to the implementation of this Settlement Agreement, including, but not limited to, plans, reports, maps, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample tracking routing, or correspondence.

2. OCWD and IRWD will provide the United States, upon request, with complete, true and correct copies of non-privileged technical and cost documentation and will provide the United States with testimony in support of any future contribution, cost recovery or other civil claims made against and any proceedings instituted by the United States under federal or state statutory or common law, at law or in equity, concerning entities not involved in this Agreement regarding costs incurred pursuant to this Agreement. The United States will provide such information as provided by law to OCWD and IRWD in such claims instituted by those Parties against entities not involved in this Agreement.

H. Water Rights.

OCWD and IRWD represent that the activities they agree to undertake under this Settlement Agreement are consistent with all applicable laws and regulations regarding ownership and allocation of water rights.

I. Retention of Records.

OCWD, IRWD, and the SFA will retain documents relating to implementation of this Agreement in a manner and for a time period that complies with Section 24 of the FFA.

J. Mutual Cooperation.

1. The Parties agree to perform any activities and execute any and all documents reasonably necessary to accomplish the purposes of this Settlement Agreement. Such activities include but are not limited to DoN's cooperation in securing access for OCWD and IRWD to the Station as necessary for OCWD and IRWD to perform under this Agreement

2. The Parties will cooperate at all times with all federal, state and local agencies involved in the investigation and remediation of hazardous substances at the Site.

3. The Parties will comply with all applicable federal and state laws and regulations in performing their obligations under this Agreement.

K. Antideficiency Act.

Payment by the United States under this Settlement Agreement is subject to the availability of appropriated funds. Nothing in this Agreement will be construed as or constitute a commitment or requirement

that any federal agency or department will obligate or pay funds in contravention of the Antideficiency Act, 31 U.S.C. Section 1341, or that the Congress, at a later time, will appropriate funds sufficient to meet deficiencies.

L. Federal Tort Claims Act.

In the event of any death or injury to any person, or the loss of or damage to any property, caused by officers, employees, or contractors of the United States in connection with any of the United States' activities hereunder or in the event of any legal or equitable action instituted between the OCWD or IRWD, OCWD's or IRWD's officers, employees and contractors and the United States, the liability, if any, of the United States will be determined in accordance with the applicable provisions of the Federal Tort Claims Act (28 U.S.C. Sections 2671-2680).

M. Notice.

1. The Parties designate the following technical and legal representatives to be the primary points of contact in the performance of this Agreement:

Technical:

OCWD: William R. Mills, Jr.  
General Manager  
Orange County Water District  
10500 Ellis Avenue  
Fountain Valley, CA 92708

IRWD: Paul D. Jones II  
General Manager  
Irvine Ranch Water District  
15600 Sand Canyon Avenue  
Irvine, CA 92619-7000

DoN: Dana Sakamoto  
Environmental Business Line Manager  
Southwest Division  
Naval Facilities Engineering Command  
1220 Pacific Highway  
San Diego, CA 92132

Legal:

OCWD: Clark F. Ide  
General Counsel  
Orange County Water District  
10500 Ellis Avenue  
Fountain Valley, CA 92708

IRWD: Malissa H. McKeith  
Loeb & Loeb  
1000 Wilshire Boulevard  
Los Angeles, CA 90017-2475

DoJ: David M. Thompson  
Environmental Defense Section  
United States Department of Justice  
601 D Street, N. W.  
Washington, DC 20004

DoN: Rex Callaway  
Office of Counsel  
Southwest Division  
Naval Facilities Engineering Command  
1220 Pacific Highway  
San Diego, CA 92132

2. These representatives may be changed from time to time as the Parties see fit and at their sole discretion. Notice of the change will be provided to the other Parties.

N. Amendment.

This Agreement may be modified only upon the mutual agreement of the Parties reflected in a written document signed by duly authorized representatives of the Parties, which document expressly makes reference to this Agreement and the intent to modify the terms of this Agreement.

O. Interpretation.

1. Captions.

Captions and section headings are inserted for convenience of reference only and are not intended to be part of or to affect the meaning or interpretation of this Agreement.

2. Federal Law.

This Settlement Agreement will be governed by and interpreted according to Federal substantive law and regulations.

3. Construction.

Neither IRWD/OCWD nor the United States will be considered the drafter of this Agreement or any of its provisions for the purposes of any statute, case law, or rule of interpretation or construction that would or might cause any provision to be construed against the drafter of the Agreement.

P. Integration and Effective Date.

This Agreement constitutes the entire understanding of the Parties and will take effect upon the date of signature by the last Party to sign it.

Q. Signatories.

Each undersigned representative of a Party to this Agreement certifies that he or she has been duly authorized to enter into the Agreement by the entity on whose behalf it is indicated that the person is signing.



**EL TORO**

**APPENDICES**

**Appendix 1**  
**Federal Facilities Agreement**

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 9 AND THE  
STATE OF CALIFORNIA  
AND THE  
UNITED STATES DEPARTMENT OF THE NAVY

---

IN THE MATTER OF: )  
 )  
The U.S.Department )  
of the Navy )  
 )  
Marine Corps Air Station )  
El Toro )  
 )  
 )

---

Federal Facility  
Agreement Under  
CERCLA Section 120

Administrative  
Docket Number: 91-2.

**ENCLOSURE**

**EPA Region IX/State of California/Marine Corps FFA  
Marine Corps Air Station El Toro**

**TABLE OF CONTENTS**

1.	Purpose	3
2.	Parties	4
3.	Jurisdiction	5
4.	Definitions	5
5.	Determinations	7
6.	Work to be Performed	8
7.	Consultation: Review and Comment Process for Draft and Final Documents	8
8.	Deadlines	12
9.	Extensions	13
10.	Force Majeure	14
11.	Emergencies and Removals	15
12.	Dispute Resolution	17
13.	Enforceability	19
14.	Stipulated Penalties	20
15.	Funding	21
16.	Exemptions	21
17.	Statutory Compliance/RCRA-CERCLA Integration	21
18.	Project Managers	22
19.	Permits	24
20.	Quality Assurance	24
21.	Notification	24
22.	Data and Document Availability	25
23.	Release of Records	26
24.	Preservation of Records	26
25.	Access to Marine Corps Air Station El Toro	27
26.	Public Participation and Community Relations	28
27.	Five-Year Review	28
28.	Transfer of Real Property	29
29.	Amendment or Modification of Agreement	28
30.	Termination of the Agreement	29
31.	Covenant Not To Sue and Reservation of Rights	29
32.	Other Claims	30
33.	Recovery of EPA Expenses	30
34.	State Support Services	30
35.	State Participation Contingency	32
36.	Effective Date and Public Comment	33
37.	Base Closure	34
38.	Appendices and Attachments	34

**EPA Region IX/State of California/Marine Corps FFA  
Marine Corps Air Station El Toro**

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 9 AND THE  
STATE OF CALIFORNIA  
AND THE  
UNITED STATES DEPARTMENT OF THE NAVY

_____ )	
IN THE MATTER OF: )	Federal Facility
)	Agreement Under
The U.S.Department )	CERCLA Section 120
of the Navy )	
)	Administrative
Marine Corps Air Station )	Docket Number: 91-2.
El Toro )	
_____ )	

Based on the information available to the Parties on the effective date of this federal facility agreement (Agreement), and without trial or adjudication of any issues of fact or law, the Parties agree as follows:

1. PURPOSE

1.1 The general purposes of this Agreement are to:

- (a) Ensure that the environmental impacts associated with past and present activities at the Site are thoroughly investigated and appropriate remedial action taken as necessary to protect the public health, welfare and the environment;
- (b) Establish a procedural framework and schedule for developing, implementing and monitoring appropriate response actions at the Site in accordance with CERCLA/SARA, the NCP, Superfund guidance and policy, RCRA, RCRA guidance and policy, and applicable State law; and
- (c) Facilitate cooperation, exchange of information and participation of the Parties in such action; and
- (d) Ensure the adequate assessment of potential injury to natural resources and the prompt notification to and cooperation and coordination with the Federal and State Natural Resource Trustees necessary to ensure the implementation of response actions achieving appropriate cleanup levels.

1.2 Specifically, the purposes of this Agreement are to:

- (a) Identify operable unit alternatives which are appropriate at the Site prior to the implementation of final remedial action(s) for the Site. OU alternatives shall be identified to the Parties as early as possible prior to proposal of OUs to EPA and the State. This process is designed to promote cooperation among Parties in identifying OU alternatives prior to the final selection of Operable Units;
- (b) Establish requirements for the performance of a Remedial Investigation to determine fully the nature and extent of the threat to the public health or welfare or the environment caused by the release and threatened release of hazardous substances, pollutants, or contaminants at the Site and to establish requirements for the performance of a Feasibility Study for the Site to identify, evaluate, and select alternatives for the appropriate remedial action(s) to prevent, mitigate, or abate the release or threatened release of hazardous substances, pollutants, or contaminants at the Site in accordance with CERCLA and applicable State law;

- (c) Identify the nature, objective, and schedule of response actions to be taken at the Site. Response actions at the Site shall attain that degree of cleanup of hazardous substances, pollutants or contaminants mandated by CERCLA and applicable State law;
- (d) Implement the selected remedial actions(s) in accordance with CERCLA and applicable State law and meet the requirements of CERCLA section 120(e)(2), 42 U.S.C. § 9620(e)(2), pertaining to interagency agreements;
- (e) Assure compliance, through this Agreement, with RCRA and other federal and State hazardous waste laws and regulations for matters covered herein;
- (f) Coordinate response actions at the Site with the mission and support activities at Marine Corps Air Station El Toro;
- (g) Expedite the cleanup process to the extent consistent with protection of human health and the environment;
- (h) Provide for State involvement in the initiation, development, selection and enforcement of remedial actions to be undertaken at Marine Corps Air Station El Toro, including the review of all applicable data as it becomes available and the development of studies, reports, and action plans; and to identify and integrate State ARARs into the remedial action process;
- (i) Provide for operation and maintenance of any remedial action selected and implemented pursuant to this Agreement.

## 2. PARTIES

2.1 The Parties to this Agreement are EPA, the Marine Corps, and the State of California. The terms of the Agreement shall apply to and be binding upon EPA, the State of California, and the Marine Corps. The Department of the Navy hereby agrees to ensure the Marine Corps's performance of each of the Marine Corps's obligations hereunder.

2.2 This Agreement shall be enforceable against all of the Parties to this Agreement. This Section shall not be construed as an agreement to indemnify any person. The Marine Corps shall notify its agents, members, employees, response action contractors for the Site, and all subsequent owners, operators, and lessees of the Site, of the existence of this Agreement.

2.3 Each Party shall be responsible for ensuring that its contractors comply with the terms and conditions of this Agreement. Failure of a Party to provide proper direction to its contractors and any resultant noncompliance with this Agreement by a contractor shall not be considered a Force Majeure event or other good cause for extensions under Section 9 (Extensions), unless the Parties so agree. The Marine Corps will notify EPA and the State of the identity and assigned tasks of each of its contractors performing work under this Agreement upon their selection.

2.4 The State of California is represented by DHS as lead agency and RWQCB as support agency. The responsibilities of the lead and support agencies are set forth in this Agreement, the Memorandum of Understanding between DHS and the State Water Resources Control Board and the Regional Water Quality Control Boards for the Cleanup of Hazardous Waste Sites (Aug. 1, 1990) and the Regional Memorandum of Understanding between DHS, Toxic Substances Control Program, Region 4, and RWQCB, each of which is attached hereto. In the event of conflict, this Agreement shall govern.

### 3. JURISDICTION

3.1 Each Party is entering into this Agreement pursuant to the following authorities:

(a) The U.S. Environmental Protection Agency (EPA), enters into those portions of this Agreement that relate to the remedial investigation/feasibility study (RI/FS) pursuant to CERCLA section 120(e)(1), 42 U.S.C. § 9620(e)(1), RCRA sections 6001, 3008(h) & 3004(u) and (v), 42 U.S.C. § 6961, 6928(h), 6924(u) & (v), and E.O. 12580;

(b) EPA enters into those portions of this Agreement that relate to operable units and final remedial actions pursuant to CERCLA section 120(e)(2), 42 U.S.C. § 9620(e)(2), RCRA sections 6001, 3008(h) and 3004(u) & (v), 42 U.S.C. § 6961, 6928(h), 6924(u) & (v), and E.O. 12580;

(c) The Marine Corps enters into those portions of this Agreement that relate to the RI/FS pursuant to CERCLA section 120(e)(1), 42 U.S.C. § 9620(e)(1), RCRA sections 6001, 3008(h) and 3004(u) & (v), 42 U.S.C. § 6961, 6928(h), 6924(u) & (v), E.O. 12580, the National Environmental Policy Act, 42 U.S.C. § 4321, and DERP;

(d) The Marine Corps enters into those portions of this Agreement that relate to operable units and final remedial actions pursuant to CERCLA section 120(e)(2), 42 U.S.C. § 9620(e)(2), RCRA sections 6001, 3008(h), and 3004(u) & (v), 42 U.S.C. § 6961, 6928(h), 6924(u) & (v), E.O. 12580 and the DERP; and

(e) The State, represented by DHS and the RWQCB, enters into this Agreement pursuant to CERCLA sections 120(f) and 121, 42 U.S.C. § 9620(f) and 9621; California Health and Safety Code section 102 and division 20, chapters 6.5 and 6.8; and California Water Code division 7.

### 4. DEFINITIONS

4.1 Except as noted below or otherwise explicitly stated, the definitions provided in CERCLA, CERCLA case law, and the NCP shall control the meaning of terms used in this Agreement.

(a) "Agreement" shall mean this document and shall include all Appendices to this document except to the extent the Parties agree that any part of any Appendix is inconsistent with this Agreement. Except to such extent, all Appendices shall be made an integral and enforceable part of this document. Copies of Appendices shall be available as part of the administrative record, as provided in subsection 26.3.

(b) "ARARs" shall mean federal and State applicable or "relevant and appropriate requirements, standards, criteria, or limitations selected pursuant to section 121 of CERCLA. ARARs shall apply in the same manner and to the same extent: that such are applied to any non-governmental entity, facility, unit, or site., as set forth in CERCLA section 120(a)(1), 42 U.S.C. § 9620.(a)(1), subject to CERCLA section 121(d)(4), 42 U.S.C. § 9621(d)(4) and E.O. 12580 § 2(d) & (g).

(c) "CERCLA" shall mean the Comprehensive Environmental Response, Compensation and Liability Act, Public Law 96-510, 42 U.S.C. § 9601 et seq., as amended by SARA and any subsequent amendments.

(d) "Days" shall mean calendar days, unless business days are specified. Any submittal that under the terms of this Agreement would be due on Saturday, Sunday, or holiday shall be due on the following business day. References herein to specific numbers of days shall be understood to exclude the day of occurrence.

(e) "DERP" shall refer to the Defense Environmental Restoration Program, as defined in 10 U.S.C. § 2701.

(f) "Department of Defense" shall mean the U.S. Department of Defense.

(g) "DRC" shall have the meaning given in subsection 12.2.

(h) "DHS" shall mean the California Department of Health Services, its successors and its employees and authorized representatives.

- (i) "EPA" shall mean the U.S. Environmental Protection Agency, its successors and its employees and authorized representatives.
- (j) "Facility" shall have the same definition as in CERCLA section 101(9), 42 U.S.C. § 9601(9).
- (k) "Feasibility Study" or "FS" means a study conducted pursuant to CERCLA and the NCP which fully develops screens and evaluates in detail remedial action alternatives to prevent, mitigate, or abate the migration or the release of hazardous substances, pollutants, or contaminants at and from the Site. The Marine Corps shall conduct and prepare the FS in a manner to support the intent and objectives of Section 17 (Statutory Compliance/CRA-CERCLA Integration).
- (l) "FOIA" shall mean the Freedom of Information Act 5 U.S.C. § 552 et seq., and any subsequent amendments thereto.
- (m) "Marine Corps" shall mean the U.S. Marine Corps (a component of the U.S. Department of the Navy) and its employees, members, agents, and authorized representatives. "Marine Corps" shall also include the U.S. Department of the Navy and the U.S. Department of Defense, to the extent necessary to effectuate the terms of this Agreement, including, but not limited to, appropriations, funding and Congressional Reporting Requirements.
- (n) "Meeting," in regard to Project Managers, shall mean an in-person discussion at a single location or a conference telephone call of all Project Managers. A conference call will suffice for an in-person meeting at the concurrence of the Project Managers.
- (o) "National Contingency Plan" or "NCP" shall refer to the regulations contained in 40 C.F.R. § 300.1 et seq., including any amendments thereto.
- (p) "Natural Resource Trustee(s)" and "Federal or State Natural Resource Trustees" shall have the same meaning and authority provided in CERCLA and the NCP.
- (q) "Natural Resource Trustee(s) Notification and Coordination" shall have the same meaning as provided in CERCLA and the NCP.
- (r) "Operable Unit" or "OU" shall have the meaning provided in the NCP.
- (s) "Operation and maintenance" shall mean activities required to maintain the effectiveness of response actions.
- (t) "Parties" shall mean the parties to this Agreement.
- (u) "Project Manager" shall have the meaning given in Section 18 of this Agreement.
- (v) "QAPP" shall mean a Quality Assurance Project Plan.
- (w) "RCRA" or "RCRA/HSWA" shall mean the Resource Conservation and Recovery Act of 1976, Public Law 94-580, 42 U.S.C. § 6901 et seq. as amended by the Hazardous and Solid Waste Amendments of 1984, Public Law 98-616, and any subsequent amendments.
- (x) "Remedial Design" or "RD" shall have the same meaning as provided in the NCP.
- (y) "Remedial Investigation" or "RI" means that investigation conducted pursuant to CERCLA and the NCP, as supplemented by the substantive provisions of the EPA RCRA Facilities Assessment guidance. The RI serves as a mechanism for collecting data for Site and waste characterization and conducting treatability studies as necessary to evaluate performance and cost of the treatment technologies. The data gathered during the RI will also be used to conduct a baseline risk assessment, perform a feasibility study, and support design of a selected remedy. The Marine Corps shall conduct and prepare the RI in a manner to support the intent and objectives of Section 17 (Statutory Compliance/RCRA-CERCLA Integration).
- (z) "Remedy" or "Remedial Action" or "RA" shall have the same meaning as provided in section 101(24) of CERCLA, 42 U.S.C. § 9601(24), and the NCP, and may consist of Operable Units.
- (aa) "Remove" or "Removal" shall have the same meaning as provided in section 101(23) of CERCLA, 42 U.S.C. § 9601(23), and the NCP.
- (bb) "RWQCB" shall mean the Regional Water Quality Control Board, Santa Ana Region, its successors and its employees, members and authorized representatives.

(cc) "SARA" shall mean the Superfund Amendments and Reauthorization Act of 1986, Public Law 99-499.

(dd) "SEC" shall have the meaning given in subsection 12.6.

(ee) "Site," for purposes other than obtaining permits, shall include Marine Corps Air Station El Toro (including any adjacent real property subject to the jurisdiction of the commanding general of Marine Corps Air Station El Toro), the Facility (as defined above) and any area necessary for performance of remedial actions. For purposes of obtaining permits, "on-site" shall have the meaning provided in the NCP and "off-site" shall mean all locations that are not on-site.

(ff) "State" shall mean the State of California and its employees and authorized representatives, represented by DHS and the RWQCB as set forth in this Agreement, and shall refer to both DHS and the RWQCB unless otherwise specified.

## 5. DETERMINATIONS

5.1 This Agreement is based upon the placement of Marine Corps Air Station El Toro, Orange County, California, on the National Priorities List by EPA on Feb. 16, 1990, 55 Federal Register 6154.

5.2 Marine Corps Air Station El Toro is a facility under the jurisdiction, custody, or control of the U.S. Department of Defense within the meaning of E.O. 12580, 52 Federal Register 2923, 29 January 1987. The Department of the Navy is authorized to act in behalf of the Secretary of Defense for all functions delegated by the President through E.O. 12580 which are relevant to this Agreement. «

5.3 Marine Corps Air Station El Toro is a federal facility under the jurisdiction of the Secretary of Defense within the meaning of CERCIA section 120, 42 U.S.C. § 9620, and SARA section 211, 10 U.S.C. § 2701 et seq. and subject to DERP.

5.4 The Department of the Navy is the authorized delegate of the President under E. O. 12580 for receipt of notification by the State of its ARARs as required by CERCIA section 121(d) (2) (A)(ii), 42 U.S.C. § 9621(d)(2)(A)(ii).

5.5 The authority of the Marine Corps to exercise the delegated removal authority of the President pursuant to CERCIA section 104, 42 U.S.C. § 9604, is not altered by this Agreement.

5.6 The actions to be taken pursuant to this Agreement are reasonable and necessary to protect the public health, welfare, or the environment.

5.7 There are areas within the boundaries of Marine Corps Air Station El Toro where hazardous substances have been deposited, stored, placed, or otherwise come to be located in accordance with 42 U.S.C. § 9601(9) & (14).

5.8 There have been releases of hazardous substances, pollutants or contaminants at or from Marine Corps Air Station El Toro into the environment within the meaning of 42 U.S.C. § 9601(22), 9604, 9606, and 9607.

5.9 With respect to these releases, the Marine Corps is an owner, operator and/or generator subject to the provisions of 42 U.S.C. § 9607 and within the meaning of California Health and Safety Code section 25323.5(a), and is a person within the meaning of California Health and Safety Code section 25118 and California Water Code section 13050©).

5.10 Included as an Attachment to this Agreement is a map showing areas of known contamination, based on information available at the time of the signing of this Agreement.

## 6. WORK TO BE PERFORMED

6.1 The Parties agree to perform the tasks, obligations and responsibilities described in this Section in accordance with CERCLA and CERCLA guidance and policy; the NCP; pertinent provisions of RCRA and RCRA guidance and policy; E.O. 12580; applicable State laws and regulations; and all terms and conditions of this Agreement including documents prepared and incorporated in accordance with Section 7 (Consultation) .

6.2 The Marine Corps agrees to undertake, seek adequate funding for, fully implement and report on the following tasks, with participation of the Parties as set forth in this Agreement:

- (a) Remedial Investigations of the Site;
- (b) Federal and State Natural Resource Trustee Notification and Coordination;
- (c) Feasibility Studies for the Site;
- (d) All response actions, including Operable Units, for the Site; and
- (e) Operation and maintenance of response actions at the Site.

6.3 The Parties agree to:

- (a) Make their best efforts to expedite the initiation of response actions for the Site, particularly for Operable Units; and
- (b) Carry out all activities under this Agreement so as to protect the public health, welfare and the environment.

6.4 Upon request, EPA and the State agree to provide any Party with guidance or reasonable assistance in obtaining and interpreting guidance relevant to the implementation of this Agreement.

6.5 The Parties recognize that any discovered release of hazardous substances determined to have originated either on or off Marine Corps Air Station El Toro and to have been caused by a party other than the Marine Corps, including groundwater plumes mingled with plumes originating on Marine Corps Air Station El Toro, may be addressed by a separate agreement between the responsible parties and appropriate regulatory agencies. Nothing in this subsection 6.5 shall reduce or otherwise affect the Marine Corps's obligations under this Agreement except as may be specifically provided in such other agreement if EPA is a party thereto and such other agreement refers to this Agreement.

## 7. CONSULTATION: Review and Comment Process for Draft and Final Documents

7.1 Applicability: The provisions of this Section establish the procedures that shall be used by the Parties to provide each other with appropriate technical support, notice, review, comment, and response to comments regarding RI/FS and RD/RA documents, specified herein as either primary or secondary documents. In accordance with CERCLA section 120, 42 U.S.C. § 9620 and 10 U.S.C. § 2705, the Marine Corps will normally be responsible for issuing primary and secondary documents to EPA and the State. As of the effective date of this Agreement, all draft, draft final and final deliverable documents, identified herein shall be prepared, distributed and subject to dispute in accordance with subsections 7.2 through 7.10 below. The designation of a document as "draft" or "final" is solely for purposes of consultation with EPA and the State in accordance with this Section. Such designation does not affect the obligation of the Parties to issue documents, which may be referred to herein as "final," to the public for review and comment as appropriate and as required by law.

## 7.2 General Process for RI/FS and RD/RA Documents:

(a) Primary documents include those reports that are major, discrete portions of RI/FS and/or RD/RA activities. Primary documents are initially issued by the Marine Corps in draft subject to review and comment by EPA and the State. Following receipt of comments, on a particular draft primary document, the Marine Corps will respond to the comments received and issue a draft final primary document subject to dispute resolution. The draft final primary document will become the final primary document either thirty (30) days after receipt by EPA and the State of a draft final document if dispute resolution is not invoked or as modified by decision of the dispute resolution process.

(b) Secondary documents include those reports that are discrete portions of the primary documents and are typically input or feeder documents. Secondary documents are issued by the Marine Corps in draft subject to review and comment by EPA and the State. Although the Marine Corps will respond to comments received, the draft secondary documents may be finalized in the context of the corresponding primary documents. A secondary document may be disputed at the time the corresponding draft final primary document is issued.

## 7.3 Primary Documents:

(a) The Marine Corps shall complete and transmit drafts of the following primary documents for each operable unit and for the final remedy to EPA and the State, for review and comment in accordance with the provisions of this Section; provided, however, that the Marine Corps need not complete a draft primary document for an operable unit if (x) the same primary document completed or to be completed with respect to another operable unit covers all topics relevant to the operable unit at issue, and (y) the Parties agree in writing that such draft primary document need not be completed.

- (1) RI/FS Workplans, including Sampling and Analysis Plans
- (2) QAPPs
- (3) Community Relations Plans (May be amended as appropriate to address

Operable Units. Any such amendments shall not be subject to the threshold requirements of subsection 7.10. Any disagreement regarding amendment of the CRP shall be resolved pursuant to Section 12 (Dispute Resolution).)

- (4) RI Reports
- (5) FS Reports
- (6) Proposed Plans
- (7) Records of Decision (RODs)
- (8) Remedial Design Work Plan
- (9) Preliminary Remedial Design
- (10) Final Remedial Design
- (11) Remedial Action Work Plan
- (12) Construction Quality Assurance Plan
- (13) Construction Quality Control Plan
- (14) Contingency Plan
- (15) Project Closeout Report
- (16) Federal and State Natural Resource Trustee Notifications.
- (17) Operation and Maintenance Plan

(b) Only draft final primary documents shall be subject to dispute resolution. The Marine Corps shall complete and transmit draft primary documents in accordance with the timetable and deadlines established in Section 8 (Deadlines).

(c) Primary documents may include target dates for subtasks as provided in subsections 7.4(b) and 18.3. The purpose of target dates is to assist the Marine Corps in meeting deadlines, but target dates do not become enforceable by their inclusion in the primary documents and are not subject to Section 8 (Deadlines), Section 9 (Extensions) or Section 13 (Enforceability).

#### 7.4 Secondary Documents:

(a) The Marine Corps shall complete and transmit drafts of the following secondary documents for each operable unit and for the final remedy to EPA and the State for review and comment? provided, however, that the Marine Corps need not complete a draft secondary document for an operable unit if (x) the same secondary document or a primary document completed or to be completed with respect to another operable unit covers all topics relevant to the operable unit at issue, and (y) the Parties agree in writing that such draft secondary document need not be completed.

- (1) Site Characterization Summaries (part of RI)
- (2) Sampling and Data Results f
- (3) Treatability Studies (only if generated)
- (4) Initial Screenings of Alternatives
- (5) Risk Assessments
- (6) Well closure methods and procedures
- (7) Detailed Analyses of Alternatives
- (8) Post-Screening Investigation Work Plans
- (9) RCRA Facility Assessment

(b) Although EPA and the State may comment on the drafts of the secondary documents listed above, such documents shall not be subject to dispute resolution except as provided by subsection 7.2. Target dates for the completion and transmission of draft secondary documents shall be established by the Project Managers. The Project Managers also may agree upon additional secondary documents that are within the scope of the listed primary documents.

7.5 Meetings of the Project Managers. (See also Section 18.) The Project Managers shall meet in person approximately every ninety (90) days to review and discuss the progress of work being performed at the Site, including progress on the primary and secondary documents. However, such meetings may be held more frequently (but not more often than every thirty (30) days) as needed upon request by any Project Manager, or less frequently if agreed by the Parties. Prior to preparing any draft document specified in subsections 7.3 or 7.4 above, the Project Managers shall meet in an effort to reach a common understanding with respect to the contents of the draft document.

#### 7.6 Identification and Determination of Potential ARARs:

(a) The State lead agency will contact in writing those State and local governmental agencies that are a potential sources of ARARs in a timely manner as set forth in NCP § 300.515(d).

(b) Prior to the issuance of a draft primary or secondary document for which ARAR determinations are appropriate, the Project Managers shall meet to identify and propose all potential pertinent ARARs, including any permitting requirements that may be a source of ARARs. At that time and within the time period described in NCP § 300.515(h)(2), the State shall submit the proposed ARARs obtained pursuant to paragraph 7.6(a) to the Marine Corps, along with a list of agencies that failed to respond to the State's solicitation of ARARs and copies of the solicitations and any related correspondence.

(c) The Marine Corps will contact the agencies that failed to respond and again solicit their inputs.

(d) The Marine Corps will prepare draft ARAR determinations in accordance with CERCLA section 121(d) (2), 42 U.S.C. § 9621(d)(2), the NCP and pertinent guidance issued by EPA.

(e) In identifying potential ARARs, the Parties recognize that actual ARARs can be identified only on a site-specific basis and that ARARs depend on the specific hazardous substances, pollutants and contaminants at a site, the particular actions associated with a proposed remedy and the characteristics of a site. The Parties recognize that ARAR identification is necessarily an iterative process and that potential ARARs must be identified and discussed among the Parties as early as possible, and must be reexamined throughout the RI/FS process until a ROD is issued.

7.7 Review and Comment on Draft Documents:

(a) The Marine Corps shall complete and transmit each draft primary document to EPA and the State on or before the corresponding deadline established for the issuance of the document. The Marine Corps shall complete and transmit the draft secondary documents in accordance with the corresponding target dates.

(b) Review of any document by EPA and the State may concern all aspects of it (including completeness) and should include, but will not be limited to, technical evaluation of any aspect of the document and consistency with CERCLA, the NCP, applicable California law, and any pertinent guidance or policy issued by EPA or the State (except that any State guidance that is not "promulgated" (as defined in the NCP) shall constitute a "to be considered" item (as that phrase is used in the NCP)). To expedite the review process, the Marine Corps shall make an oral presentation of each primary document at the next scheduled Project Managers meeting after transmittal of the draft document, and shall do so with respect to secondary documents if a majority of the Project Managers other than the Marine Corps so requests'. Comments by the EPA, DHS and RWQCB shall be provided with adequate specificity so that the Marine Corps may respond and, if appropriate, make changes to the draft document. Comments shall refer to any pertinent sources of authority or references upon which the comments are based and, upon request of the Marine Corps, the EPA, DHS or RWQCB, as appropriate, the commenter shall provide a copy of the cited authority or reference.

(c) Unless the Parties agree to another period, all draft documents shall be subject to a sixty (60) day period for review and comment. At or before the close of the comment period, EPA and the State shall transmit their written comments to the Marine Corps. For unusually lengthy or complex documents, EPA or the State may extend the sixty (60) day comment period for an additional thirty (30) days by written notice to the Marine Corps prior to the end of the sixty (60) day period. In appropriate circumstances, this period may be further extended in accordance with Section 9 (Extensions).

(d) Representatives of the Marine Corps shall make themselves readily available to EPA and the State during the comment period for purposes of informally responding to questions and comments on draft documents. Oral comments made during such discussions need not be the subject of a written response by the Marine Corps on the close of the comment period.

(e) In commenting on a draft document which contains a proposed ARAR determination, EPA, DHS or RWQCB shall include a reasoned statement of whether it objects to any portion of the proposed ARAR determination. To the extent that EPA or the State does object, it shall explain the basis for its objection in detail and shall identify any ARARs which it believes were not properly addressed in the proposed ARAR determination.

(f) Following the close of the comment period for a draft document, the Marine Corps shall give full consideration to all written comments. If the Marine Corps requests, the Parties shall hold a meeting to discuss such comments within fifteen (15) days of the close of the comment period on a draft secondary document or draft primary document. On a draft secondary document, the Marine Corps shall, within sixty (60) days of the close of the comment period, transmit to the EPA and the State its written response to the comments received. On a draft primary document, the Marine Corps shall, within sixty (60) days of the close of the comment period, transmit to EPA and the State a draft final primary document, which shall include the Marine Corps's response to all written comments received within the comment period. While the resulting draft final document shall be the responsibility of the Marine Corps, it shall be the product of consensus to the maximum extent possible.

(g) The Marine Corps may extend the sixty (60) day period for either responding to comments on a draft document or for issuing the draft final primary document for an additional thirty (30) days by providing written notice to EPA and the State. In appropriate circumstances, this time period may be further extended in accordance with Section 9 (Extensions).

7.8 Availability of Dispute Resolution for Draft Final Primary Documents:

(a) Dispute resolution shall be available to the Parties for draft final primary documents as set forth in Section 12 (Dispute Resolution).

(b) When dispute resolution is invoked on a draft final primary document, work may be stopped in accordance with the procedures set forth in subsection 12.9 regarding dispute resolution.

7.9 Finalization of Documents: The draft final primary document shall serve as the final primary document if no party invokes dispute resolution regarding the document or, if invoked, at completion of the dispute resolution process should the Marine Corps's position be sustained. If the Marine Corps's determination is not sustained in the dispute resolution process, the Marine Corps shall prepare, within not more than sixty (60) days of resolution of the dispute, a revision of the draft final document which conforms to the results of dispute resolution. In appropriate circumstances, the time period for this revision period may be extended in accordance with Section 9 (Extensions).

7.10 Subsequent Modification of Final Documents: Following finalization of any primary document pursuant to subsection 7.9 above, any Party may seek to modify the document including seeking additional field work, pilot studies, computer modeling or other supporting technical work, only as provided in paragraphs 7.10(a) and (b) below. (These restrictions do not apply to the Community Relations Plan.)

(a) Any Party may seek to modify a document after finalization by submitting a concise written request to the Project Managers of the other Parties. The request shall specify the nature of the requested modification and how the request is appropriate under subparagraphs 7.10(b)(1) and (2) below.

(b) In the event that a consensus is not reached by the Project Managers on the need for a modification, any Party may invoke dispute resolution to determine if such modification shall be conducted. Modification of a document shall be required only upon a showing that:

(1) The requested modification is based on information that is (A) new (i.e. information that becomes available or known after the document was finalized) and (B) significant; and

(2) The requested modification could be of . significant assistance in evaluating impacts on the public health or the environment, in evaluating the selection of remedial alternatives, or in protecting human health and the environment.

(c) Nothing in this Section shall alter EPA's or the State's ability to request the performance of additional work which was not contemplated by this Agreement. The Marine Corps' obligation to perform such work under this Agreement must be established by either a modification of a document or by amendments to this Agreement.

## 8. DEADLINES

8.1 All deadlines agreed upon before the effective date of this Agreement shall be made an Appendix to this Agreement. To the extent that deadlines have already been mutually agreed upon by the Parties prior to the execution of this Agreement, they will satisfy the requirements of this Section and remain in effect, shall be published in accordance with subsection 8.2, and shall be incorporated into the appropriate work plans.

8.2 Within twenty-one (21) days of issuance of the Record of Decision for any operable unit or for the final remedy, the Marine Corps shall propose deadlines for completion of the following draft primary documents:

- (a) Remedial Design/Remedial Action Work Plans
- (b) Preliminary Remedial Design

- (c) Final Remedial Design
- (d) Construction Quality Assurance Plan
- (e) Construction Quality Control Plan
- (f) Contingency Plan
- (g) Project Closeout Report

Within fifteen (15) days of receipt, EPA, DHS and RWQCB shall review and provide comments to the Marine Corps regarding the proposed deadlines, within fifteen (15) days following receipt of the comments the Marine Corps shall, as appropriate, make revisions and reissue the proposal. The Parties shall meet as necessary to discuss and finalize the proposed deadlines. All agreed upon deadlines shall be incorporated into the appropriate work plans. If the Parties fail to agree within thirty (30) days on the proposed deadlines, the matter shall immediately be submitted for dispute resolution pursuant to Section 12 (Dispute Resolution). The final deadlines established pursuant to this subsection shall be published by EPA in conjunction with the State, and shall become an Appendix to this Agreement.

8.3 For any operable units not identified as of the effective date of this Agreement, the Marine Corps shall propose deadlines for all documents listed in subsection 7.3(a)(1) through (7) (with the exception of the Community Relations Plan and any document that comes within the proviso to such subsection) within twenty-one (21) days of agreement on the proposed operable unit by all Parties. These deadlines shall be proposed, finalized and published using the procedures set forth in subsection 8.2.

8.4 The deadlines set forth in this Section, or to be established as set forth in this Section, may be extended pursuant to Section 9 (Extensions). The Parties recognize that one possible basis for extension of the deadlines for completion of the Remedial Investigation and Feasibility Study Reports is the identification of significant new Site conditions during the performance of the remedial investigation.

## 9. EXTENSIONS

9.1 Timetables, deadlines and schedules shall be extended upon receipt of a timely request for extension and when good cause exists for the requested extension. Any request for extension by a Party shall be submitted to the other Parties in writing and shall specify:

- (a) The timetable, deadline or schedule that is sought to be extended;
- (b) The length of the extension sought;
- (c) The good cause(s) for the extension; and
- (d) The extent to which any related timetable and deadline or schedule would be affected if the extension were granted.

9.2 Good cause exists for an extension when sought in regard to:

- (a) An event of Force Majeure;
- (b) A delay caused by another Party's failure to meet any requirement of this Agreement;
- (c) A delay caused by or resulting from the good faith invocation of dispute resolution or the initiation of judicial action;
- (d) A delay caused, or which is likely to be caused, by an extension (including without limitation an extension under subsection 7.7) in regard to another timetable and deadline or schedule;
- (e) A delay caused by public comment periods or hearings required under State law in connection with the State's performance of this Agreement or by receipt of unusually extensive public comments under the NCP in connection with the Marine Corps's performance of this Agreement;
- (f) Any work stoppage within the scope of Section 11 (Emergencies and Removals); or

- (g) Any other event or series of events mutually agreed to by the Parties as constituting good cause.

9.3 Absent agreement of the Parties with respect to the existence of good cause, a Party may seek and obtain a determination through the dispute resolution process that good cause exists.

9.4 Within seven days of receipt of a request for an extension of a timetable, deadline or schedule, each receiving Party shall advise the requesting Party in writing of the receiving Party's position on the request. Any failure by a receiving Party to respond within the seven-day period shall be deemed to constitute concurrence with the request for extension. If a receiving Party does not concur in the requested extension, it shall include in its statement of nonconcurrence an explanation of the basis for its position.

9.5 If there is consensus among the Parties that the requested extension is warranted, the Marine Corps shall extend the affected timetable and deadline or schedule accordingly. If there is no consensus among the Parties as to whether all or part of the requested extension is warranted, the timetable and deadline or schedule shall not be extended except in accordance with a determination resulting from the dispute resolution process.

9.6 Within seven days of receipt of a statement of nonconcurrence with the requested extension, the requesting Party may invoke dispute resolution.

9.7 A timely and good faith request by the Marine Corps for an extension shall toll any assessment of stipulated penalties or application for judicial enforcement of the affected timetable and deadline or schedule until a decision is reached on whether the requested extension will be approved. If dispute resolution is invoked and the requested extension is denied, stipulated penalties may be assessed and may accrue from the date of the original timetable, deadline or schedule. Following the grant of an extension, an assessment of stipulated penalties or an application for judicial enforcement may be sought only to compel compliance with the timetable and deadline or schedule as most recently extended.

## 10. FORCE MAJEURE

10.1 A Force Majeure shall mean any event arising from causes beyond the control of a Party that causes a delay in or prevents the performance of any obligation under this Agreement, including, but not limited to:

- (a) acts of God;
- (b) fire;
- (c) War or national emergency declared by the President or Congress and affecting the Marine Corps;
- (d) insurrection;
- (e) civil disturbance;
- (f) explosion;
- (g) unanticipated breakage or accident to machinery, equipment or lines of pipe despite reasonably diligent maintenance;
- (h) adverse weather conditions that could not be reasonably anticipated;
- (i) unusual delay in transportation;
- (j) restraint by court order or order of public authority;
- (k) inability to obtain, at reasonable cost and after exercise of reasonable diligence, any necessary authorizations, approvals, permits, or licenses due to action or inaction of any governmental agency or authority other than the Department of the Navy (including Marine Corps);

- (l) delays caused by compliance with applicable statutes or regulations governing contracting, procurement or acquisition procedures, despite the exercise of reasonable diligence; and
- (m) insufficient availability of appropriated funds which have been diligently sought. In order for Force Majeure based on insufficient funding to apply to the Marine Corps, the Marine Corps shall have made timely request for such funds as part of the budgetary process as set forth in Section 15 (Funding) .

A Force Majeure shall also include any strike or other labor dispute, whether or not within the control of the Party affected thereby. Force Majeure shall not include increased costs or expenses of response actions, unless (i) such increase could not reasonably have been anticipated at the time the estimate thereof was made and (ii) funding for such increase has been diligently sought and is not available.

## 11. EMERGENCIES AND REMOVALS

### 11.1 Discovery and Notification

If any Party discovers or becomes aware of an emergency or other situation that endangers public health or safety or the environment at or near the Site, which is related to or may affect the work performed under this Agreement, that Party shall immediately orally notify all other Parties. If the emergency arises from activities conducted pursuant to this Agreement, the Marine Corps shall then take immediate action to notify the appropriate State and local agencies and affected members of the public

### 11.2 Work Stoppage

In the event any Party determines that activities conducted pursuant to this Agreement will cause or otherwise be threaten by a situation described in subsection 11.1, the Party may propose the termination of such activities. If the Parties mutually agree, the activities shall be stopped for such period of time as is required to abate the danger. In the absence of mutual agreement, the activities shall be stopped in accordance with the proposal, and the matter shall be immediately referred to the EPA Hazardous Waste Management Division Director for a work stoppage determination in accordance with Section 12.9.

### 11.3 Removal Actions

- (a) The provisions of this Section shall apply to all removal actions as defined in CERCLA section 101(23) 42 U.S.C. § 9601(23) and California Health and Safety code section 25323, including all modifications to, or extensions of, the ongoing removal actions, and all new removal actions proposed or commenced following the effective date of this Agreement.
- (b) Any removal actions conducted at the Site shall be conducted in a manner consistent with this agreement, CERCLA, the NCP and E.O. 12580.
- (c) Nothing in this Agreement shall alter the Marine Corps' authority with respect to removal actions conducted pursuant to section 104 of CERCLA, 42 U.S.C. § 9604.
- (d) Nothing in this Agreement shall alter any authority the State or EPA may have with, respect to removal actions conducted at the Site.
- (e) All reviews conducted by EPA and the State pursuant to 10 U.S.C. § 2705(b)(2) will be expedited so as not to unduly jeopardize fiscal resources of the Marine Corps for funding the removal actions.
- (f) If a Party determines that there is an endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous substance, pollutant or contaminant at or from the Site, the Party may request that the Marine Corps take such response actions as may be necessary to

abate such danger or threat and to protect the public health or welfare or the environment. Such actions might include provision of alternative drinking water supplies or other response actions listed in CERCLA section 101(23) or (24), or such other relief as the public interest may require.

#### 11.4 Notice and Opportunity to Comment

(a) The Marine Corps shall provide the other Parties with timely notice and opportunity to review and comment upon any proposed removal action for the Site, in accordance with 10 U.S.C. § 2705(a) and (b). The Marine Corps agrees to provide the information described below pursuant to such obligation.

(b) For emergency response actions, the Marine Corps shall provide EPA and the State with notice in accordance with subsection 11.1. Such oral notification shall, except in the case of extreme emergencies, include adequate information concerning the Site background, threat to the public health and welfare or the environment (including the need for response), proposed actions and costs (including a comparison of possible alternatives, means of transportation of any hazardous substances off-site, and proposed manner of disposal), expected change in the situation should no action be taken or should action be delayed (including associated environmental impacts), any important policy issues, and the Marine Corps On-Scene Coordinator recommendations. Within forty-five (45) days of completion of the emergency action, the Marine Corps will furnish EPA and the State with an Action Memorandum addressing the information provided in the oral notification, and any other information required pursuant to CERCLA and the NCP, and in accordance with pertinent EPA guidance, for such actions.

(c) For other removal actions, the Marine Corps will provide EPA and the State with any information required by CERCLA or the NCP, and in accordance with pertinent EPA guidance, such as the Action Memorandum, the Engineering Evaluation/Cost Analysis (when required under the NCP) and, to the extent it is not otherwise included, all information required to be provided in accordance with paragraph 11.4(b). Such information shall be furnished at least forty-five (45) days before the response action is to begin.

(d) All activities related to ongoing removal actions shall be reported by the Marine Corps in the progress reports described in Section 18 (Project Managers).

11.5 Any dispute between the Parties as to whether a proposed nonemergency response action is (a) properly considered a removal action, as defined by 42 U.S.C. § 9601(23), or (b) consistent, to the extent deemed practicable under CERCLA section 104(a)(2), with any remedial action shall be resolved pursuant to Section 12 (Dispute Resolution). Such dispute may be brought directly to the DRC or the SEC (each as defined in Section 12) at any Party's request.

#### 11.6 Alternative Dispute Resolution for Subsection 11.3(f)

(a) The following procedures shall apply only to disputes as to whether the Marine Corps will take any removal action requested under subsection 11.3(f). Such disputes shall be submitted to the DRC, which shall have ten (10) days to unanimously resolve the dispute. The DRC shall forward an unresolved dispute to the SEC within four (4) days of the end of the ten-day period.

(b) The SEC will serve as the forum for resolution of disputes for which agreement has not been reached by the DRC. The EPA representative on the SEC is the Regional Administrator of EPA Region 9. The Department of the Navy's representative on the SEC is the Commander, Southwest Division, Naval Facilities Engineering Command. The DHS representative on the SEC is the Regional Administrator, Region 4. The RWQCB representative on the SEC is the Assistant Executive Officer. The SEC members shall, as appropriate, confer, meet and exert their best efforts to resolve the dispute and issue a written decision. If unanimous resolution of the dispute is not reached within seven (7) days, the Department of the Navy SEC

representative shall issue, a written position on the dispute. EPA or the State may, within four (4) days of the such representative's issuance of the Department of the Navy's position, issue a written notice elevating the dispute to the Department of the Navy's Secretariat Representative for resolution in accordance with all applicable laws and procedures. In the event EPA or the State elects not to elevate the dispute to the Secretariat Representative within the designated four (4) day escalation period, EPA and the State shall be deemed to have agreed with the Department of the Navy SEC representative's written position" with respect to the dispute.

(c) Upon escalation of a dispute to the Department of the Navy's Secretariat Representative pursuant to subsection 11.6(b) above, the Secretariat Representative will review and resolve the dispute within seven (7) days. Before resolving the dispute, the Secretariat Representative, shall, upon request, meet and confer with the EPA Administrator, the DHS Chief Deputy Director and the RHQCB Executive Officer to discuss the issue (s) under dispute. The Secretariat Representative shall provide the EPA and the State with its final decision in writing. If EPA or the state does not concur with such decision, the nonconcurring party must transmit indication thereof to the Secretariat Representative within fourteen (14) days of receipt of such decision. Failure to transmit such nonconcurrence will be presumed to signify concurrence.

## 12. DISPUTE RESOLUTION

12.1 Except as specifically set forth in subsection 11.6 or elsewhere in this Agreement, if a dispute arises under this Agreement, the procedures of this Section shall apply. Any Party may invoke this dispute resolution procedure. All Parties to this Agreement shall make reasonable efforts to informally resolve disputes at the Project Manager or immediate supervisor level, if resolution cannot be achieved informally, the procedures of this Section shall be Implemented to resolve a dispute.

12.2 Within thirty (30) days after: (a) receipt by EPA and the State of a draft final primary document pursuant to Section 7 (Consultation), or (b) any action. which leads to or generates a dispute, the disputing Party shall submit to the Dispute Resolution Committee (DRC) a written statement of dispute setting forth the nature of the dispute, the work affected by the dispute, the disputing Party's position with respect to the dispute and the technical, legal or factual Information the disputing Party is relying upon to support its position.

12.3 Prior to any Party's issuance of a written statement of a dispute, the disputing Party shall engage the other Party in informal dispute resolution among the Project Managers and/or their immediate supervisors. During this informal dispute resolution period the Parties shall meet as many times as are necessary to discuss and attempt resolution of the dispute.

12.4 The DRC will serve as a forum for resolution of dispute for which agreement has not been reached through informal dispute resolution. The Parties shall each designate one individual and an alternate to serve on the DRC. The individuals designated to serve on the DRC shall be employed at the policy level Senior Executive Service (SES) or equivalent or be delegated the authority to participate on the DRC for the purposes of dispute resolution under this Agreement. The EPA representative on DRC is the Assistant Director for Superfund of EPA's Region 9. The Department of the Navy's designated member is the Director, Facilities Management, Southwest Division, Naval Facilities Engineering Command. The DHS representative is the DHS Chief of the Site Mitigation Branch, Region 4. The RWQCB representative is the Chief, Special Projects Unit. Written notice of any delegation of authority from a Party's designated representative on the DRC shall be provided to all other Parties pursuant to the procedures of Section 21 (Notification).

12.5 Following elevation of a dispute to the DRC, the DRC shall have twenty-one (21) days to unanimously resolve the dispute and issue a written decision. If the DRC is unable to unanimously resolve the dispute within this twenty-one (21) day period, the written statement of dispute shall be forwarded to the Senior

Executive Committee (SEC) for resolution within seven (7) days after the close of the twenty-one (21) day resolution period.

12.6 The SEC will serve as the forum for resolution of disputes for which agreement has not been reached by the DRC. EPA representative on the SEC is the Regional Administrator of EPA Region 9. The Department of the Navy's representative on the SEC is the Commander, Southwest Division, Naval Facilities Engineering Command. The DHS representative on the SEC is the Regional Administrator, Region 4. The RWQCB representative on the SEC is the Assistant Executive Officer. The SEC members shall, as appropriate, confer, meet and exert their best efforts to resolve the dispute and issue a written decision. If unanimous resolution of the dispute is not reached within twenty-one (21) days, EPA's Regional Administrator shall issue a written position on the dispute. The Department of the Navy or the State may, within fourteen (14) days of the Regional Administrator's issuance of EPA's position, issue a written notice elevating the dispute to the Administrator of EPA for resolution in accordance with all applicable laws and procedures. In the event the Department of the Navy or the State elects not to elevate the dispute to the Administrator within the designated fourteen (14) day escalation period, the Department of the Navy and the State shall be deemed to have agreed with the Regional Administrator's written position with respect to the dispute.

12.7 Upon escalation of a dispute to the Administrator of EPA pursuant to subsection 12.6 above, the Administrator will review and resolve the dispute within twenty-one (21) days. Upon request, and prior to resolving the dispute, the EPA Administrator shall meet and confer with the Department of the Navy's Secretariat Representative, the DHS Chief Deputy Director and the RWQCB Executive Officer to discuss the issue(s) under dispute. Upon resolution, the Administrator shall provide the Department of the Navy and the State with a written final decision setting forth resolution of the dispute. The duties of the Administrator set forth in this Section shall not be delegated.

12.8 The pendency of any dispute under this Section shall not affect any Party's responsibility for timely performance of the work required by this Agreement, except that the time period for completion of work affected by such dispute shall be extended for a period of time usually not to exceed the actual time taken to resolve any good faith dispute in accordance with the procedures specified herein. All elements of the work required by this Agreement which are not affected by the dispute shall continue and be completed in accordance with the applicable timetable and deadline or schedule.

12.9 When dispute resolution is in progress, work affected by the dispute will immediately be discontinued if the Hazardous Waste Management Division Director for EPA Region 9 requests, in writing, that work related to the dispute be stopped because, in EPA's opinion, such work is inadequate or defective, and such inadequacy or defect is likely to yield an adverse effect on human health or the environment, or is likely to have a substantial adverse effect on the remedy selection or implementation process. DHS or RWQCB may request the EPA Hazardous Waste Management Division Director to order work stopped for the reasons set out above. To the extent possible, the Party seeking a work stoppage shall consult with the other Parties prior to initiating a work stoppage request. After work stoppage, if a Party believes that the work stoppage is inappropriate or may have potential significant adverse impacts, the Party may meet with the other Parties to discuss the work stoppage. Following this meeting and further considerations of this issue, the EPA Hazardous Waste Management Division Director will, issue, in writing, a final decision with respect to the work stoppage. The final written decision of the EPA Hazardous Waste Management Division Director may immediately be subject to formal dispute resolution. Such dispute may be brought directly to either the DRC or the SEC, at the discretion of the Party requesting dispute resolution.

12.10 Within twenty-one (21) days of resolution of a dispute pursuant to the procedures specified in

this Section (or before such later date as is agreed by the Parties), the Marine Corps shall incorporate the resolution and final determination into the appropriate plan, schedule or procedures and proceed to implement this Agreement according to the amended plan, schedule or procedures. The deadline set forth above may in appropriate circumstances be extended in accordance with Section 9 (Extensions).

12.11 Except as set forth in Section 31 (Covenant Not to Sue and Reservation of Rights), resolution of a dispute pursuant to this Section (as it may be modified pursuant to subsection 11.6) constitutes a final resolution of any dispute arising under this Agreement. All Parties shall abide by all terms and conditions of any final resolution of dispute obtained pursuant to this Section.

12.12 For purposes of all dispute resolution procedures set forth in this Agreement and other decisions of the Parties that may be taken to dispute resolution, the Parties agree as follows:

(a) DHS and RWQCB will jointly designate which of the two agencies shall voice the State's position for specified subjects and which shall do so for unspecified subjects. DHS and RWQCB shall provide EPA and the Marine Corps with an initial designation within thirty (30) days after the execution of this agreement. DHS and RWQCB may modify the initial designation or subsequent designations. DHS and RWQCB shall notify EPA and the Marine Corps in writing of any modification. Such modification shall become effective upon receipt by EPA and the Marine Corps.

(b) The agency designated in accordance with paragraph 12.12(a) shall represent the State with a single voice throughout the dispute resolution process and in all decisions of the Parties that may be taken to dispute resolution.

### 13. ENFORCEABILITY

13.1 The Parties agree that:

(a) Upon the effective date of this Agreement, any standard, regulation, condition, requirement or order which has become effective under CERCLA and is incorporated into this Agreement is enforceable by any person pursuant to CERCLA section 310, and any violation of such standard, regulation, condition, requirement or order will be subject to civil penalties under CERCLA sections 310(c) and 109;

(b) All timetables or deadlines associated with the RI/FS shall be enforceable by any person pursuant to CERCLA section 310, and any violation of such timetables or deadlines will be subject to civil penalties under CERCLA sections 310(c) and 109;

(c) All terms and conditions of this Agreement which relate to remedial actions, including corresponding timetables, deadlines or schedules, and all work associated with remedial actions, shall be enforceable by any person pursuant to CERCLA section 310(c), and any violation of such terms or conditions will be subject to civil penalties under CERCLA sections 310(c) and 109; and

(d) Any final resolution of a dispute pursuant to Section 12 (Dispute Resolution) of this Agreement which establishes a term, condition, timetable, deadline or schedule shall be enforceable by any person pursuant to CERCLA section 310(c), and any violation of such terms, condition, timetable, deadline or schedule will be subject to civil penalties under CERCLA sections 310(c) and 109.

13.2 Nothing in this Agreement shall be construed as authorizing any person to seek judicial review of any action or work where review is barred by any provision of CERCLA including CERCLA section 113(h).

13.3 Nothing in this Agreement shall be construed as a restriction or waiver of any rights the EPA or the State may have under CERCLA, including but not limited to any rights under sections 113 and 310, 42 U.S.C. § 9613 and 9659, and/or applicable state law. The Marine Corps does not waive any rights it may have under CERCLA sections 120 and 121, SARA section 211 and E.O. 12580.

13.4 The Parties agree to exhaust their rights under Section 12 (Dispute Resolution) prior to exercising any rights to judicial review that they may have.

13.5 The Parties agree that all Parties shall, have the right to enforce the terms of this Agreement.

#### 14. STIPULATED PENALTIES

14.1 In the event that the Marine Corps (a) fails to submit a primary document listed in Section 7 (Consultation) to EPA and the State pursuant to the appropriate timetable or deadline in accordance with the requirements of this Agreement, or (b) fails to comply with a term or condition of this Agreement which relates to an operable unit or final remedial action (unless excused under this Agreement), EPA may assess a stipulated penalty against the Marine Corps. The State may also recommend to EPA that a stipulated penalty be assessed. A stipulated penalty may be assessed in an amount not to exceed \$5,000 for the first week.(or part thereof), and \$10,000 for each additional week (or part thereof) for which a failure set forth in this subsection occurs.

14.2 Upon determining that an event described in subsection 14.1(a) or 14.1(b) has occurred, EPA shall notify the Marine Corps in writing. If the failure in question is not already subject to dispute resolution at the time such notice is received, the Marine Corps shall have fifteen (15) days after receipt of the notice to invoke dispute resolution on the question whether such event has in fact occurred. The Marine Corps shall not be liable for the stipulated penalty assessed by EPA if the event is determined, through the dispute resolution process, not to have occurred. No assessment of a stipulated penalty shall be final until the conclusion of dispute resolution procedures related to the assessment of the stipulated penalty.

14.3 The annual reports required by CERCLA section 120(e) (5), 42 U.S.C. § 9620(e)(5), shall include, with respect to each final assessment of a stipulated penalty against the Marine Corps under this Agreement, each of the following:

- (a) The federal facility responsible for the failure;
- (b) A statement of the facts and circumstances giving rise to the failure;
- (c) A statement of any administrative or other corrective action taken at the relevant federal facility, or a statement of why such measures were determined to be inappropriate;
- (d) A statement of any additional action taken by or at the federal facility to prevent recurrence of the same type of failure; and
- (e) The total dollar amount of the stipulated penalty assessed for the particular failure.

14.4 Stipulated penalties assessed pursuant to this Section shall be payable to the Hazardous Substances Response Trust Fund only in the manner and to the extent expressly provided for in acts authorizing funds for, and appropriations to, the Department of Defense. EPA and the State agree, to the extent allowed by law, to share equally any stipulated penalties paid on behalf of Marine Corps Air Station El Toro between the Hazardous Substance Response Trust Fund and an appropriate State fund.

14.5 In no event shall this Section give rise to a stipulated penalty in excess of the amount set forth in CERCLA section 109, 42 U.S.C. § 9609.

14.6 This Section shall not affect the Marine Corps' ability to obtain an extension of a timetable, deadline or schedule pursuant to Section 9 (Extensions).

14.7 Nothing in this Agreement shall be construed to render any officer or employee of the Marine Corps personally liable for the payment of any stipulated penalty assessed pursuant to this Section.

## 15. FUNDING

15.1 It is the expectation of the Parties to this Agreement that all obligations of the Marine Corps arising under this Agreement will be fully funded. The Marine Corps agrees to seek sufficient funding through the Department of Defense budgetary process to fulfill its obligations under this Agreement.

15.2 In accordance with CERCLA section 120(e)(5)(B), 42 U.S.C. § 9620 (e)(5)(B), the Marine Corps shall include, in its submission to the Department of Defense annual report to Congress, the specific cost estimates and budgetary proposals associated with the implementation of this Agreement.

15.3 Any requirement for the payment or obligation of funds, including stipulated penalties, by the Marine Corps established by the terms of this Agreement shall be subject to the availability of appropriated funds, and no provision herein shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, 31 U.S.C. § 1341. In cases where payment or obligation of funds would constitute a violation of the Anti-Deficiency Act, the dates established requiring the payment or obligation of such funds shall be appropriately adjusted.

15.4 If appropriated funds are not available to fulfill the Marine Corps' obligations under this Agreement, EPA and the State reserve the right to initiate an action against any other person, or to take any response action, which would be appropriate absent this Agreement.

15.5 Funds authorized and appropriated annually by Congress under the "Environmental Restoration, Defense" appropriation in the Department of Defense Appropriation Act and allocated by the Deputy Assistant Secretary of Defense for Environment to the Department of the Navy will be the source of funds for activities required by this Agreement consistent with section 211 of CERCLA, 10 U.S.C. Chapter 160. However, should the Environmental Restoration, Defense appropriation be inadequate in any year to meet the total Department of the Navy CERCLA implementation requirements, the Department of Defense shall employ and the Department of the Navy shall follow a standardized Department of Defense prioritization process which allocates that year's appropriations in a manner which maximizes the protection of human health and the environment. A standardized Department of Defense prioritization model shall be developed and utilized with the assistance of EPA and the states.

## 16. EXEMPTIONS

16.1 The obligation of the Marine Corps to comply with the provisions of this Agreement may be relieved by:

- (a) A Presidential order of exemption issued pursuant to the provisions of CERCLA section 120(j)(1), 42 U.S.C. § 9620(j)(1), or RCRA section 6001, 42 U.S.C. § 6961; or
- (b) The order of an appropriate court.

16.2 The State reserves any statutory right it may have to challenge any Presidential order relieving the Marine Corps of its obligations to comply with this Agreement.

## 17. STATUTORY COMPLIANCE/RCRA-CERCLA INTEGRATION

17.1 The Parties intend to integrate into this comprehensive Agreement the Marine Corps's CERCLA response obligations with the Marine Corps's (a) RCRA corrective action obligations, (b) State corrective/

remedial action obligations, and ©) obligations under all Orders and other statutory requirements of RWQCB, in each case relating to releases of hazardous substances, hazardous wastes, pollutants or contaminants covered by this Agreement and which have been or will be adequately addressed by the remedial actions provided for under this Agreement. Therefore, the Parties intend that activities covered by this Agreement will achieve compliance with CERCLA, 42 U.S.C. § 9061 et seq., satisfy the corrective action requirements of RCRA section 3004(u) & (v), 42 U.S.C. § 6924(u) & (v), for a RCRA permit, and RCRA section 3008(h), 42 U.S.C. § 6928(h), for interim status facilities; and meet or exceed all applicable or relevant and appropriate federal and State laws and regulations, to the extent required by CERCLA section 121, 42 U.S.C. § 9621.

17.2 Based upon the foregoing, the Parties intend that any remedial action selected, implemented and completed under this Agreement will be protective of human health and the environment such that remediation of releases covered by this Agreement shall obviate the need for further corrective action under RCRA or otherwise applicable State hazardous waste or water quality protection laws (i.e., no further corrective action shall be required). The Parties agree that with respect to releases of hazardous waste covered by this Agreement, RCRA and such State laws shall be considered an applicable or relevant and appropriate requirement pursuant to CERCLA section 121, 42 U.S.C. § 9621.

17.3 The Parties recognize that the requirement to obtain permits for response actions undertaken pursuant to this Agreement shall be as provided in CERCIA and the NCP. The Parties further recognize that ongoing hazardous waste management activities at Marine Corps Air Station El Toro may require the issuance of permits under federal and State laws.^ This Agreement does not affect the requirements, if any, to obtain such permits. However, if a permit is issued to the Marine Corps for ongoing hazardous waste management activities at the Site, the issuing party shall reference and incorporate in a permit condition any appropriate provision, including appropriate schedules (and the provision for extension of such schedules), of this Agreement into such permit. The Parties intend that any judicial review of any permit condition which references this Agreement shall, to the extent authorized by law, only be reviewed under the provisions of CERCLA.

## 18. PROJECT MANAGERS

18.1 Within ten (10) days after the date of execution of this Agreement, EPA, the Marine Corps, DHS and RWQCB shall each designate a Project Manager and an alternate (each hereinafter referred to as Project Manager), for the purpose of overseeing the implementation of this Agreement. The Project Managers shall be responsible on a daily basis for assuring proper implementation of the RI/FS and the RD/RA in accordance with the terms of the Agreement. In addition to the formal notice provisions set forth in Section 21 (Notification), to the maximum extent possible, communications among the Marine Corps, EPA, and the State on all documents, including reports, comments, and other correspondence concerning the activities performed pursuant to this Agreement, shall be directed through the Project Managers. A contractor may not serve as Project Manager, unless the other Parties shall consent in writing.

18.2 The Marine Corps, EPA, DHS and RWQCB may change their respective Project Managers. The other Parties shall be notified in writing within five days of the change.

18.3 The Project Managers shall meet to discuss progress as described in subsection 7.5. Although the Marine Corps has ultimate responsibility for meeting its respective deadlines or schedule, the Project Managers shall assist in this effort by consolidating the review of primary and secondary documents whenever possible, and by scheduling progress meetings to review reports, evaluate the performance of environmental monitoring at the Site, review RI/FS or RD/RA progress, discuss target dates for elements of the RI/FS to be conducted in

the following one hundred and eighty (180) days, resolve disputes, and adjust deadlines or schedules. At least one week prior to each scheduled progress meeting, the Marine Corps will provide to the other Parties a draft agenda and summary of the status of the work subject to this Agreement. Unless the Project Managers agree otherwise, the minutes of each progress meeting, the meeting agenda and all documents discussed during the meeting that were not previously provided shall constitute a progress report. The Marine Corps will send to all Project Managers (a) within ten business days after the meeting, all such documents not previously provided and (b) within twenty-one calendar days after the meeting, the minutes and agenda. If an extended period occurs between Project Manager progress meetings, the Project Managers may agree that the Marine Corps shall prepare an interim progress report and provide it to the other Parties. The report shall include the information that would normally be discussed in a progress meeting.

18.4 The authority of the Project Managers shall include, but is not limited to:

- (a) Taking samples and ensuring that sampling and other field work is performed in accordance with the terms of any final work plan and QAPP;
- (b) Observing, and taking photographs and making such other reports on the progress of the work as the Project Managers deem appropriate, subject to the limitations set forth in Section 25 (Access to Marine Corps Air Station El Toro) hereof;
- (c) Reviewing records, files and documents relevant to the work performed, subject to the limitations set forth in subsection 23.1 hereof;
- (d) Determining the form and specific content of the Project Manager meetings and of progress reports based on such meetings; and
- (e) Recommending and requesting minor field modifications to the work to be performed pursuant to a final work plan, or to techniques, procedures, or design utilized in carrying out such work plan.

18.5 Any minor field modification proposed by any Party pursuant to this Section must be approved orally by all Parties' Project Managers to be effective. The Marine Corps Project Manager will make a contemporaneous record of such modification and approval in a written log, and a copy of the log entry will be provided as part of the next progress report. Even after approval of the proposed modification, no Project Manager will require implementation by a government contractor without approval of the appropriate Government Contracting Officer.

18.6 The Project Manager for the Marine Corps shall be responsible for day-to-day field activities at the Site. The Marine Corps Project Manager or other designated representative of Marine Corps Air Station El Toro shall be present at: the Site or reasonably available to supervise work during all hours of work performed at the Site pursuant to this Agreement. For all times that such work is being performed, the Marine Corps Project Manager shall inform the command post at Marine Corps Air Station El Toro of the name and telephone number of the designated representative responsible for supervising the work.

18.7 The Project Managers shall be reasonably available to consult on work performed pursuant to this Agreement and shall make themselves available to each other for the pendency of this Agreement. The absence of EPA, DHS, RWQCB or Marine Corps Project Managers from the Facility shall not be cause for work stoppage of activities taken under this Agreement.

18.8 If the Project Manager for DHS or RWQCB cannot attend any Project Managers' meeting, the agency unable to attend shall provide reasonable notice (48 hours' advance notice if possible) to all other Project Managers regarding such absence and whether the Project Manager for the other State agency is authorized to speak for the absent agency. If such other agency's Project Manager is not so authorized, the

absent agency shall, to the extent practical, provide its concerns and comments to all other Parties within a reasonable time prior to the meeting.

## 19. PERMITS

19.1 The Parties recognize that under sections 121(d) and 121(e)(1) of CERCLA, 42 U.S.C. § 9621(d) and 9621(e)(1), and the NCP, portions of the response actions called for by this Agreement and conducted entirely on-site are exempted from the procedural requirement to obtain a federal, State, or local permit but must satisfy all the promulgated (as defined in NCP 5 300.400(g)(4)) applicable or relevant and appropriate federal and State substantive standards, requirements, criteria, or limitations which would have been included in any such permit.

19.2 This Section is not intended to relieve the Marine Corps from any applicable regulatory requirements, including obtaining a permit, whenever it proposes a response action involving either the movement of hazardous substances, pollutants, or contaminants off-site, or the conduct of a response action off-site.

19.3 The Marine Corps shall notify EPA and the State in writing of any permit required for off-site activities as soon as it becomes aware of the requirement. The Marine Corps agrees to obtain any permits necessary for the performance of any work under this Agreement. Upon request, the Marine Corps shall provide EPA and the State copies of all such permit applications and other documents related to the permit process. Copies of permits obtained in implementing this Agreement shall be appended to the appropriate submittal or progress report. Upon request by the Marine Corps Project Manager, the Project Managers of EPA and the State will assist Marine Corps Air Station El Toro to the extent feasible in obtaining any required permit.

## 20. QUALITY ASSURANCE

20.1 In order to provide quality assurance and maintain quality control regarding all field work and sample collection performed pursuant to this Agreement, the Marine Corps agrees to designate a Quality Assurance Officer (QAO) who will ensure that all work is performed in accordance with approved work plans, sampling plans and QAPPs. The QAO shall maintain for inspection a log of quality assurance field activities and provide a copy to the Parties upon request.

20.2 To ensure compliance with the QAPP, the Marine Corps shall, upon request by EPA or the State, use its best efforts to obtain access to all laboratories performing analysis on behalf of the Marine Corps pursuant to this Agreement. If such access is not obtained for any laboratory, EPA or the State may reject all or portions of the data generated by such laboratory and require the Marine Corps to have the same or comparable data analyzed by a laboratory that will grant such access.

## 21. NOTIFICATION

21.1 All Parties shall transmit primary and secondary documents, and comments thereon, and all notices required herein by next day mail, hand delivery, or facsimile, or by certified mail if transmitted sufficiently ahead of the applicable deadline. Notifications shall be deemed effective upon receipt.

21.2 Notice to the individual Parties pursuant to this Agreement shall be sent to the addresses specified by the Parties. Initially these shall be as follows:

EPA:

Mr. John Hamill  
Remedial Project Manager, Marine Corps Air Station El Toro  
U.S. Environmental Protection Agency, Region 9  
Hazardous Waste Management Division, H-7-5  
75 Hawthorne Street  
San Francisco, CA 94105

State:

Joe J. Zarnoch, Project Manager  
Preremedial and Federal Facilities Unit  
California Department Toxic Substances Control  
Region 4, Site Mitigation Branch  
245 West Broadway, Suite 350  
Long Beach, CA 90802; and

John Broderick  
Water Resource Control Engineer  
Regional Water Quality Control Board, Santa Ana Region  
2010 Iowa Avenue, Suite 10  
Riverside, CA 92507

Marine Corps:

F. Andrew Pierson, Remedial Project Manager  
Southwest Division  
Naval Facilities Engineering Command  
1220 Pacific Highway  
San Diego, CA 92132-5190

21.3 All routine correspondence may be sent via first class mail to the above addresses.

22. DATA AND DOCUMENT AVAILABILITY

22.1 Each Party shall make all sampling results, test results or other data or documents generated through the implementation of this Agreement available to the other Parties. All quality assured data shall be supplied within sixty (60) days of its collection. If the quality assurance procedure is not completed within sixty (60) days, raw data or results shall be submitted within the sixty (60) day period and quality assured data or results shall be submitted as soon as they become available. The procedures of Section 9 (Extensions) shall apply to the sixty-day period referred to herein.

22.2 The sampling Party's Project Manager shall notify the other Parties' Project Managers not less than 10 days in advance of any sample collection. If it is not possible to provide 10 days prior notification, the sampling Party's Project Manager shall notify the other Project Managers as soon as possible after becoming aware that samples will be collected. Each Party shall allow, to the extent practicable, split or duplicate samples to be taken by the other Parties or their authorized representatives. Other Parties desiring to collect split or duplicate samples shall inform the sampling Party before the time of sample collection. Each Party receiving split or duplicate samples shall on request provide the sampling Party with its chain of custody documents relating to such sample.

## 23. RELEASE OF RECORDS

23.1 The Parties may request of one another access to or a copy of any record or document relating to this Agreement or the Installation Restoration Program. If the Party that is the subject of the request (the originating Party) has the record or document, that Party shall provide to the requesting Party access to or a copy of the record or document; provided, however, that no such access or copy need be provided if the record or document is identified as confidential and is subject to a claim of confidentiality because of attorney-client privilege or attorney work product or under the following provisions of FOIA: deliberative process, enforcement confidentiality, or properly classified for national security under law or executive order.

23.2 Records or documents identified by the originating Party as confidential pursuant to (a) non-disclosure provisions of FOIA other than those listed in subsection 23.1 above, or (b) the California Public Records Act, section 6250 et seq., of the California Government Code, shall be released to the requesting Party if the requesting Party states in writing that it will not release the record or document to the public without first consulting with the originating Party and either (x) receiving the originating Party's prior approval or (y) if the originating Party does not approve, giving the originating Party opportunity to contest, in accordance with applicable statutes and regulations, the preliminary decision to release. Records, or documents which are provided to the requesting Party and which are not identified as confidential may be made available to the public without further notice to the originating Party.

23.3 The Parties will not assert one of the above exemptions, including any available under FOIA or the California Public Records Act, even if available, if no governmental interest (including the interest established by law in protecting confidential business information) would be jeopardized by access or release as determined solely by the asserting Party.

23.4 Subject to section 120(j)(2) of CERCLA, 42 U.S.C. § 9620(j) (2) any documents required to be provided by Section 7 (Consultation) and analytical data showing test results will not be subject to subsection 23.2 or the proviso to subsection 23.1.

23.5 This Section does not change any requirement regarding press releases in Section 26 (Public Participation and Community Relations).

23.6 Disputes between EPA and the Marine Corps concerning matters covered by this Section 23 shall be subject to Section 12 (Dispute Resolution). Disputes between (a) DHS or the RWQCB and (b) EPA or the Marine Corps shall not be subject to Section 12 and shall instead be pursued through the originating Party's standard procedures concerning reusability of documents under FOIA or the California Public Records Act.

## 24. PRESERVATION OF RECORDS

24.1 Notwithstanding any document retention policy to the contrary, during the pendency of this Agreement and for a minimum of the years after its termination, (a) the Marine Corps shall preserve all records and documents that were at any time in its possession or in the possession of its contractors and (b) each other Party shall preserve all records and documents it prepared or to which it substantially contributed, in each case that relate to (x) the implementation of the Installation Restoration Program at the Site, or (y) the actions carried out pursuant to this Agreement. After this ten-year period, each Party shall notify the other Parties at least 45 days prior to destruction of any such records or documents.

## 25. ACCESS TO MARINE CORPS AIR STATION EL TORO

25.1 Without limitation of any authority conferred on EPA or the State by statute or regulation, EPA, the State or their authorized representatives shall be allowed to enter Marine Corps Air Station El Toro at reasonable times for purposes consistent with the provisions of the Agreement, subject to any statutory and regulatory requirements necessary to protect national security or mission essential activities. Such access shall include, but not be limited to, reviewing the progress of the Marine Corps in carrying out the terms of this Agreement; ascertaining that the work performed pursuant to this Agreement is in accordance with approved work plans, sampling plans and QAPPs; and conducting such tests as EPA, the State, or the Project Managers deem necessary.

25.2 The Marine Corps shall honor all reasonable requests for access by the EPA or the State, conditioned upon presentation of proper credentials. The Marine Corps Project Manager or his/her designee will provide briefing information, coordinate access and escort to restricted or controlled access areas, arrange for base passes and coordinate any other access requests which arise.

25.3 EPA and the State shall provide reasonable notice (which shall, if practical, be 48 hours' advance notice) to the Marine Corps Project Manager to request any necessary escorts. EPA and the State shall not use any camera, sound recording or other recording device at Marine Corps Air Station El Toro without the permission of the Marine Corps Project Manager. The Marine Corps shall not unreasonably withhold such permission.

25.4 The access by EPA and the State granted in subsection 25.1 shall be subject to those regulations necessary to protect national security or mission essential activities. Such regulation shall not be applied so as to unreasonably hinder EPA or the State from carrying out their responsibilities and authority pursuant to this Agreement. In the event that access requested by either EPA or the State is denied by the Marine Corps, the Marine Corps shall provide an explanation within 48 hours of the reason for the denial, including reference to the applicable regulations, and, upon request, a copy of such regulations. The Marine Corps shall expeditiously make alternative arrangements for accommodating the requested access. The Parties agree that this Agreement is subject to CERCLA section 120(j), 42 U.S.C. § 9620(j), regarding the issuance of Site Specific Presidential Orders as may be necessary to protect national security.

25.5 If EPA or the State requests access in order to observe a sampling event or other work being conducted pursuant to this Agreement, and access is denied or limited, the Marine Corps agrees to reschedule or postpone such sampling or work if EPA or the State so requests, until such mutually agreeable time when the requested access is allowed. The Marine Corps shall not restrict the access rights of the EPA or the State to any greater extent than the Marine Corps restricts the access rights of its contractors performing work pursuant to this Agreement.

25.6 All Parties with access to Marine Corps Air Station El Toro pursuant to this Section shall comply with all applicable health and safety plans.

25.7 To the extent the activities pursuant to this Agreement must be carried out on other than Marine Corps property, the Marine Corps shall use its best efforts, including its authority under CERCLA section 104, to obtain access agreements from the owners which shall provide reasonable access for the Marine Corps, EPA, and the State and their representatives. The Marine Corps may request the assistance of the State in obtaining such access, and upon such request, the State will use its best efforts to obtain the required access. In the event that the Marine Corps is unable to obtain such access agreements, the Marine Corps shall promptly notify EPA and the State.

25.8 With respect to non-Marine Corps property on which monitoring wells, pumping wells, or other response actions are to be located, the Marine Corps shall use its best efforts to ensure that any access agreements shall provide for the continued right of entry for all Parties for the performance of such remedial activities. In addition, any access agreement shall provide that no conveyance of title, easement, or other interest in the property shall be consummated without the continued right of entry.

25.9 Nothing in this Section shall be construed to limit EPA's and the State's full right of access as provided in 42 U.S.C. § 9604(e) and California Health and Safety Code section 25185, except as that right may be limited by 42 U.S.C. § f 9620(j)(2), E.O. 12580, or other applicable national security regulations or federal law.

## 26. PUBLIC PARTICIPATION AND COMMUNITY RELATIONS

26.1 The Parties agree that any proposed removal actions and remedial action alternative(s) and plan(s) for remedial action at the Site arising out of this Agreement shall comply with the administrative record and public participation requirements of CERCLA sections 113(k) and 117, 42 U.S.C. § 9313(k) and 9617, relevant community relations provisions in the NCP, EPA guidances, and, to the extent they may apply, State statutes and regulations. The State agrees to inform the Marine Corps of all State requirements which it believes pertain to public participation. The provisions of this Section shall be carried out in a manner consistent with, and shall fulfill the intent of, Section 17 (Statutory Compliance/RCRA-CERCLA Integration).

26.2 The Marine Corps shall develop and implement a community relations plan (CRP) addressing the environmental activities and elements of work undertaken by the Marine Corps, except as provided in Section 11 hereof.

26.3 The Marine Corps shall establish and maintain an administrative record at a place, at or near the federal facility, which is freely accessible to the public, which record shall provide the documentation supporting the selection of each response action. The administrative record shall be established and maintained in accordance with relevant provisions in CERCLA, the NCP, and EPA guidances. A copy of each document placed in the administrative record, not already provided, will be provided by the Marine Corps to the other Parties. The administrative record developed by the Marine Corps shall be updated and new documents supplied to the other Parties on at least a quarterly basis. An index of documents in the administrative record will accompany each update of the administrative record.

26.4 Except in case of an emergency, any Party issuing a press release with reference to any of the work required by this Agreement shall advise the other Parties of such press release and the contents thereof at least 48 hours prior to issuance.

## 27. FIVE-YEAR REVIEW

27.1 Consistent with 42 U.S.C. § . 9621(c) and in accordance with this Agreement, if the selected remedial action results in any hazardous substances, pollutants or contaminants remaining at the Site, the Parties shall review the remedial action program at least every five (5) years after the initiation of the final remedial action to assure that human health and the environment are being protected by the remedial action being implemented.

27.2 If, upon such review, any of the Parties proposes additional work or modification of work, such proposal shall be handled under subsection 7.10 of this Agreement.

27.3 To synchronize the five-year reviews for all operable units and final remedial actions, the following procedure will be used: Review of operable units will be conducted every five years counting from the initiation of the first operable unit, until initiation of the final remedial action for the Site. At that time a separate review for all operable units shall be conducted. Review of the final remedial action (including all operable units) shall be conducted every five years thereafter.

## 28. TRANSFER OF REAL PROPERTY

28.1 No change in the ownership of Marine Corps Air Station El Toro shall in any way alter the responsibility of the Parties under this Agreement. The Marine Corps shall not transfer any real property comprising the federal facility except in compliance with section 120(h) of CERCLA, 42 U.S.C. § 9620(h). Prior to any sale of any portion of the land comprising the federal facility which includes an area within which any release of hazardous substance has come to be located, or any property which is necessary for proceeding with the remedial action, the Marine Corps shall give written notice of that condition to the buyer of the land. At least thirty (30) days prior to any conveyance subject to section 120(h) of CERCLA, the Marine Corps shall notify all Parties of the transfer of any real property subject to this Agreement and the provisions made for any additional remedial actions, if required. The provisions of this subsection 28.1 shall not apply to the extent federal statute adopted after the effective date of this Agreement places restrictions on transfer of real property by the Marine Corps that are inconsistent with such provisions.

28.2 Until six months following the effective date of the final regulations implementing CERCLA section 120(h)(2), 42 U.S.C. § 9620(h)(2), the Marine Corps agrees to comply with the most recent version of the regulations as proposed and all other substantive and procedural provisions of CERCLA section 120(h) and subsection 28.1.

## 29. AMENDMENT OR MODIFICATION OF AGREEMENT

29.1 This Agreement can be amended or modified solely upon written consent of all Parties. Such amendments or modifications may be proposed by any Party and shall be effective the third business day following the day the last Party to sign the amendment or modification sends its notification of signing to the other Parties. The Parties may agree to a different effective date.

## 30. TERMINATION OF THE AGREEMENT

30.1 The provisions of this Agreement shall be deemed satisfied and terminated upon receipt by the Marine Corps of written notice from EPA, with concurrence of the State, that the Marine Corps has demonstrated that all the terms of this Agreement have been completed. If EPA denies or otherwise fails to grant a termination notice within 90 days of receiving a written Marine Corps request for such notice, EPA shall provide a written statement of the basis for its denial and describe the Marine Corps actions which, in the view of EPA, would be a satisfactory basis for granting a notice of completion. Such denial or failure to grant shall be subject to dispute resolution.

30.2 This Section shall not affect the requirements for periodic review at maximum five-year intervals of the efficacy of the remedial actions.

## 31. COVENANT NOT TO SUE AND RESERVATION OF RIGHTS

31.1 In consideration for the Marine Corps's compliance with this Agreement, and based on the

information known to the Parties or reasonably available on the effective date of this Agreement, EPA, the Marine Corps, and the State agree that compliance with this Agreement shall stand in lieu of any administrative, legal, and equitable remedies against the Marine Corps available to them regarding the releases or threatened releases of hazardous substances including hazardous wastes, pollutants or contaminants at the Site which are the subject of any RI/FS conducted pursuant to this Agreement and which have been or will be adequately addressed by the remedial actions provided for under this Agreement. The above notwithstanding, EPA and the State reserve all rights each may have with regard to the Marine Corps's taking any removal action requested under subsection 11.3(f) after exhaustion of the alternative dispute resolution process set forth in subsection 11.6.

31.2 Notwithstanding this Section or any other Section of this Agreement, the State shall retain any statutory right it may have to obtain judicial review of any final decision of the EPA on selection of remedial action pursuant to any authority the State may have under CERCLA, including sections 121(e)(2), 121(f), 310, and 113.

## 32. OTHER CLAIMS

32.1 Nothing in this Agreement shall constitute or be construed as a bar or release from any claim, cause of action or demand in law or equity by or against any person, firm, partnership or corporation not a signatory to this Agreement for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances, hazardous waste, pollutants, or contaminants found at, taken to, or taken from the federal facility. Unless specifically agreed to in writing by the Parties, EPA and the State shall not be held as party to any contract entered into by the Department of the Navy (including the Marine Corps) to implement the requirements of this Agreement.

32.2 This Agreement shall not restrict EPA, the State or the Marine Corps from taking any legal or response action for any matter not part of the subject matter of this Agreement.

## 33. RECOVERY OF EPA EXPENSES

33.1 The Parties agree to amend this Agreement at a later date in accordance with any subsequent national resolution of the issue of cost reimbursement. Pending such resolution, EPA reserves any rights it may have with respect to cost reimbursement.

## 34. STATE SUPPORT SERVICES

34.1 Compensation for State support services rendered in connection with this Agreement are governed by the Defense/State Memorandum of Agreement, executed on May 31, 1990, between DHS on behalf of the State and the Department of Defense. In the event such Memorandum of Agreement is terminated or no longer in effect for any reason, subsections 34.2 through 34.12 shall apply.

34.2 The Marine Corps agrees to request funding and reimburse the State, subject to the conditions and limitations set forth in this Section and subject to Section 15 (Funding), for all reasonable costs it incurs in providing services in direct support of the Marine Corps environmental restoration activities pursuant to this Agreement at the Site.

34.3 Reimbursable expenses shall consist only of actual expenditures required to be made and actually made by the State in providing the following assistance to Marine Corps Air Station El Toro:

- (a) Timely technical review and substantive comment on reports or studies which the Marine Corps prepares in support of its response actions and submits to the State.
- (b) Identification and explanation of unique State requirements applicable to military installations in performing response actions, especially State ARARs.
- (c) Field visits to ensure investigations and clean-up activities are implemented in accordance with appropriate State requirements, or in accordance with agreed upon conditions between the State and the Marine Corps that are established in the framework of this Agreement.
- (d) Support and assistance to the Marine Corps in the conduct of public participation activities in accordance with federal and State requirements for public involvement.
- (e) Participation in the review and comment functions of Marine Corps Technical Review Committees.
- (f) Other services specified in this Agreement.

34.4 Within ninety (90) days after the end of each quarter of the federal fiscal year, the State shall submit to the Marine Corps an accounting of all State costs actually incurred during that quarter in providing direct support services under this Section. Such accounting shall be accompanied by cost summaries and be supported by documentation which meets federal auditing requirements. The summaries will set forth employee-hours and other expenses by major type of support service. All costs submitted must be for work directly related to implementation of this Agreement and not inconsistent with either the National Contingency Plan (NCP) or the requirements described in OMB Circulars A-87 (Cost Principles for State and Local Governments) and A-128 (Audits for State and Local Cooperative Agreements with State and Local Governments) and Standard Forms 424 and 270. The Marine Corps has the right to audit cost reports used by the State to develop the cost summaries. Before the beginning of each fiscal year, the State shall supply a budget estimate of what it plans to do in the next year in the same level of detail as the billing documents.

34.5 Except as allowed pursuant to subsections 34.6 or 34.7 below, within ninety (90) days of receipt of the accounting provided pursuant to subsection 34.3 above, the Marine Corps shall reimburse the State in the amount set forth in the accounting.

34.6 In the event the Marine Corps contends that any of the costs set forth in the accounting provided pursuant to subsection 34.4 above are not properly payable, the matter shall be resolved through the process set forth in subsection 34.10 below.

34.7 The Marine Corps shall not be responsible for reimbursing the State for any costs actually incurred in the implementation of this Agreement in excess of one percent (1%) of the Marine Corps's total lifetime project costs incurred through construction of the remedial action(s). Circumstances could arise whereby fluctuations in the Marine Corps estimates or actual final costs through the construction of the final remedial action creates a situation where the State receives reimbursement in excess of one percent of these costs. Under these circumstances, the State remains entitled to payment for services rendered prior to the completion of a new estimate if the services are within the ceiling applicable under the previous estimate. This Section does not cover the cost of services rendered prior to October 17, 1986; services and properties not owned by the federal government; and activities funded from sources other than Defense Environmental Restoration Account appropriations.

- (a) Funding of support services must be constrained so as to avoid unnecessary diversion of the limited Defense Environmental Restoration Account funds available for the overall cleanup, and
- (b) Support services should not be disproportionate to overall project costs and budget.

34.8 Either the Marine Corps or the state may request, on the basis of significant upward or downward revisions in the Marine Corps's estimate of its total lifetime costs through construction used in subsection 34.7 above, a renegotiation of the cap. Failing an agreement, either the Marine Corps or the State may initiate dispute resolution in accordance with subsection 34.10 below.

34.9 The State agrees to seek reimbursement for its expenses solely through the mechanisms established in this Section, and reimbursement provided under this Section shall be in settlement of any claims for State response costs relative to the Marine Corps's environmental restoration activities at the Site.

34.10 Section 12 (Dispute Resolution) notwithstanding, this subsection shall govern any dispute between the Marine Corps and the State regarding the application of this Section or any matter controlled by this Section including, but not limited to, allowability of expenses and limits on reimbursement. While it is the intent of the Marine Corps and the State that these procedures shall govern resolution of disputes concerning State reimbursement, informal dispute resolution is encouraged.

(a) The Marine Corps, DHS and RWQCB Project Managers shall be the initial points of contact for coordination of dispute resolution under this Subsection.

(b) If the Marine Corps, DHS and RWQCB Project Managers are unable to resolve a dispute, the matter shall be referred to the Commander, Southwest Division, Naval Facilities Engineering Command, or his designated representative, the DHS Regional Administrator, Region 4, and the RWQCB Assistant Executive Officer as soon as practicable, but in any event within five (5) working days after the dispute is elevated by the Project Managers.

(c) If the persons listed in paragraph 34.10(b) above are unable to resolve the dispute within ten (10) working days, the matter shall be elevated to the DHS Chief Deputy Director, the RWQCB Executive Officer and the Deputy Assistant Secretary of the Navy for Installations and the Environment.

(d) In the event persons listed in paragraph 34.10(c) above are unable to resolve a dispute, the State retains any legal and equitable remedies it may have to recover its expenses. In addition, the State may withdraw from this Agreement by giving sixty (60) days notice to the other Parties.

34.11 Nothing herein shall be construed to limit the ability of the Marine Corps to contract with the State for technical services that could otherwise be provided by a private contractor including, but not limited to:

- (a) Identification, investigation, and cleanup of any contamination beyond the boundaries of Marine Corps Air Station El Toro;
- (b) Laboratory analysis; or
- (c) Data collection for field studies.

34.12 Nothing in this Agreement shall be construed to constitute a waiver of any claims by the State for any expenses incurred prior to the effective date of this Agreement.

## 35. STATE PARTICIPATION CONTINGENCY

35.1 If either DHS or RWQCB fails to sign this Agreement within thirty (30) days of notification of the signature by both EPA and the Marine Corps, this Agreement will be interpreted as if that agency were not a signatory and any reference to that agency in this Agreement will have no effect.

35.2 If both DHS and RWQCB do not sign this Agreement within the 30-day period described in subsection 35.1, this Agreement will be interpreted as if the State were not a Party and any reference in this Agreement to the State, DHS and RWQCB will have no effect. In addition, Marine Corps Air Station El Toro shall have to comply only with those State requirements, conditions or standards, including those specifically listed in this Agreement, that Marine Corps Air Station El Toro would otherwise have had to comply with absent this Agreement.

35.3 If either subsection 35.1 or subsection 35.2 applies,

- (a) the Marine Corps agrees to transmit all primary and secondary documents to the agency or agencies that did not sign this Agreement at the same time such documents are transmitted to EPA; and
- (b) EPA intends to consult with the agency or agencies that did not sign this Agreement with respect to the above documents and during implementation of this Agreement.

## 36. EFFECTIVE DATE AND PUBLIC COMMENT

36.1 The provisions of this Section shall be carried out in a manner consistent with, and shall fulfill the intent of Section 17 (Statutory Compliance/RCRA-CERCLA Integration).

36.2 Within fifteen (15) days of the date of the execution of this Agreement, the Marine Corps shall announce the availability of this Agreement to the public for a forty-five (45) day period of review and comment, including publication in at least two major local newspapers of general circulation. Comments received shall be transmitted to the other Parties within seven (7) days after the end of the comment period. The Parties shall review such comments within fourteen (14) days after such seven-day period and shall meet within seven (7) days after such 14-day period to determine whether this Agreement should be made effective in its present form.

(a) If it is determined that this Agreement should be made effective, EPA shall promptly notify all Parties in writing, and this Agreement shall become effective on the date that Marine Corps Air Station El Toro receives such notification.

(b) If the determination in paragraph 36.2(a) is not made, the Parties shall meet to discuss any proposed changes. If changes are agreed upon, the Agreement, as modified, shall be re-executed by the Parties, with EPA signing last, and shall become effective on the date it is signed by EPA.

(c) If the Parties cannot agree to modify this Agreement pursuant to paragraph 36.2(b) within the second seven day period set forth above (or within such other time period as the Parties agree upon), the Parties shall submit their written notices of position concerning those provisions still in dispute to the DRC. If the DRC is unable to resolve the dispute, the dispute shall be elevated to the SEC. If changes are agreed upon by the DRC or SEC, the Agreement, as modified, shall be re-executed by the Parties, with EPA signing last, and shall become effective on the date it is signed by EPA.

(d) If the SEC cannot resolve the dispute and the proposed changes would impose substantial additional obligations on a Party, such Party may withdraw from this Agreement. Withdrawal by the Marine Corps shall not affect the obligation of the Marine Corps to comply with CERCIA section 120, 42 U.S.C. § 9620, or limit the enforcement powers of EPA or the State.

36.3 Any response action underway upon the effective date of this Agreement shall be subject to the terms of this Agreement unless the Parties agree otherwise.

36.4 At the start of the public comment period, the Marine Corps will also transmit copies of this Agreement, for review and comment, to the appropriate Federal Natural Resource Trustees. The State will transmit copies to appropriate State and local agencies and compile and consolidate comments from these agencies. The State will work with the Marine Corps prior to the start of the public comment period to develop the list of appropriate State and local agencies.

## 37. BASE CLOSURE

37.1 The Marine Corps does not currently plan to close Marine Corps Air Station El Toro. However, in the event that Marine Corps Air Station El Toro is closed, such closure, except as is otherwise specifically provided by law, will not affect the Marine Corps's obligation to comply with the terms of this Agreement and to specifically ensure the following:

- (a) Continuing rights of access for EPA and the State in accordance with the terms and conditions of Section 25 (Access to Marine Corps Air Station El Toro) ;
- (b) Availability of a Project Manager to fulfill the terms and conditions of the Agreement;
- (c) Designation of alternate DRC members as appropriate for the purposes of implementing Section 12 (Dispute Resolution); and
- (d) Adequate resolution of any other problems identified by the Project Managers regarding the effect of base closure on the implementation of this Agreement.

37.2 Base closure will not of itself constitute a Force Majeure under Section 10 (Force Majeure) , nor will it constitute good cause for extensions under Section 9 (Extensions), unless agreed by the Parties.

## 38. APPENDICES AND ATTACHMENTS

38.1 Appendices shall be an integral and enforceable part of this Agreement. They shall include the most current versions of:

- (a) Deadlines previously established.
- (b) Site-specific outline of key elements to be included in the RI/FS Workplan, QAPP, Community Relations Plan, RI Report, FS Report and Treatability Studies.
- (c) All final primary and secondary documents which will be created in accordance with Section 7 (Consultation).
- (d) All deadlines which will be established in accordance with Section 8 (Deadlines) and which may be extended in accordance with Section 9 (Extensions).
- (e) All final primary documents and all completed secondary documents agreed upon by the Parties prior to the effective date of this Agreement.

38.2 Attachments shall be for information only and shall not be enforceable parts of this Agreement. The information in these attachments is provided to support the initial review and comment upon this Agreement, and they are only intended to reflect the conditions known at the signing of this Agreement. None of the facts related therein shall be considered admissions by, nor are they legally binding upon, any Party with respect to any claims unrelated to, or persons not a Party to, this Agreement. They shall include:

- (a) Map(s) of Marine Corps Air Station El Toro (see also subsection 5.10)
- (b) Chemicals of Concern
- (c) Statement of Facts
- (d) Installation Restoration Program Activities

Each undersigned representative of a Party certifies that he or she is fully authorized to enter into the terms and conditions of this Agreement and to legally bind such Party to this Agreement.

## **Appendices**

- A) Deadlines Previously Established
- B) Outline of Topics to Be Addressed in the RI/FS
- C) All Final and Secondary Documents Which Will Be Created in Accordance With Section 7 (Consultation)
- D) All Deadlines Which Will Be Established In Accordance With Section B (Deadlines) and Which May Be Extended in Accordance With Section 9 (Extensions)

## Revised Appendix A

### El Toro MCAS

OU 1	Due Date
Phase I Technical Memo	7 MAY 93
Draft Phase II Workplan	9 AUG 93
Draft RI Report	30 DEC 94
Draft FS Report	23 MAR 95
Draft Proposed Plan	23 JUN 95
Draft Record of Decision	29 DEC 95

OU 2 and 3	Due Date
Phase I Technical Memo	7 MAY 93
Draft Phase II Workplan	9 AUG 93
Draft RI Report	2 JAN 95
Draft FS Report	1 JUN 95
Draft Proposed Plan	1 SEP 95
Draft Record of Decision	12 MAR 96

OU 4	Due Date
Draft RI/FS Workplan	18 AUG 93

Other FFA Milestones and submittal dates for OU 4 will be established following concurrence on the RFA Report.

**Appendix A**

**Revised** (see previous page)

**Deadlines Previously Established**

Documents not submitted before the effective date of this agreement:

1. In accordance with Section 8.1 of this Agreement, the following deadlines for submission of Draft Primary Documents have been agreed upon by the Parties before the effective date of this Agreement:

	- 0U 1-	- 0U 2&3 -	- 0U 4-
Draft RI/FS Workplan (Includes Field Sampling Plan, Quality Assurance Project Plan, and Community Relations Plan)	30 Sep 90	30 Sep 90	15 Dec 91
Draft RI Report (Includes Baseline Risk Assessment)	15 Jun 92	15 Oct 92	15 Sep 93
Draft FS Report (Includes treatability study results)	15 Aug 92	15 Feb 93	15 Jan 94
Draft Proposed Plan	15 Nov 92	15 May 93	15 Apr 94
Draft ROD (includes Responsiveness/Summary)	15 Apr 93	15 Oct 93	15 Sep 94

2. The following deadlines for submission of Draft Secondary Documents for the RFA/Confirmation Study have been agreed upon by the Parties before the effective date of this Agreement. The Navy will make best efforts to incorporate all RFA sites requiring further action into the RI/FS by these dates. If all sites cannot be addressed by then, a schedule for the remaining sites will be negotiated by all Parties, per Section 29 of this Agreement.

Draft Report on records search, VSI and sample plan	15 Mar. 91
Draft RFA Report	15 Dec 91

**OPERABLE UNITS**  
(As Defined by the Effective Date of the Agreement)

Operable Unit # 1

- Site 18 - Regional Groundwater Investigation

Operable Unit # 2

- Site 2 - Magazine Road Landfill
- Site 3 - Original Landfill
- Site 5 - Perimeter Road Landfill
- Site 17 - Communication Station Landfill
- Site 10 - Petroleum Disposal Area

Operable Unit # 3

- Site 1 - Explosive Ordnance Disposal Range
- Site 4 - Ferrocene Spill Area
- Site 6 - Drop Tank Drainage Area No. 1
- Site 7 - Drop Tank Drainage Area No. 2
- Site 8 - DPDO Storage Yard
- Site 9 - Crash Crew pit No. 1
- Site 11 - Transformer Storage Area
- Site 12 - Sludge Drying Beds
- Site 13 - Oil Change Area
- Site 14 - Battery Acid Disposal Area
- Site 15 - Suspended Fuel Tanks C
- Site 16 - Crash Crew Pit No. 2
- Site 19 - ACER Site
- Site 20 - Hobby Shop
- Site 21 - Material Management Group, Building 320
- Site 22 - Tactical Air Fuel Dispensing System

The RFA/Confirmation Study

- The RFA will perform a records search, visual site inspection and a sampling plan, to identify all solid waste management units (SWMUs), and review the sites proposed by the California Regional Water Quality Control Board and all questionable or qualifying underground storage tanks.

Operable Unit # 4

- Any site identified during the RFA/Confirmation Study that warrant inclusion and qualify for the RI/FS program.
- Site 23 - Wastewater Treatment plant Sewer Lines
- Leaking Hazardous Substance Tanks
- Final ROD for Overall site

**Appendix B**  
**Outline of Topics to Be Addressed In**  
**The Remedial Investigation/Feasibility Study**  
**and Related Reports**

The following outlines list topics to be included at a minimum in the RI/FS Documents in Section 7.3(a) (1)-(5) and 7.4(a)(3), as set forth in the most recent version of the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (OSWER Directive 9355.3-01, Interim Final, October, 1988) and applicable State law. The documents shall also include additional topics and tasks, as appropriate, as set forth in the guidance.

- 1.0 RI/FS Work Plan
  - Executive Summary
    - 1. Introduction
    - 2. Site Background and Setting
    - 3. Initial Evaluation
      - 3.1 Types and Volumes of Waste Present
      - 3.2 Potential Pathways of Contaminant Migration/Preliminary Public Health and Environmental Impacts
      - 3.3 Preliminary Identification of Operable Units
      - 3.4 Preliminary Identification of Response Objectives and Remedial Action Alternatives
    - 4. Work Plan Rationale
      - 4.1 Data Quality Objectives
      - 4.2 Work Plan Approach
    - 5. RI/FS Tasks
    - 6. Costs and key assumptions
    - 7. Schedule (including Operable Units)
    - 8. Project Management 8.1 Staffing 8.2 Coordination
    - 9. References Appendices
  
- 2.0 Quality Assurance Project Plan
  - Title Page
  - Table of Contents
    - 1. Project Description
    - 2. Project Organization and Responsibilities
    - 3. QA Objectives for Measurement of Data
    - 4. Sampling Procedures
    - 5. Sample Custody
    - 6. Calibration Procedures
    - 7. Analytical Procedures
    - 8. Data Reduction, Validation and Reporting
    - 9. Internal Quality Control
    - 10. Performance and Systems Audits
    - 11. Preventative Maintenance
    - 12. Data Assessment Procedures
    - 13. Corrective Action
    - 14. Quality Assurance Reports

- 3.0 Sampling and Analysis Plans
  - 1. Site Background
  - 2. Sampling Objectives
  - 3. Sample Location and Frequency
  - 4. Sample Designation
  - 5. Sampling Equipment and Procedures
  - 6. Sample Handling and Analysis
  
- 4.0 Community Relations Plan
  - 1. Overview of Community Relations Plan
  - 2. Capsule Site Description
  - 3. Community Background
  - 4. Highlights of Program
  - 5. Techniques and Timing Appendices
  
- 5.0 RI Report
  - Executive Summary
    - 1. Introduction
      - 1.1 Purpose of Report
      - 1.2 Site Background
        - 1.2.1 Site Description
        - 1.2.2 Site History
        - 1.2.3. Previous Investigations
      - 1.3 Report Organization
    - 2. Study Area Investigation
      - 2.1 Includes field activities associated with f site characterization. These may include physical and chemical monitoring of some, but not necessarily all, of the following:
        - 2.1.2 Surface Features (topographic mapping, etc.) (natural and manmade features)
        - 2.1.3 Contaminant Source Investigations
        - 2.1.4 Surface-water and Sediment Investigations
        - 2.1.5 Geologic Investigations
        - 2.1.6 Soil and Vadose Zone Investigations
        - 2.1.7 Ground Water Investigations
        - 2.1.8 Human Population Surveys
        - 2.1.9 Ecological Investigations
      - 2.2 If technical memoranda documenting field ac-activities were prepared, they may be included in an appendix and summarized in this chapter.
    - 3. Physical Characteristics of the Study Area
      - 3.1 Includes results of field activities to determine physical characteristics. These may include some, but not necessarily all, of the following:
        - 3.1.1 Surface Features
        - 3.1.2 Meteorology.
        - 3.1.3 Surface Water Hydrology
        - 3.1.4 Geology
        - 3.1.5 Soils
        - 3.1.6 Hydrogeology
        - 3.1.7 Demography and Land Use
        - 3.1.8 Ecology

4. Nature and Extent of Contamination
  - 4.1 Presents the results of site characterization, both natural chemical components and contaminants in the following:
    - 4.1.1 Sources
    - 4.1.2 Soils and Vadose Zone
    - 4.1.3 Ground Water
    - 4.1.4 Surface Water and Sediments
    - 4.1.5 Air
    - 4.1.6 Biota
    - 4.1.7 Fish and Wildlife
5. Contaminant Fate and Transport
  - 5.1 Potential Routes of Migration (i.e., air, ground water, etc.)
  - 5.2 Contaminant Persistence
    - 5.2.1 If they are applicable (i.e., for organic contaminants), describe estimated persistence in the study area environment and physical, chemical, and/or biological factors of importance for the media of interest.
  - 5.3 Contaminant Migration
    - 5.3.1 Discuss factors affecting contaminant migration for the media of importance (e.g., sorption onto soils, solubility in water, movement of ground water, etc).
    - 5.3.2 Discuss modeling methods and results, if applicable.
6. Baseline Risk Assessment
  - 6.1 Human Health Evaluation
    - 6.1.1 Exposure Assessment
    - 6.1.2 Toxicity Assessment
    - 6.1.3 Risk Characterization
  - 6.2 Environmental Evaluation
7. Summary and Conclusions
  - 7.1 Summary
    - 7.1.1 Nature and Extent of Contamination
    - 7.1.2 Fate and Transport
    - 7.1.3 Risk Assessment
  - 7.2 Conclusions
    - 7.2.1 Data Limitations and Recommendations for Further Work
    - 7.2.3 Recommended Remedial Action Objectives

## 6.0 FS Report

### Executive Summary

1. Introduction
  - 1.1 Purpose and Organization of Report
  - 1.2 Background Information (Summarized from RI)
    - 1.2.1 Site Description
    - 1.2.2 Site History
    - 1.2.3 Nature and Extent of Contamination
    - 1.2.4 Contaminant Fate and Transport
    - 1.2.5 Baseline Risk. Assessment
2. Identification and Screening of Technologies
  - 2.1 Introduction
  - 2.2 Remedial Action Objectives - Presents the development of remedial action objectives for each medium of interest (ground water/soil, surface water, air, ecological, etc.). For each medium, the following should be discussed:

- 2.2.1 Contaminants of Interest
- 2.2.2 Allowable Exposure Based on Risk Assessment (Including ARARs)
- 2.2.3 Development of Remediation Goals
- 2.3 General Response Actions - For each medium of interest, describes the estimation of areas or volumes to which treatment, containment, or disposal technologies may be applied.
- 2.4 Identification and Screening of Technology Types and Process Options - For each medium of interest, describes:
  - 2.4.1 Identification and Screening of Technologies
  - 2.4.2 Evaluation of Technologies and selection of Representative Technologies
- 3. Development and Screening of Alternatives
  - 3.1 Development of Alternatives - Describes rationale for combination of technologies/media into alternatives. Note: This discussion may be by medium or for the site as a whole.
  - 3.2 Screening of Alternatives (if conducted)
    - 3.2.1 Introduction
    - 3.2.2 Alternative 1
      - 3.2.2.1 Description
      - 3.2.2.2 Evaluation of:
        - Effectiveness
        - Implementability
        - Cost
    - 3.2.3 Alternative 2
      - 3.2.3.1 Description
      - 3.2.3.2 Evaluation
    - 3.2.4 Alternative 3
- 4. Detailed Analysis of Alternatives
  - 4.1 Introduction
  - 4.2 Individual Analysis of Alternatives
    - 4.2.1 Alternative 1
      - 4.2.1.1 Description
      - 4.2.1.2 Assessment of:
        - Overall Protection
        - Compliance with ARARs
        - Long-term Effectiveness and Permanence
        - Reduction of Toxicity, Mobility or Volume Through Treatment
        - Short-Term Effectiveness
        - Implementability
        - Cost
        - State Acceptance
        - Community Acceptance
    - 4.2.2 Alternative 2
      - 4.2.2.1 Description
      - 4.2.2.2 Assessment
    - 4.2.3 Alternative 3
  - 4.3 Comparative Analysis Bibliography Appendices
- 7.0 Treatability Investigations - The need for treatability testing should be identified as early in the RI/FS process as possible. The purpose is to provide information needed for the detailed analysis

of alternatives and to allow selection of a remedial action with a reasonable certainty of achieving the response actions. In general, treatability testing will include the following:

1. A work plan for Bench or Pilot Scale - see Chapter 5 of the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (October, 1968), for example work plan outlines
2. Performing field sampling, and or bench testing or pilot testing
3. Evaluating data from field studies and or bench or pilot testing
4. Preparing a brief report documenting the results of the testing

**Appendix C**  
**All Final Primary and Secondary Documents**  
**Which Will Be Created**  
**In Accordance With Section 7 (Consultation)**

**(To be incorporated by reference)**

**Appendix D**  
**All Deadlines Which Will Be Established In**  
**Accordance With Section 8 (Deadlines) and Which**  
**May Be Extended in Accordance With Section 9 (Extensions)**

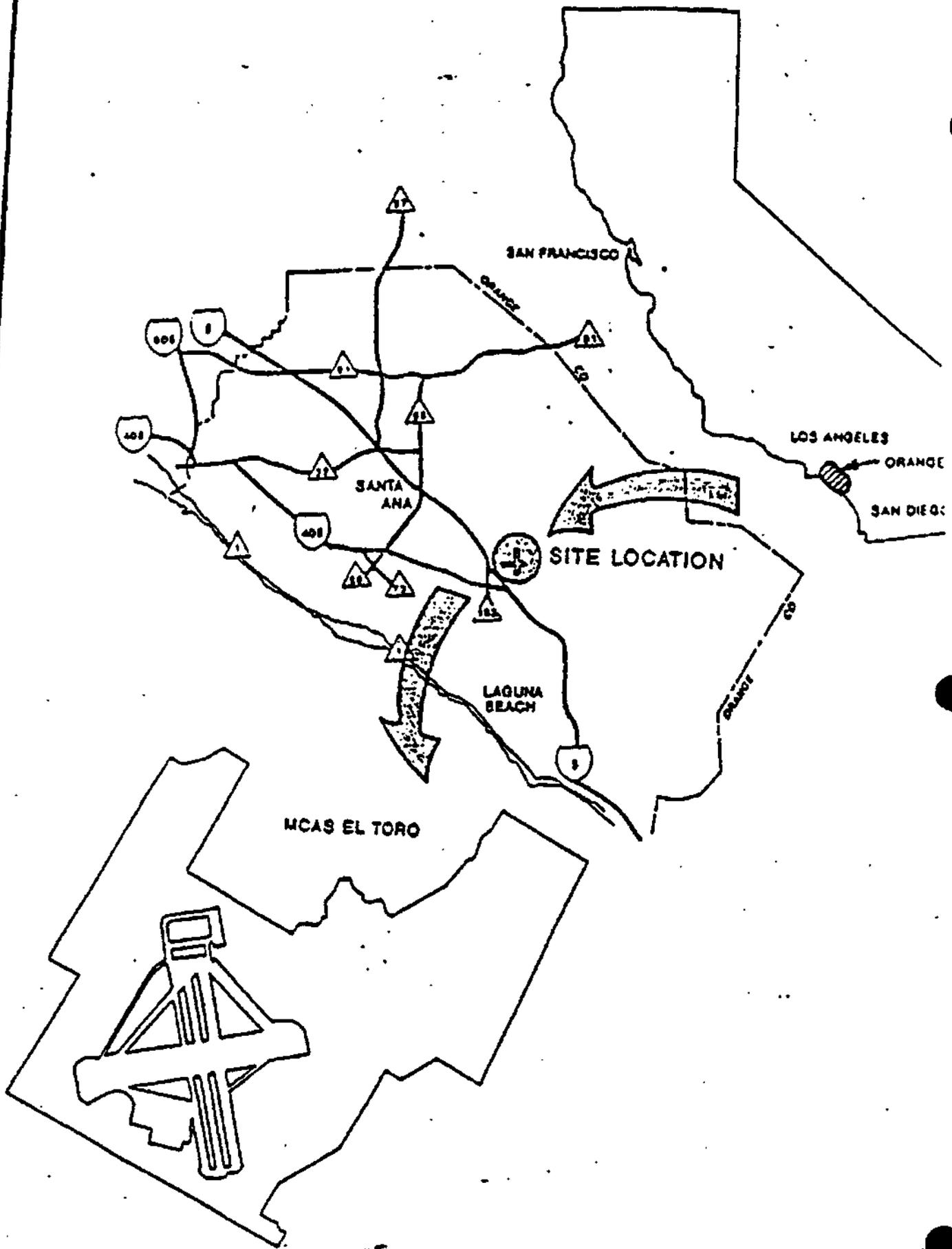
**(To be incorporated by reference)**

## **Attachments**

- A) Site Maps
- B) Chemicals of Concern
- C) Statement of Facts
- D) ISP Activities

## **Attachment A**

### **Site Map(s)**

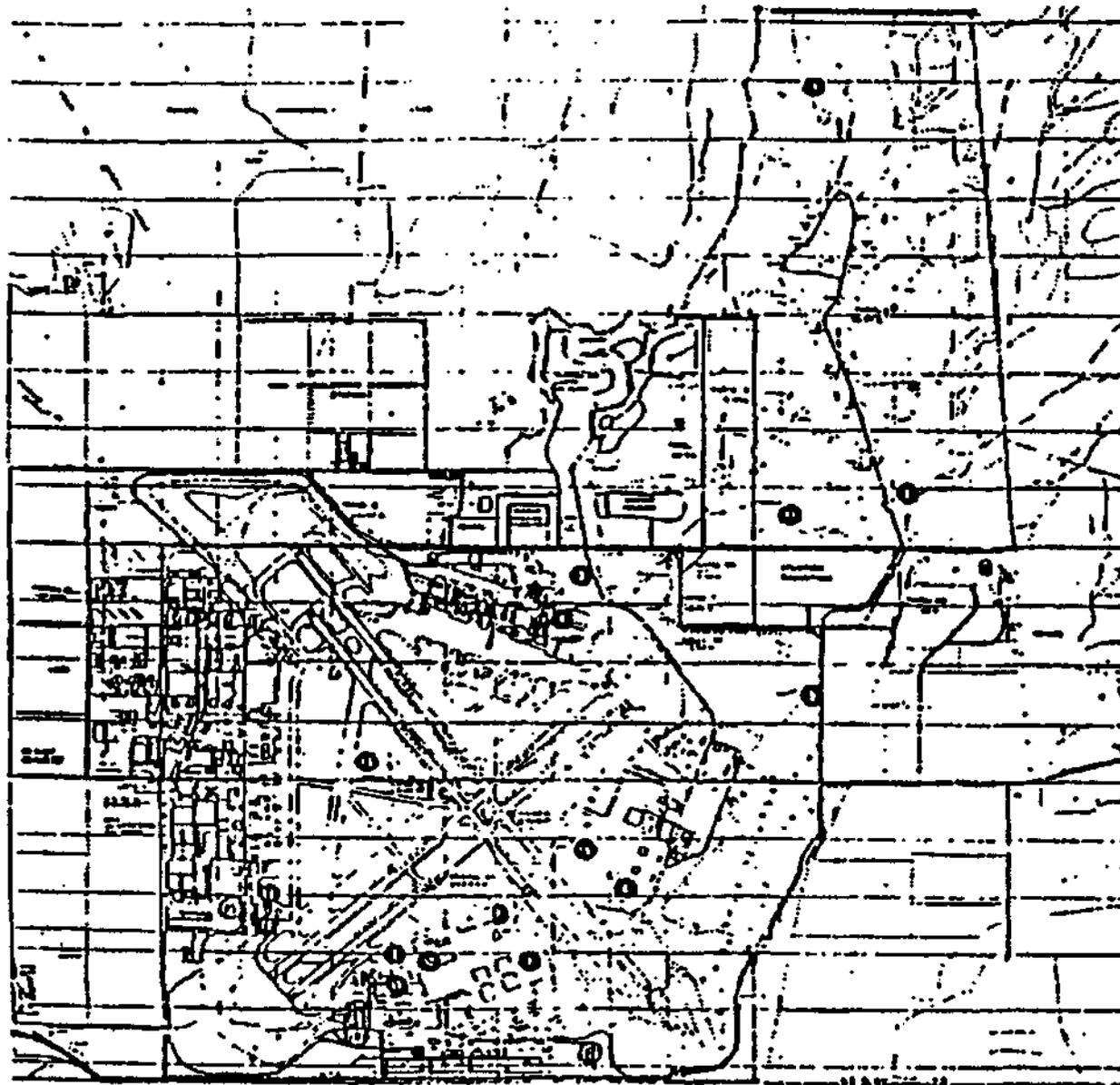


MCAS EL TORO  
SITE LOCATION



# **TECHNICAL ATTACHMENTS**

## **Federal Facilities Agreement**



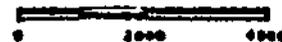
50 500 1000


**INSTALLATION RESTORATION PROGRAM**  
**MARINE CORPS AIR STATIONS**  
**TUSAN AND E. TORO, CALIFORNIA**

**LEGEND**

● SITE NUMBER AND LOCATION

SCALE IN FEET



**FIGURE 9**

**MCAS EL TORO, CALIFORNIA**

**Attachment B**  
**Chemicals of Concern**

## **Chemicals of Concern El Toro Marine Corps Air Station**

This description of the toxicity of chemicals of concern at El Toro MCAS is for reference only and should not be interpreted as describing effects on any individual person.

This list represents chemicals of concern known at the time of this Agreement. It is based on limited sampling only and does not include chemicals suspected of being present at one or more sites at El Toro. An assessment of any risk of these chemicals to potentially exposed populations will be conducted as part of the Remedial Investigation (RI). This list may change as the RI continues.

### DEFINITIONS

**Acute Toxicity** - Toxicity manifested within a relatively short time interval (i.e., as short as a few minutes to as long as several days). Such toxicity is frequently caused by a single dose of the toxicant.

**Chronic Toxicity** - The adverse effects manifested after a long time period of uptake of small quantities of a toxicant. The dose is small enough that no acute effects are manifested, and the time period is frequently a significant part of the expected normal lifetime of the organism. The most serious manifestation of chronic toxicity is carcinogenesis, but other types of chronic toxicity are also known (e.g., reproductive effects and behavioral effects) .

#### Acetone 67-64-1

- Acute: irritation of eyes, nose and throat, headaches, dizziness and dermatitis, CNS depression, bronchial irritation and pulmonary congestion.
- Chronic: CNS depression and respiratory system damage

#### Benzene 71-43-2

- Acute: strong CNS depressant, dizziness, weakness, heart irregularities, coma, convulsions, cerebral edema, cardiac and respiratory failure
- Chronic: hematopoietic system depression, bone marrow damage, anemia, skin rash, aplastic anemia, leukemia

#### Carbon Tetrachloride 56-23-5

- Acute: headaches, nausea, dizziness, eye irritation, dermatitis, gastrointestinal upset
- Chronic: kidney damage (nephrosis), liver degeneration and jaundice, CNS depression, possible mutagen, suspected human carcinogen

#### Chlorobenzene 108-90-7

- Acute: irritation of the eyes and nose, drowsiness, incoherence, skin irritation, liver damage
- Chronic: kidney and liver damage, possible mutagen

#### Chloroform 67-66-3

- Acute: pupil dilation, irritation of mucous membranes, conjunctiva and skin, loss of reflexes, sensation and consciousness, cardiac/respiratory failure.
- Chronic: heart, liver and kidney damage, possible mutagen, suspected human carcinogen

#### 1,1-Dichloroethane 75-34-3

- Acute: eye irritant, unconsciousness, liver, kidney and lung damage, CNS depression
- Chronic: loss of appetite, nausea, epigastric pain, mucous membrane irritant, liver and kidney impairment

## Chemicals of Concern El Toro Marine Corps Air Station

### 1,1-Dichloroethene 75-35-4

Acute: CNS depressant, unconsciousness, eye and skin irritant  
Chronic: liver and kidney damage

### cis-1, 2-Dichloroethylene 156-59-2

Acute: none found  
Chronic: possible mutagen and suspected human carcinogen

### trans-1,2-Dichloroethylene 156-60-5

Acute: nausea, vomiting, weakness, tremor and cramps, dermatitis  
Chronic: mutagen, CNS Depression, kidney damage

### Ethyl Benzene 100-41-4

Acute: eye, skin and mucous membrane irritation, dermatitis, CMS depression  
Chronic: possible teratogen and mutagen, chronic dermatitis

### Methyl Ethyl Ketone 78-93-3

Acute: irritation of eyes and nose, headaches, dizziness, vomiting  
Chronic: peripheral and central nervous system depression, possible teratogen

### Tetrachloroethylene 127-18-4

Acute: dermatitis, eye and mucous membrane irritation, CNS depression, gastrointestinal irritation  
Chronic: liver damage, mutagen, possible teratogen and human carcinogen

### Toluene 108-88-3

Acute: eye, skin and mucous membrane irritation, CNS depression  
Chronic: dermatitis, possible teratogen, mutagen, liver and bone marrow damage, CNS damage

### 1,1,1-Trichloroethane 71-55-6

Acute: eye, skin and mucous membrane irritant, cardiac arrhythmia, CNS depression  
Chronic: dermatitis, possible teratogen and carcinogen; mutagen

### 1,1,2-Trichloroethane 79-00-5

Acute: CNS depression, eye and nose irritant  
Chronic: CNS depression, liver and kidney damage

### Trichloroethylene 79-01-6

Acute: skin, eyes and mucous membrane irritant, CNS depression  
Chronic: dermatitis, possible tumorigen, teratogen and carcinogen; mutagen, gastrointestinal and liver

### Xylenes 1330-20-7

Acute: nose, eye and throat irritant, dizziness, drowsiness, nausea, kidney and liver damage, CNS depression  
Chronic: eye damage, dermatitis, tremors, liver and kidney damage, digestive disorders, fatigue, loss of appetite

## Attachment C

### Statement of Facts

For the purposes of this Agreement, the following constitutes a summary of the facts upon which this Agreement is based. None of the facts related herein shall be considered admissions by any Party, nor shall they be used by any person for purposes unrelated to this Agreement.

The Parties have determined that:

1. El Toro Marine Corps Air Station (El Toro) is located on 5,000 acres in a primarily urban area of El Toro, Orange County, California. The base lies at the foot of the Santa Ana Mountains and encompasses a portion of the Tustin Plain. Soils at the installation grade from a thin layer of sand and gravel near the mountains, to thick deposits of silt and clay underlying the Tustin Plain. Ground water in this area is recharged primarily by agricultural irrigation water, and by infiltration in stream channels entering the basin from the Santa Ana Mountains. Four intermittent streams flow either through or adjacent to the El Toro site. Two flow along the border of the facility, with two passing through the center of the site. All three streams flow into San Diego Creek southwest of the site, with San Diego Creek flowing into Newport Bay 14km from the site. San Diego Creek was originally an intermittent stream, but is now a continuously flowing, low gradient stream due to surface water runoff from development in the watershed. Newport Bay empties into the Gulf of Santa Catalina.
2. The United States Marine Corps established El Toro in 1943. El Toro is the center for USMC aviation operations on the west coast.
3. Major activities at El Toro contributing to the generation of hazardous wastes include vehicle maintenance, ground support maintenance, aircraft maintenance, and aircraft corrosion control. Other waste generating activities include munitions disposal, pest control, fire protection training, and laboratory operations including photo development, nondestructive inspection, and fuel analysis.
4. Wastes generated by the maintenance operations include spent solvents and waste oils (including TCE, TCA, MEK, toluene, and PD-680), fuels, and greases removed from the spent solvents, and spent strippers.
5. Aircraft washrack activities result in discharge of alkaline soaps, detergents, and small amounts of PD-680. Vehicle and aircraft waste discharge produces the greatest volume of industrial waste of any of the base activities.
6. El Toro was placed on the National Priorities List of Hazardous Sites on February 16, 1990.
7. Work under the Installation Restoration Program has identified 22 sites thus far, requiring investigation under the RI/FS. The Santa Ana Regional Water Quality Control Board requested in June, 1989 that approximately thirty additional sites be investigated for possible inclusion in the IR program. Additional source identification will be conducted during the RI/FS work planning and under the RCRA/CERCLA integration provision of this agreement. Those sources will be incorporated into the RI/FS work. Sites identified thus far include:

Site 1 - Explosive Ordnance Disposal (EOD) - Possible soil contamination from ordnance disposal, including low-level radioactive wastes.

Site 2 - Magazine Road Landfill - Landfill used for disposal of unburned wastes. Possible contamination of soil and/or groundwater sources includes polychlorinated biphenyls (PCBs), petroleum hydrocarbons, organic solvents, and heavy metals.

Site 3 - Original Landfill - Landfill along Agua Chinon Wash containing burned wastes. Possible contamination of soil and/or groundwater sources includes PCBs, petroleum C hydrocarbons, organic solvents, and heavy metals.

Site 4 - Ferrocene Spill Area - Drainage ditch adjacent to North 9th Street, near building 658, with possible soil and/or groundwater contamination from ferrocene and hydrocarbon carrier spill that occurred in 1983.

Site 5 - Perimeter Road Landfill - Landfill north of station golf course containing burned wastes. Possible contamination from organic solvents, paint residue and oily wastes.

Site 6 - Drop Tank Drainage Area No. 1 - Possible contamination from disposal of JP-5 fuel and lubricating oil.

Site 7 - Drop Tank Drainage Area No. 2 - Possible contamination from JP-5 and waste lubricating oil disposed of on area soil as a dust suppressant from 1969 to 1983.

Site 8 - DPDO Storage Area - Possible contamination from a spill of several gallons of transformer fluid containing PCB's. The 1984 spill occurred adjacent to ramp 633. Approximately 10,000 lbs. of material was removed to about 1 foot in depth in the spill area.

Site 9 - Crash Crew Pit No. 1 - Possible groundwater contamination from waste liquids percolating into the surrounding soils during crash crew training.

Site 10 - Petroleum Disposal Area - Possible contamination from petroleum wastes used as a dust suppressant from 1952 to mid 1960.

Site 11 - Transformer Storage Area - Possible contamination from PCB spillage onto soil during 1968 to 1983 timeframe.

Site 12 - Sludge Drying Beds - Located west of building 493, a secondary treatment plant dewatered sludge in drying beds. Reportedly, 880 cubic yards of sludge was plowed under at this location.

Site 13 - Oil Change Area - Possible soil contamination from land disposal of heavy equipment waste crankcase oil.

Site 14 - Battery Acid Disposal Area - Possible heavy metal, organic compound and petroleum hydrocarbon contamination from battery acids oil wastes and paint wastes disposed of on soil.

Site 15 - Suspended Fuel Tanks - Diesel fuel spill of more than 500 gallons from elevated fuel tanks between 1979 and 1984. Site 15 is located northeast of building 31. These tanks have been removed.

Site 16 - Crash Crew Pit No. 2 - Possible soil and/or groundwater contamination from crash crew training.

Site 17 - Communication Station Landfill - Landfill adjacent to buildings 394 and 573 containing an unknown quantity of liquid wastes.

Site 18 - Perimeter Investigation Area - Investigation to identify whether TCE contamination observed off-station is a result of past waste generation or disposal activities on-station.

Site 19 - Assess, Critique, Evaluate and Review (ACER) Site- Area situated near buildings 404 and 414 with possible soil and/or groundwater contamination from JP-5 fuel and a fuel bladder rupture that occurred in early 1986.

Site 20 - Hobby Shop (Building 626). Possible soil contamination from used oil and solvents. A 600 gallon waste oil tank is located west of building 626 along with three 50 gallon storage drums for solvents inside the building.

Site 21 - Material Management Group & Supply Center Storage (Building 320). Drums containing chemicals are stored outside building 320. Possible soil contamination from leaking drums

Site 22 - Tactical Air Fuel Dispensing System (TAFDS) Operations Area. Previously removed fuel bladders west of Site #10. Located east of building 369 and consisting of four 10,000 gallon rubberized fabric tanks needed for aircraft fueling. Possible soil and groundwater contamination iron leaking tanks, fittings and hoses. These' tanks have been removed.

Site 23 - Wastewater treatment plant sewer lines. Possible soil and groundwater contamination from leaking sewer lines.

## **Attachment D**

### **Installation Restoration Activities**

In 1976 the Department of Defense (DOD) Initiated the Installation Restoration Program (IRP) to evaluate, characterize, and control the potential migration of possible contaminants resulting from. past operations and disposal practices on DOD facilities.

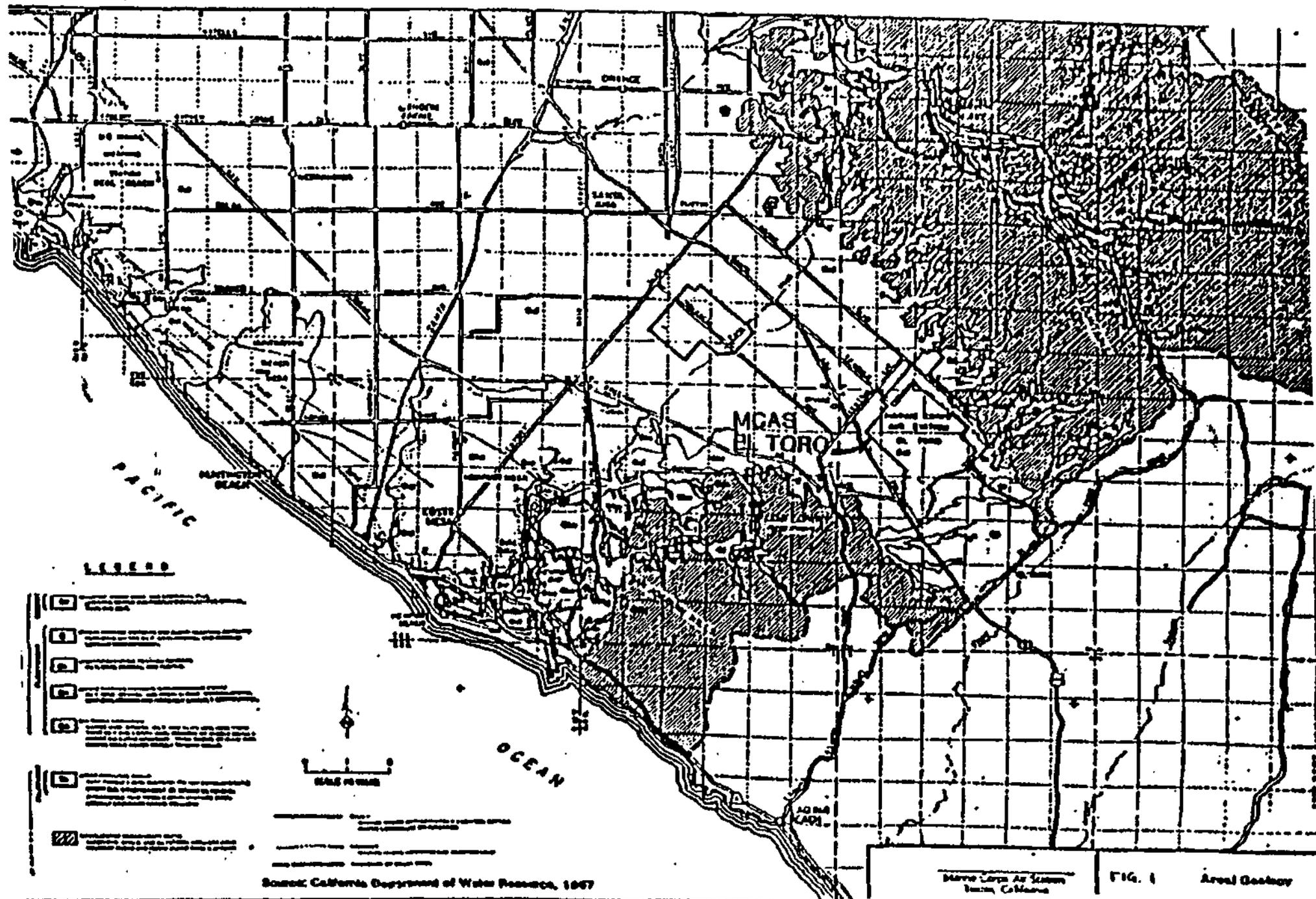
The four phases of the IRP are:

- Phase 1 - Problem Identification/Records Search
- Phase 2 - Problem Confirmation/Quantification Study
- Phase 3 - Technology Base Development
- Phase 4 - corrective Action

In response to the DOD IRP, the Navy Assessment and Control of Installation Pollutants (NACIP) Program was instituted. NACIP was conceived as a three-phase process, including an Initial Assessment study (IAS) (identification of sites); Confirmation Study (CS) (investigation of sites), and; Corrective Measures Implementation.

The NACIP Program was replaced by the current IRP in 1983. Since the current IRP was authorized, modifications have been made to include compliance with CERCLA/SARA and use of National Contingency Plan-terminology and procedures. As a result of these changes, the Navy now complies with NCP terminology and requirements and follows the EPA Remedial Investigation/Feasibility Study (RI/FS) process.

The three major IRP investigations conducted at the El Toro MCAS are documented in the Initial Assessment Study of MCAS El Toro (May, 1986), the MCAS El Toro Perimeter Investigation (April, 1989), and the MCAS El Toro Off-Station Remedial Investigation, Draft Work Plan (November, 1989). The IAS addressed seventeen sites and recommended nine for further investigation. In response to regulatory agency comments during September 1986, four sites were added to the Site Investigation. A Plan of Action for further study was developed, reviewed in the Technical Review Committee, and finalized in August 1988. The number of sites thus far identified under the IRP is twenty-two, which are described in Attachment C, Statement of Facts. It should be noted that the discovery and identification of IR sites (or RI sites) will be an iterative, on-going process. During the course of the investigation new information may be obtained or new sites observed that will require inclusion into the RI/FS. In addition, the RCRA Corrective Action requirements that must be fulfilled under the terms of this Agreement, require identification of Solid Waste Management Units that must be evaluated for inclusion in the RI/FS. State requirements for addressing releases, must be included, as well.



## **Appendix 2**

## Appendix 2

### Evaluation Concentration Levels (ECL) for Groundwater (all units as micrograms/liter)

Analytes	ECL for Point of Connection of DoN's Shallow Groundwater Unit (SGU) Conveyance Pipeline (a)	ECL for CCMI central VOC Treatment Plant Intake
<b>General Chemistry (mg/L)</b>		
ALKALINITY AS CaCO <sub>3</sub>	302	290
Ca	287	169
Cl	393	264
HCO <sub>3</sub>	363	
HCO <sub>3</sub> (AS CaCO <sub>3</sub> )	302	
K	5	4
Na	188	195
NO <sub>3</sub>	181	67
NO <sub>3</sub> (N)	30.2	8
NO <sub>3</sub> /NO <sub>2</sub> (N)	33.5	
SO <sub>4</sub>	479	376
SILICA	60	59
TDS	2147	1450
pH	N/A	>5.9 & <9.1
<b>Metals and Cyanide (µg/L)</b>		
Ag	100	
Al	50	40
As	2.1	10
Ba	200 (b)	68
Cd	5	4
CN	200	
Co	9.2	
Cr (total)	50	9
Cu	50 (b)	70
Fe	300	240
Hg	2	0.6
Mg	91.2	
Mn	79.3	110

## Appendix 2

### Evaluation Concentration Levels (ECL) for Groundwater (all units as micrograms/liter)

Analytes	ECL for Point of Connection of DoN's Shallow Groundwater Unit (SGU) Conveyance Pipeline (a)	ECL for CCMI central VOC Treatment Plant Intake
Ni	233	
Pb	50	8
Sb	27.1	
Se	33.2	19
V	25.7	
Zn	200 (b)	
<b>Radionuclides (pCi/L)</b>		
GROSS BETA	50	11.5
GROSS ALPHA	15	6.3
<b>Volatile Organic Compounds (µg/L)</b>		
1,1,1-TCA	200	15.4
1,1,2-TCA	5	
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.2	
1,1-DCA	5	
1,1-DCE	6	
1,2-DCA	1.8	0.14
1,2-DCE (TOTAL)	10	
1,2-DCE, Cis-	6	
BENZENE	4.5	0.35
CARBON DISULFIDE	1.8	
CCl <sub>4</sub>	3.6	0.28
CHLOROFORM	80	6.4
ETHYLBENZENE	680	52.5
METHYL CHLORIDE	2.8	
METHYLENE CHLORIDE	5	
PCE	5.2	0.5
PHENOL	17.7	
TCE	237	22

## Appendix 2

### Evaluation Concentration Levels (ECL) for Groundwater (all units as micrograms/liter)

Analytes	ECL for Point of Connection of DoN's Shallow Groundwater Unit (SGU) Conveyance Pipeline (a)	ECL for CCMi central VOC Treatment Plant Intake
TOLUENE	150	11.6
XYLENE (TOTAL)	1750	
<b>Other Organic Constituents (µg/L)</b>		
2-HEXANONE	3.5	
2-PENTANONE, 4-HYDROXY-4-METHYL	16.5	
BENZYL BUTYL PHTHALATE	100	
BIS(2-ETHYLHEXYL)PHTHALATE	17.7	
DI-N-OCTYL PHTHALATE	7.0	
STYRENE	100	
TPH DIESEL	513	
TPHVOA	132	
PERCHLORATE	23 (c)	1.8
METHYL TERTIARY BUTYL ETHER (MTBE)	5	

**Notes:**

(a) Highest concentration of either:

1. Source of Maximum Credible Values (MCVs): Table C-1g of OU-1 IAFS Addendum dated August 9, 1996. Inorganic Data: Average values are unchanged from monitoring well values, maximum credible data are 1.59 times average value. VOC and SVOC Data: Average values are based on monitoring well data for each VOC and SVOC times the ratio of the average (highest or lowest, depending on which column) TCE concentration at the extraction well (See Table C-1e of the OU-1 IAFS Addendum) divided by the average TCE value for the monitoring wells. Maximum credible data are calculated similarly using peak (90% confidence level) TCE data; or
2. Most stringent primary, secondary, or proposed Maximum Contaminant Level (MCL), Federal or State

(b) Revised due to OCWD/IRWD requirement (June 24, 1998).

(c) Highest value detected in SGU to date.

## **Appendix 3**

## APPENDIX 3

### Known Analytes Detected in On-Base and Off-Base Groundwater Wells

ID/CAS Number (a)	Analyte Name	Listed on App. 2	OCWD/RWD Identified	El Toro Site ID
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	X	X	24
79-00-5	1,1,2-TRICHLOROETHANE	X		24
75-35-4	1,1-DICHLOROETHYLENE	X		24
106-93-4	1,2-DIBROMOETHANE			24
95-50-1	1,2-DICHLOROBENZENE			24
107-06-2	1,2-DICHLOROETHANE	X	X	24
540-59-0	1,2-DICHLOROETHYLENE (TOTAL)	X	X	24
78-87-5	1,2-DICHLOROPROPANE		X	24
106-46-7	1,4-DICHLOROBENZENE			24
78-93-3	2-BUTANONE		X	24
110-75-8	2-CHLOROETHYL VINYL ETHER			18
104-76-7	2-ETHYL-1-HEXANOL			24
149-57-5	2-ETHYL-HEXANOIC ACID			24
928-68-7	2-HEPTANONE, 6-METHYL-			24
591-78-6	2-HEXANONE	X	X	24
123-42-2	2-HYDROXY-2-METHYL-4-PENTANONE			24
91-57-6	2-METHYLNAPHTHALENE			24
107-87-9	2-PENTANONE			24
108-10-1	4-METHYL-2-PENTANONE		X	24
75-07-0	ACETALDEHYDE			24
67-64-1	ACETONE		X	24
10-09-3	ALKALINITY (AS CaCO3)	X	X	24
7429-90-5	ALUMINUM	X	X	24
7664-41-7	AMMONIA		X	24
7440-36-0	ANTIMONY	X	X	24
7440-38-2	ARSENIC	X	X	24
7440-39-3	BARIUM	X	X	24

### APPENDIX 3

## Known Analytes Detected in On-Base and Off-Base Groundwater Wells

ID/CAS Number (a)	Analyte Name	Listed on App. 2	OCWD/IRWD Identified	EI Toro Site ID
71-43-2	BENZENE	X	X	24
3622-84-2	BENZENESULFONAMIDE, N-BUTYL-			18
7440-41-7	BERYLLIUM		X	24
71-52-3	BICARBONATE	X	X	24
10-26-4	BIOCHEMICAL OXYGEN DEMAND			24
80-05-7	BISPHENOL A			24
10-26-4	BOD5			18
75-27-4	BROMODICHLOROMETHANE		X	24
75-25-2	BROMOFORM		X	24
123-72-8	BUTANAL			24
85-68-7	BUTYL BENZYL PHTHALATE			24
7440-43-9	CADMIUM	X	X	24
7440-70-2	CALCIUM	X	X	24
75-15-0	CARBON DISULFIDE	X	X	24
56-23-5	CARBON TETRACHLORIDE	X		24
10-27-5	CHEMICAL OXYGEN DEMAND			24
16887-00-6	CHLORIDE	X	X	24
124-48-1	CHLORODIBROMOMETHANE			18
67-66-3	CHLOROFORM	X	X	24
74-87-3	CHLOROMETHANE		X	24
57-88-5	CHOLESTEROL			24
7440-47-3	CHROMIUM	X	X	24
156-59-2	CIS-1,2-DICHLOROETHENE		X	24
7440-48-4	COBALT	X	X	24
7440-50-8	COPPER	X	X	24
541-05-9	CYCLOTRISILOXANE, HEXAMETHYL-			18
117-84-0	DI-N-OCTYL PHTHALATE			24
100-41-4	ETHYLBENZENE	X	X	24

### APPENDIX 3

## Known Analytes Detected in On-Base and Off-Base Groundwater Wells

ID/CAS Number (a)	Analyte Name	Listed on App. 2	OCWD/IRWD Identified	EI Toro Site ID
16984-48-8	FLUORIDE		X	24
111-71-7	HEPTANAL			24
66-25-1	HEXANAL			24
7439-89-6	IRON	X	X	18
7439-89-6F	IRON, FERRIC			24
15438-31-0	IRON, FERROUS			24
7439-92-1	LEAD	X	X	24
136777-61-2	M,P-XYLENE			24
7439-95-4	MAGNESIUM	X	X	24
7439-96-5	MANGANESE	X	X	24
7439-97-6	MERCURY	X	X	24
1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	X	X	24
75-09-2	METHYLENE CHLORIDE	X	X	24
7439-98-7	MOLYBDENUM			24
544-63-8	MYRISTIC ACID			24
91-20-3	NAPHTHALENE			24
7440-02-0	NICKEL	X	X	24
14797-55-8	NITRATE-N	X	X	24
10-28-6	NITRATE/NITRITE-N	X	X	24
14797-65-0	NITRITE			24
124-19-6	NONANAL			24
124-13-0	OCTANAL			24
57-10-3	PALMITIC ACID			24
110-62-3	PENTANAL			24
7778-74-7	PERCHLORATE	X	X	24
14265-44-2	PHOSPHATE		X	24
7440-09-7	POTASSIUM	X	X	24
123-38-6	PROPANAL			24

### APPENDIX 3

## Known Analytes Detected in On-Base and Off-Base Groundwater Wells

ID/CAS Number (a)	Analyte Name	Listed on App. 2	OCWD/IRWD Identified	EI Toro Site ID
115-07-1	PROPYLENE			24
129-00-0	PYRENE			24
7782-49-2	SELENIUM	X	X	24
7631-86-9	SILICA	X	X	24
7440-21-3	SILICON			24
7440-22-4	SILVER	X	X	24
7440-23-5	SODIUM	X	X	24
7440-24-6	STRONTIUM			24
100-42-5	STYRENE	X	X	24
14808-79-8	SULFATE	X	X	24
127-18-4	TETRACHLOROETHYLENE	X	X	24
109-99-9	TETRAHYDROFURAN			24
7440-28-0	THALLIUM		X	24
108-88-3	TOLUENE	X	X	24
10-33-3	TOTAL DISSOLVED SOLIDS	X	X	24
10-92-4	TOTAL HARDNESS (as CaCO <sub>3</sub> )		X	24
10-07-1	TOTAL KJELDAHL NITROGEN		X	24
10-35-5	TOTAL ORGANIC CARBON		X	24
10-32-2	TOTAL SUSPENDED SOLIDS			24
1330-20-7	TOTAL XYLENES			24
68334-30-5	TPH AS DIESEL	X	X	18
8006-61-9	TPH AS GASOLINE (TPHVOA)	X	X	24
156-60-5	TRANS-1,2-DICHLOROETHENE			24
79-01-6	TRICHLOROETHYLENE	X	X	24
75-69-4	TRICHLOROFLUOROMETHANE		X	24
791-28-6	TRIPHENYLPHOSPHINE OXIDE			24
7440-62-2	VANADIUM	X	X	24
108-05-4	VINYL ACETATE			18

### APPENDIX 3

## Known Analytes Detected in On-Base and Off-Base Groundwater Wells

ID/CAS Number (a)	Analyte Name	Listed on App. 2	OCWD/IRWD Identified	EI Toro Site ID
75-01-4	VINYL CHLORIDE		X	24
1330-20-7	XYLENES (TOTAL)	X	X	18
7440-66-6	ZINC	X	X	24
7440-14-4	RADIUM (naturally occurring)		X	2
7440-61-1	URANIUM (naturally occurring)		X	2
<b>ADDITIONAL ANALYTES SPECIFICALLY LISTED ON APPENDIX 2 AND/OR IDENTIFIED BY IRWC/OCWD</b>				
	Gross Alpha	X	X	
	Gross Beta	X	X	
57-12-5	Cyanide	X		
	1,2-Dichloroethylene, Cis-	X		
71-55-6	1,1,1-Trichloroethane	X		
	1,1-Dichloroethane	X		
	2-Pentanone, 4-Hydroxy-4-Methyl	X	X	
108-90-7	Chlorobenzene		X	
	Chlorodibromomethane		X	
75-71-8	Dichlorodifluoromethane (CFC-12)		X	
	Methyl Chloride	X	X	
U00000321	Total Trihalomethanes (TTHMs)		X	
76-13-1	Trichlorotrifluoroethane (Freon 113)		X	
	4-Methylphenol		X	
	Benzyl Butyl Phthalate	X	X	
	Bis(2-Ethylhexyl)Phthalate	X	X	
	Di-N-Butyl Phthalate (DBP)		X	
	Di-N-Octyl Phthalate	X	X	
	Diethyl Phthalate (DEP)		X	
84-66-2	Dimethyl Phthalate		X	
86-30-6	N-Nitrosodiphenylamine		X	

## APPENDIX 3

### Known Analytes Detected in On-Base and Off-Base Groundwater Wells

ID/CAS Number (a)	Analyte Name	Listed on App. 2	OCWD/IRWD Identified	El Toro Site ID
108-95-2	Phenol	X	X	
U00000004	4,4'-DDT		X	
309-00-2	Aldrin		X	
58-89-9	BHC-gamma (lindane)		X	
60-57-1	dieldrin		X	
76-44-8	Heptachlor		X	
	2,4,5-Trichlorophenoxyacetic Acid		X	
	MCPP		X	
	Total Recoverable Petroleum Hydrocarbons		X	
10043-92-2	Radon		X	
	Bicarbonate (as CaCO <sub>3</sub> )	X	X	
7440-42-8	Boron		X	
	Bromide		X	
	Carbonate (as CaCO <sub>3</sub> )		X	
PCS-00080	Color (filtered) - units		X	
PCS-00081	Color (apparent or unfiltered) - units		X	
	Electrical Conductivity (umhos/cm)		X	
	MBAS (Surfactants)		X	
	Nitrate-NO <sub>3</sub>	X	X	
7727-37-9	Nitrogen, Total Organic		X	
	pH - units	X	X	
	Temperature		X	
PCS-00070	Turbidity		X	
	Tributyltin		X	
<b>Footnotes:</b>				
(a) Chemical Abstract Service (CAS) Registry identification number, other system identification code, or unknown.				

## **Appendix 4**

## Appendix 4

### Primary Components of Modified Irvine Desalter Project

The Modified Irvine Desalter Project (IDP) is comprised of both a Potable Water System (Potable System) and a Non-potable Water System (Non-potable System); each is an entirely separate groundwater extraction, conveyance, treatment and delivery/discharge system.

None of the assets of the Potable System are included in, associated with, or related to the MCAS El Toro groundwater CERCLA actions. Certain specified assets of the Non-potable System are also not associated with or related to the MCAS El Toro groundwater CERCLA actions (see below).

Each System is designated by color(s) on the Appendix 5 map. The Potable System in green and the Non-potable System in red and blue.

The Primary Components of the Modified IDP are as follows:

1. CERCLA Component of the Modified IDP (CCMI).

The CCMI consists of the following assets of the Non-potable System (see Whereas Clause P of the Recitals):

a. Extraction Wells IRWD-78, ET-1, and ET-2, and Injection Well IDP-1 are located within the VOC plume in the Principal Aquifer (PA).

b. Pumping and pipeline conveyance system from Wells IRWD-78, ET-1, and ET-2 to the separate Non-Potable VOC treatment system located at the Central Treatment Plant (reference red line on Appendix 5 map). Pumping and pipeline conveyance system from the Non-Potable VOC treatment system located at the Central Treatment Plant to Injection Well IDP-1 (reference blue line on Appendix 5 map).

c. Separate Non-Potable VOC treatment system (including air strippers and off-gas granular-activated carbon units) located at the Central Treatment Plant for VOC-contaminated groundwater extracted from both SGU and PA groundwater.

d. DON's extraction wells for interception and removal of VOC-contaminated groundwater in the Shallow Groundwater Unit (SGU). DON's pumping and pipeline conveyance from those extraction wells to the Non-Potable pipeline conveyance system's point of connection at the MCAS El Toro station boundary.

e. DON's monitoring wells associated with the remediation of the VOC plume in the SGU and PA.

2. Non-CERCLA Component of the Modified IDP (non-CCMI).

The following Potable System and Non-potable System assets of the Modified IDP are non-CERCLA.

a. The entire Potable System of the Modified IDP including:

1. Extraction Wells TIC-110, IRWD-75, IRWD-76, and IRWD-77 located outside and cross gradient of the VOC plume in the PA.

2. Pumping and pipeline conveyance system from the extraction wells outside and cross gradient of the VOC plume in the PA to the separate Potable System water treatment system (including treatment for VOCs) located at the Central Treatment Plant.

3. The Potable System water treatment system (including treatment for VOCs) located at the Central Treatment Plant for groundwater extracted from outside and cross gradient of the VOC contaminant plume in the PA.

4. The Potable System desalination treatment assets (including pre-filters, chemical feed units, pumps, reverse osmosis units, de-gassifiers, and controls) and peripheral facilities that include product water delivery/discharge system pumps and pipelines, and brine disposal.

5. The monitoring wells associated with the operation and performance of the Potable System.

b. The Non-Potable System desalination treatment assets (including pre-filters, chemical feed units, pumps, reverse osmosis units, de-gassifiers, and controls) and peripheral facilities that include product water delivery/discharge system pumps and pipelines, and brine disposal.

3. Shared CCMI/non-CCMI Component Assets at the Central Treatment Plant (costs allocated proportionately in settlement).

Central Treatment Plant site real property, buildings, site improvements, telemetry, transformers and other electrical improvements, and central monitoring and control systems.

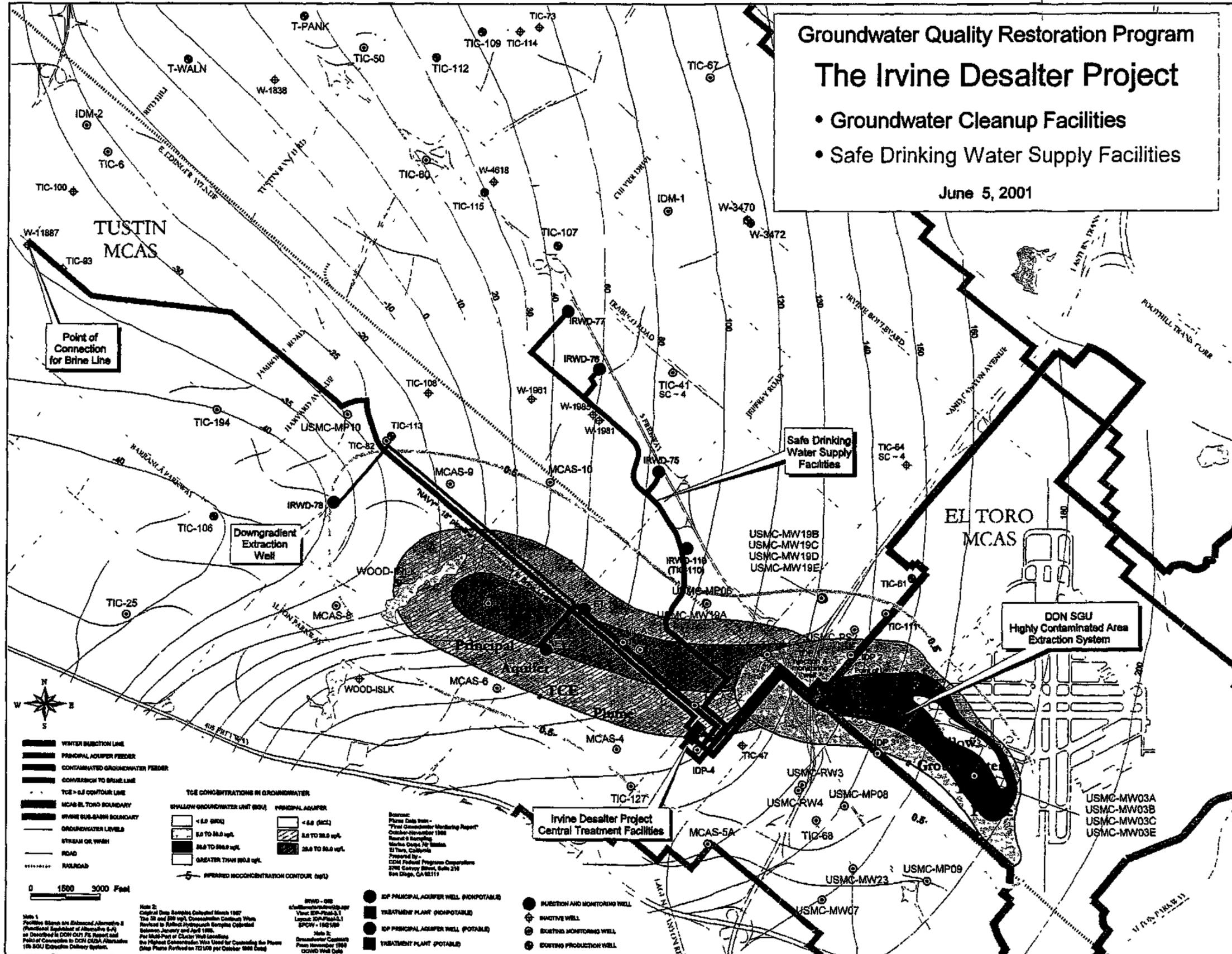
## **Appendix 5**

# Groundwater Quality Restoration Program

## The Irvine Desalter Project

- Groundwater Cleanup Facilities
- Safe Drinking Water Supply Facilities

June 5, 2001



- WATER FUNCTION LINE
- PRINCIPAL AQUIFER FEEDER
- CONTAMINATED GROUNDWATER FEEDER
- CONNECTION TO BRINE LINE
- TIC > 0.5 CONTOUR LINE
- MCAS EL TORO BOUNDARY
- IRVINE SUB-BARRI BOUNDARY
- GROUNDWATER LEVEL
- STREAM OR WASH
- ROAD
- RAILROAD

**TIC CONCENTRATIONS IN GROUNDWATER**

SHALLOW GROUNDWATER UNIT (SGU)	PRINCIPAL AQUIFER
< 4.0 (MCL)	< 4.0 (MCL)
4.0 TO 20.0 ug/L	4.0 TO 20.0 ug/L
20.0 TO 50.0 ug/L	20.0 TO 50.0 ug/L
GREATER THAN 50.0 ug/L	GREATER THAN 50.0 ug/L

**Source:**  
 Phase Data from -  
 "Final Groundwater Monitoring Report"  
 October-November 1999  
 Report # 99-000000  
 Marine Corps Air Station,  
 El Toro, California  
 Prepared by:  
 CDRI Federal Programs Operations  
 2700 Gateway Street, Suite 210  
 San Diego, CA 92111

**Note 1:**  
 Facilities shown are Alternative 2  
 (Preferred) Equivalent of Alternative 1 (A)  
 as described in CDRI O&M FE Report and  
 Point of Connection to CDRI O&M Alternative  
 (1) SGU Extraction Delivery System.

**Note 2:**  
 Capital Data Revisited Collected March 1997  
 The 20 and 50 ug/L Concentration Contours Were  
 Revised to Reflect Hydrograph Results Collected  
 Between January and April 1998.  
 For Multiple of Cluster Well Locations  
 the Highest Concentration Was Used for Contouring for Phase  
 (Map Plume Forthwith on 7/2/00 per October 1998 Data)

**IRWD - 02**  
 (W-1887) (W-1888) (W-1889) (W-1890) (W-1891) (W-1892) (W-1893) (W-1894) (W-1895) (W-1896) (W-1897) (W-1898) (W-1899) (W-1900) (W-1901) (W-1902) (W-1903) (W-1904) (W-1905) (W-1906) (W-1907) (W-1908) (W-1909) (W-1910) (W-1911) (W-1912) (W-1913) (W-1914) (W-1915) (W-1916) (W-1917) (W-1918) (W-1919) (W-1920) (W-1921) (W-1922) (W-1923) (W-1924) (W-1925) (W-1926) (W-1927) (W-1928) (W-1929) (W-1930) (W-1931) (W-1932) (W-1933) (W-1934) (W-1935) (W-1936) (W-1937) (W-1938) (W-1939) (W-1940) (W-1941) (W-1942) (W-1943) (W-1944) (W-1945) (W-1946) (W-1947) (W-1948) (W-1949) (W-1950) (W-1951) (W-1952) (W-1953) (W-1954) (W-1955) (W-1956) (W-1957) (W-1958) (W-1959) (W-1960) (W-1961) (W-1962) (W-1963) (W-1964) (W-1965) (W-1966) (W-1967) (W-1968) (W-1969) (W-1970) (W-1971) (W-1972) (W-1973) (W-1974) (W-1975) (W-1976) (W-1977) (W-1978) (W-1979) (W-1980) (W-1981) (W-1982) (W-1983) (W-1984) (W-1985) (W-1986) (W-1987) (W-1988) (W-1989) (W-1990) (W-1991) (W-1992) (W-1993) (W-1994) (W-1995) (W-1996) (W-1997) (W-1998) (W-1999) (W-2000) (W-2001) (W-2002) (W-2003) (W-2004) (W-2005) (W-2006) (W-2007) (W-2008) (W-2009) (W-2010) (W-2011) (W-2012) (W-2013) (W-2014) (W-2015) (W-2016) (W-2017) (W-2018) (W-2019) (W-2020) (W-2021) (W-2022) (W-2023) (W-2024) (W-2025) (W-2026) (W-2027) (W-2028) (W-2029) (W-2030) (W-2031) (W-2032) (W-2033) (W-2034) (W-2035) (W-2036) (W-2037) (W-2038) (W-2039) (W-2040) (W-2041) (W-2042) (W-2043) (W-2044) (W-2045) (W-2046) (W-2047) (W-2048) (W-2049) (W-2050) (W-2051) (W-2052) (W-2053) (W-2054) (W-2055) (W-2056) (W-2057) (W-2058) (W-2059) (W-2060) (W-2061) (W-2062) (W-2063) (W-2064) (W-2065) (W-2066) (W-2067) (W-2068) (W-2069) (W-2070) (W-2071) (W-2072) (W-2073) (W-2074) (W-2075) (W-2076) (W-2077) (W-2078) (W-2079) (W-2080) (W-2081) (W-2082) (W-2083) (W-2084) (W-2085) (W-2086) (W-2087) (W-2088) (W-2089) (W-2090) (W-2091) (W-2092) (W-2093) (W-2094) (W-2095) (W-2096) (W-2097) (W-2098) (W-2099) (W-2100) (W-2101) (W-2102) (W-2103) (W-2104) (W-2105) (W-2106) (W-2107) (W-2108) (W-2109) (W-2110) (W-2111) (W-2112) (W-2113) (W-2114) (W-2115) (W-2116) (W-2117) (W-2118) (W-2119) (W-2120) (W-2121) (W-2122) (W-2123) (W-2124) (W-2125) (W-2126) (W-2127) (W-2128) (W-2129) (W-2130) (W-2131) (W-2132) (W-2133) (W-2134) (W-2135) (W-2136) (W-2137) (W-2138) (W-2139) (W-2140) (W-2141) (W-2142) (W-2143) (W-2144) (W-2145) (W-2146) (W-2147) (W-2148) (W-2149) (W-2150) (W-2151) (W-2152) (W-2153) (W-2154) (W-2155) (W-2156) (W-2157) (W-2158) (W-2159) (W-2160) (W-2161) (W-2162) (W-2163) (W-2164) (W-2165) (W-2166) (W-2167) (W-2168) (W-2169) (W-2170) (W-2171) (W-2172) (W-2173) (W-2174) (W-2175) (W-2176) (W-2177) (W-2178) (W-2179) (W-2180) (W-2181) (W-2182) (W-2183) (W-2184) (W-2185) (W-2186) (W-2187) (W-2188) (W-2189) (W-2190) (W-2191) (W-2192) (W-2193) (W-2194) (W-2195) (W-2196) (W-2197) (W-2198) (W-2199) (W-2200) (W-2201) (W-2202) (W-2203) (W-2204) (W-2205) (W-2206) (W-2207) (W-2208) (W-2209) (W-2210) (W-2211) (W-2212) (W-2213) (W-2214) (W-2215) (W-2216) (W-2217) (W-2218) (W-2219) (W-2220) (W-2221) (W-2222) (W-2223) (W-2224) (W-2225) (W-2226) (W-2227) (W-2228) (W-2229) (W-2230) (W-2231) (W-2232) (W-2233) (W-2234) (W-2235) (W-2236) (W-2237) (W-2238) (W-2239) (W-2240) (W-2241) (W-2242) (W-2243) (W-2244) (W-2245) (W-2246) (W-2247) (W-2248) (W-2249) (W-2250) (W-2251) (W-2252) (W-2253) (W-2254) (W-2255) (W-2256) (W-2257) (W-2258) (W-2259) (W-2260) (W-2261) (W-2262) (W-2263) (W-2264) (W-2265) (W-2266) (W-2267) (W-2268) (W-2269) (W-2270) (W-2271) (W-2272) (W-2273) (W-2274) (W-2275) (W-2276) (W-2277) (W-2278) (W-2279) (W-2280) (W-2281) (W-2282) (W-2283) (W-2284) (W-2285) (W-2286) (W-2287) (W-2288) (W-2289) (W-2290) (W-2291) (W-2292) (W-2293) (W-2294) (W-2295) (W-2296) (W-2297) (W-2298) (W-2299) (W-2300) (W-2301) (W-2302) (W-2303) (W-2304) (W-2305) (W-2306) (W-2307) (W-2308) (W-2309) (W-2310) (W-2311) (W-2312) (W-2313) (W-2314) (W-2315) (W-2316) (W-2317) (W-2318) (W-2319) (W-2320) (W-2321) (W-2322) (W-2323) (W-2324) (W-2325) (W-2326) (W-2327) (W-2328) (W-2329) (W-2330) (W-2331) (W-2332) (W-2333) (W-2334) (W-2335) (W-2336) (W-2337) (W-2338) (W-2339) (W-2340) (W-2341) (W-2342) (W-2343) (W-2344) (W-2345) (W-2346) (W-2347) (W-2348) (W-2349) (W-2350) (W-2351) (W-2352) (W-2353) (W-2354) (W-2355) (W-2356) (W-2357) (W-2358) (W-2359) (W-2360) (W-2361) (W-2362) (W-2363) (W-2364) (W-2365) (W-2366) (W-2367) (W-2368) (W-2369) (W-2370) (W-2371) (W-2372) (W-2373) (W-2374) (W-2375) (W-2376) (W-2377) (W-2378) (W-2379) (W-2380) (W-2381) (W-2382) (W-2383) (W-2384) (W-2385) (W-2386) (W-2387) (W-2388) (W-2389) (W-2390) (W-2391) (W-2392) (W-2393) (W-2394) (W-2395) (W-2396) (W-2397) (W-2398) (W-2399) (W-2400) (W-2401) (W-2402) (W-2403) (W-2404) (W-2405) (W-2406) (W-2407) (W-2408) (W-2409) (W-2410) (W-2411) (W-2412) (W-2413) (W-2414) (W-2415) (W-2416) (W-2417) (W-2418) (W-2419) (W-2420) (W-2421) (W-2422) (W-2423) (W-2424) (W-2425) (W-2426) (W-2427) (W-2428) (W-2429) (W-2430) (W-2431) (W-2432) (W-2433) (W-2434) (W-2435) (W-2436) (W-2437) (W-2438) (W-2439) (W-2440) (W-2441) (W-2442) (W-2443) (W-2444) (W-2445) (W-2446) (W-2447) (W-2448) (W-2449) (W-2450) (W-2451) (W-2452) (W-2453) (W-2454) (W-2455) (W-2456) (W-2457) (W-2458) (W-2459) (W-2460) (W-2461) (W-2462) (W-2463) (W-2464) (W-2465) (W-2466) (W-2467) (W-2468) (W-2469) (W-2470) (W-2471) (W-2472) (W-2473) (W-2474) (W-2475) (W-2476) (W-2477) (W-2478) (W-2479) (W-2480) (W-2481) (W-2482) (W-2483) (W-2484) (W-2485) (W-2486) (W-2487) (W-2488) (W-2489) (W-2490) (W-2491) (W-2492) (W-2493) (W-2494) (W-2495) (W-2496) (W-2497) (W-2498) (W-2499) (W-2500) (W-2501) (W-2502) (W-2503) (W-2504) (W-2505) (W-2506) (W-2507) (W-2508) (W-2509) (W-2510) (W-2511) (W-2512) (W-2513) (W-2514) (W-2515) (W-2516) (W-2517) (W-2518) (W-2519) (W-2520) (W-2521) (W-2522) (W-2523) (W-2524) (W-2525) (W-2526) (W-2527) (W-2528) (W-2529) (W-2530) (W-2531) (W-2532) (W-2533) (W-2534) (W-2535) (W-2536) (W-2537) (W-2538) (W-2539) (W-2540) (W-2541) (W-2542) (W-2543) (W-2544) (W-2545) (W-2546) (W-2547) (W-2548) (W-2549) (W-2550) (W-2551) (W-2552) (W-2553) (W-2554) (W-2555) (W-2556) (W-2557) (W-2558) (W-2559) (W-2560) (W-2561) (W-2562) (W-2563) (W-2564) (W-2565) (W-2566) (W-2567) (W-2568) (W-2569) (W-2570) (W-2571) (W-2572) (W-2573) (W-2574) (W-2575) (W-2576) (W-2577) (W-2578) (W-2579) (W-2580) (W-2581) (W-2582) (W-2583) (W-2584) (W-2585) (W-2586) (W-2587) (W-2588) (W-2589) (W-2590) (W-2591) (W-2592) (W-2593) (W-2594) (W-2595) (W-2596) (W-2597) (W-2598) (W-2599) (W-2600) (W-2601) (W-2602) (W-2603) (W-2604) (W-2605) (W-2606) (W-2607) (W-2608) (W-2609) (W-2610) (W-2611) (W-2612) (W-2613) (W-2614) (W-2615) (W-2616) (W-2617) (W-2618) (W-2619) (W-2620) (W-2621) (W-2622) (W-2623) (W-2624) (W-2625) (W-2626) (W-2627) (W-2628) (W-2629) (W-2630) (W-2631) (W-2632) (W-2633) (W-2634) (W-2635) (W-2636) (W-2637) (W-2638) (W-2639) (W-2640) (W-2641) (W-2642) (W-2643) (W-2644) (W-2645) (W-2646) (W-2647) (W-2648) (W-2649) (W-2650) (W-2651) (W-2652) (W-2653) (W-2654) (W-2655) (W-2656) (W-2657) (W-2658) (W-2659) (W-2660) (W-2661) (W-2662) (W-2663) (W-2664) (W-2665) (W-2666) (W-2667) (W-2668) (W-2669) (W-2670) (W-2671) (W-2672) (W-2673) (W-2674) (W-2675) (W-2676) (W-2677) (W-2678) (W-2679) (W-2680) (W-2681) (W-2682) (W-2683) (W-2684) (W-2685) (W-2686) (W-2687) (W-2688) (W-2689) (W-2690) (W-2691) (W-2692) (W-2693) (W-2694) (W-2695) (W-2696) (W-2697) (W-2698) (W-2699) (W-2700) (W-2701) (W-2702) (W-2703) (W-2704) (W-2705) (W-2706) (W-2707) (W-2708) (W-2709) (W-2710) (W-2711) (W-2712) (W-2713) (W-2714) (W-2715) (W-2716) (W-2717) (W-2718) (W-2719) (W-2720) (W-2721) (W-2722) (W-2723) (W-2724) (W-2725) (W-2726) (W-2727) (W-2728) (W-2729) (W-2730) (W-2731) (W-2732) (W-2733) (W-2734) (W-2735) (W-2736) (W-2737) (W-2738) (W-2739) (W-2740) (W-2741) (W-2742) (W-2743) (W-2744) (W-2745) (W-2746) (W-2747) (W-2748) (W-2749) (W-2750) (W-2751) (W-2752) (W-2753) (W-2754) (W-2755) (W-2756) (W-2757) (W-2758) (W-2759) (W-2760) (W-2761) (W-2762) (W-2763) (W-2764) (W-2765) (W-2766) (W-2767) (W-2768) (W-2769) (W-2770) (W-2771) (W-2772) (W-2773) (W-2774) (W-2775) (W-2776) (W-2777) (W-2778) (W-2779) (W-2780) (W-2781) (W-2782) (W-2783) (W-2784) (W-2785) (W-2786) (W-2787) (W-2788) (W-2789) (W-2790) (W-2791) (W-2792) (W-2793) (W-2794) (W-2795) (W-2796) (W-2797) (W-2798) (W-2799) (W-2800) (W-2801) (W-2802) (W-2803) (W-2804) (W-2805) (W-2806) (W-2807) (W-2808) (W-2809) (W-2810) (W-2811) (W-2812) (W-2813) (W-2814) (W-2815) (W-2816) (W-2817) (W-2818) (W-2819) (W-2820) (W-2821) (W-2822) (W-2823) (W-2824) (W-2825) (W-2826) (W-2827) (W-2828) (W-2829) (W-2830) (W-2831) (W-2832) (W-2833) (W-2834) (W-2835) (W-2836) (W-2837) (W-2838) (W-2839) (W-2840) (W-2841) (W-2842) (W-2843) (W-2844) (W-2845) (W-2846) (W-2847) (W-2848) (W-2849) (W-2850) (W-2851) (W-2852) (W-2853) (W-2854) (W-2855) (W-2856) (W-2857) (W-2858) (W-2859) (W-2860) (W-2861) (W-2862) (W-2863) (W-2864) (W-2865) (W-2866) (W-2867) (W-2868) (W-2869) (W-2870) (W-2871) (W-2872) (W-2873) (W-2874) (W-2875) (W-2876) (W-2877) (W-2878) (W-2879) (W-2880) (W-2881) (W-2882) (W-2883) (W-2884) (W-2885) (W-2886) (W-2887) (W-2888) (W-2889) (W-2890) (W-2891) (W-2892) (W-2893) (W-2894) (W-2895) (W-2896) (W-2897) (W-2898) (W-2899) (W-2900) (W-2901) (W-2902) (W-2903) (W-2904) (W-2905) (W-2906) (W-2907) (W-2908) (W-2909) (W-2910) (W-2911) (W-2912) (W-2913) (W-2914) (W-2915) (W-2916) (W-2917) (W-2918) (W-2919) (W-2920) (W-2921) (W-2922) (W-2923) (W-2924) (W-2925) (W-2926) (W-2927) (W-2928) (W-2929) (W-2930) (W-2931) (W-2932) (W-2933) (W-2934) (W-2935) (W-2936) (W-2937) (W-2938) (W-2939) (W-2940) (W-2941) (W-2942) (W-2943) (W-2944) (W-2945) (W-2946) (W-2947) (W-2948) (W-2949) (W-2950) (W-2951) (W-2952) (W-2953) (W-2954) (W-2955) (W-2956) (W-2957) (W-2958) (W-2959) (W-2960) (W-2961) (W-2962) (W-2963) (W-2964) (W-2965) (W-2966) (W-2967) (W-2968) (W-2969) (W-2970) (W-2971) (W-2972) (W-2973) (W-2974) (W-2975) (W-2976) (W-2977) (W-2978) (W-2979) (W-2980) (W-2981) (W-2982) (W-2983) (W-2984) (W-2985) (W-2986) (W-2987) (W-2988) (W-2989) (W-2990) (W-2991) (W-2992) (W-2993) (W-2994) (W-2995) (W-2996) (W-2997) (W-2998) (W-2999) (W-3000) (W-3001) (W-3002) (W-3003) (W-3004) (W-3005) (W-3006) (W-3007) (W-3008) (W-3009) (W-3010) (W-3011) (W-3012) (W-3013) (W-3014) (W-3015) (W-3016) (W-3017) (W-3018) (W-3019) (W-3020) (W-3021) (W-3022) (W-3023) (W-3024) (W-3025) (W-3026) (W-3027) (W-3028) (W-3029) (W-3030) (W-3031) (W-3032) (W-3033) (W-3034) (W-3035) (W-3036) (W-3037) (W-3038) (W-3039) (W-3040) (W-3041) (W-3042) (W-3043) (W-3044) (W-3045) (W-3046) (W-3047) (W-3048) (W-3049) (W-3050) (W-3051) (W-3052) (W-3053) (W-3054) (W-3055) (W-3056) (W-3057) (W-3058) (W-3059) (W-3060) (W-3061) (W-3062) (W-3063) (W-3064) (W-3065) (W-3066) (W-3067) (W-3068) (W-3069) (W-3070) (W-3071) (W-3072) (W-3073) (W-3074) (W-3075) (W-3076) (W-3077) (W-3078) (W-3079) (W-3080) (W-3081) (W-3082) (W-3083) (W-3084) (W-3085) (W-3086) (W-3087) (W-3088) (W-3089) (W-3090) (W-3091) (W-3092) (W-3093) (W-3094) (W-3095) (W-3096) (W-3097) (W-3098) (W-3099) (W-3100) (W-3101) (W-3102) (W-3103) (W-3104) (W-3105) (W-3106) (W-3107) (W-3108) (W-3109) (W-3110) (W-3111) (W-3112) (W-3113) (W-3114) (W-3115) (W-3116) (W-3117) (W-3118) (W-3119) (W-3120) (W-3121) (W-3122) (W-3123) (W-3124) (W-3125) (W-3126) (W-3127) (W-3128) (W-3129) (W-3130) (W-3131) (W-3132) (W-3133) (W-3134) (W-3135) (W-3136) (W-3137) (W-3138) (W-3139) (W-3140) (W-3141) (W-3142) (W-3143) (W-3144) (W-3145) (W-3146) (W-3147) (W-3148) (W-3149) (W-3150) (W-3151) (W-3152) (W-3153) (W-3154) (W-3155) (W-3156) (W-3157) (W-3158) (W-3159) (W-3160) (W-3161) (W-3162) (W-3163) (W-3164) (W-3165) (W-3166) (W-3167) (W-3168) (W-3169) (W-3170) (W-3171) (W-3172) (W-3173) (W-3174) (W-3175) (W-3176) (W-3177) (W-3178) (W-3179) (W-3180) (W-3181) (W-3182) (W-3183) (W-3184) (W-3185) (W-3186) (W-3187) (W-3188) (W-3189) (W-3190) (W-3191) (W-3192) (W-3193) (W-3194) (W-3195) (W-3196) (W-3197) (W-3198) (W-3199) (W-3200) (W-3201) (W-3202) (W-3203) (W-3204) (W-3205) (W-3206) (W-3207) (W-3208) (W-3209) (W-3210) (W-3211) (W-3212) (W-3213) (W-3214) (W-3215) (W-3216) (W-3217) (W-3218) (W-3219) (W-3220) (W-3221) (W-3222) (W-3223) (W-3224) (W-3225) (W-3226) (W-3227) (W-3228) (W-3229) (W-3230) (W-3231) (W-3232) (W-3233) (W-3234) (W-3235) (W-3236) (W-3237) (W-3238) (W-3239) (W-3240) (W-3241) (W-3242) (W-3243) (W-3244) (W-3245) (W-3246) (W-3247) (W-3248) (W-3249) (W-3250) (W-3251) (W-3252) (W-3253) (W-3254) (W-3255) (W-3256) (W-3257) (W-3258) (W-3259) (W-3260) (W-3261) (W-3262) (W-3263) (W-3264) (W-3265) (W-3266) (W-3267) (W-3268

## **Appendix 6**

**Facility Capital and Operation and Maintenance  
Reimbursement Schedule**

Assumptions		Investment Rate (net)	Annual Inflation Rate		5.479%	2.800%
Year	Trust	Payments	Annual	Trust		
Q.A.M	Project	Facility	Payments	Q.A.M	Payments	Balance
	0.0	\$14,911,000	\$500,000		\$500,000	\$15,200,062
	1.0		\$707,200		\$1,207,200	\$15,286,405
	2.0		\$6,364,800		\$7,572,000	\$9,410,100
0.5	2.5			\$182,619	\$7,754,619	\$9,480,102
1.0	3.0			\$185,358	\$7,939,977	\$9,549,207
1.5	3.5			\$188,139	\$8,128,116	\$9,617,347
2.0	4.0			\$190,961	\$8,319,077	\$9,684,453
2.5	4.5			\$193,825	\$8,512,802	\$9,750,453
3.0	5.0			\$196,733	\$8,709,334	\$9,815,273
3.5	5.5			\$199,684	\$8,908,318	\$9,878,836
4.0	6.0			\$202,679	\$9,111,897	\$9,941,082
4.5	6.5			\$205,718	\$9,317,716	\$10,001,898
5.0	7.0			\$208,805	\$9,526,320	\$10,061,189
5.5	7.5			\$211,937	\$9,738,457	\$10,118,875
6.0	8.0			\$215,116	\$9,953,573	\$10,174,885
6.5	8.5			\$218,343	\$10,171,918	\$10,229,139
7.0	9.0			\$221,618	\$10,393,033	\$10,281,482
7.5	9.5			\$224,942	\$10,618,475	\$10,331,889
8.0	10.0			\$228,316	\$10,848,791	\$10,380,156
8.5	10.5			\$231,741	\$11,078,532	\$10,426,251
9.0	11.0			\$235,217	\$11,313,749	\$10,470,035
9.5	11.5			\$238,745	\$11,552,495	\$10,511,382
10.0	12.0			\$242,326	\$11,794,821	\$10,550,202
10.5	12.5			\$245,961	\$12,040,782	\$10,586,341
11.0	13.0			\$249,651	\$12,290,433	\$10,619,678
11.5	13.5			\$253,395	\$12,543,829	\$10,650,081
12.0	14.0			\$257,196	\$12,801,025	\$10,677,411
12.5	14.5			\$261,054	\$13,062,079	\$10,701,526
13.0	15.0			\$264,970	\$13,327,049	\$10,722,278
13.5	15.5			\$268,945	\$13,595,994	\$10,739,515
14.0	16.0			\$272,979	\$13,868,973	\$10,753,079
14.5	16.5			\$277,074	\$14,146,047	\$10,762,806
15.0	17.0			\$281,230	\$14,427,276	\$10,768,533
15.5	17.5			\$285,448	\$14,712,725	\$10,770,080
16.0	18.0			\$289,730	\$15,002,454	\$10,767,272
16.5	18.5			\$294,076	\$15,296,530	\$10,759,921
17.0	19.0			\$298,487	\$15,595,017	\$10,747,838
17.5	19.5			\$302,964	\$15,897,981	\$10,730,823
18.0	20.0			\$307,509	\$16,205,480	\$10,708,674
18.5	20.5			\$312,121	\$16,517,612	\$10,681,180
19.0	21.0			\$316,803	\$16,834,415	\$10,648,123
19.5	21.5			\$321,555	\$17,156,970	\$10,608,279
20.0	22.0			\$326,379	\$17,485,349	\$10,564,416
20.5	22.5			\$331,274	\$17,819,623	\$10,513,285
21.0	23.0			\$336,243	\$18,159,866	\$10,455,689
21.5	23.5			\$341,287	\$18,506,153	\$10,391,284
22.0	24.0			\$346,408	\$18,858,559	\$10,319,877
22.5	24.5			\$351,602	\$19,217,162	\$10,241,177
23.0	25.0			\$356,878	\$19,582,036	\$10,154,903
23.5	25.5			\$362,230	\$19,953,268	\$10,060,786
24.0	26.0			\$367,663	\$20,330,931	\$9,958,474
24.5	26.5			\$373,178	\$20,715,109	\$9,847,713
25.0	27.0			\$378,776	\$21,107,084	\$9,728,189
25.5	27.5			\$384,457	\$21,507,042	\$9,599,515
26.0	28.0			\$390,224	\$21,914,266	\$9,461,415
26.5	28.5			\$396,077	\$22,328,943	\$9,313,519
27.0	29.0			\$402,016	\$22,751,282	\$9,155,471
27.5	29.5			\$408,049	\$23,181,411	\$8,986,901
28.0	30.0			\$414,179	\$23,628,600	\$8,807,428
28.5	30.5			\$420,402	\$24,093,283	\$8,616,856
29.0	31.0			\$426,828	\$24,575,951	\$8,414,187
29.5	31.5			\$433,460	\$25,077,039	\$8,199,586
30.0	32.0			\$439,305	\$25,597,022	\$7,972,480
30.5	32.5			\$446,178	\$26,136,502	\$7,732,329
31.0	33.0			\$452,871	\$26,695,173	\$7,478,746
31.5	33.5			\$459,684	\$27,273,557	\$7,211,246
32.0	34.0			\$466,529	\$27,871,286	\$6,928,337
32.5	34.5			\$473,507	\$28,489,003	\$6,632,519
33.0	35.0			\$480,611	\$29,127,314	\$6,320,278
33.5	35.5			\$487,841	\$29,786,865	\$5,992,082
34.0	36.0			\$495,199	\$30,468,314	\$5,647,382
34.5	36.5			\$502,687	\$31,172,380	\$5,285,614
35.0	37.0			\$510,195	\$31,899,709	\$4,905,188
35.5	37.5			\$517,824	\$32,650,954	\$4,506,529
36.0	38.0			\$525,578	\$33,426,730	\$4,081,885
36.5	38.5			\$533,459	\$34,227,589	\$3,635,659
37.0	39.0			\$541,461	\$35,054,089	\$3,169,783
37.5	39.5			\$549,583	\$35,906,832	\$2,722,735
38.0	40.0			\$557,826	\$36,786,486	\$2,224,177
38.5	40.5			\$566,184	\$37,693,633	\$1,703,374
39.0	41.0			\$574,657	\$38,628,839	\$1,159,587
39.5	41.5			\$583,307	\$39,592,646	\$592,057
40.0	42.0			\$592,057	\$40,595,603	\$0

**MCAS EL TORO GROUNDWATER SETTLEMENT**

**Contingency Trust Payment Schedule  
Joint Regional Groundwater Project with OCWD/RWD**

5.475%

Net Trust Earnings

Beginning of Year	Eligible Payments		Accum. Payments	Trust Balance
	Scheduled Installments	Maximum Contingencies		
				<b>\$5,250,000</b>
0	\$1,500,000	\$1,750,000	\$3,250,000	<b>\$2,000,000</b>
1	\$0	\$0	\$3,250,000	\$2,109,500
2	\$0	\$0	\$3,250,000	\$2,224,995
3	\$0	\$0	\$3,250,000	\$2,346,814
4	\$0	\$0	\$3,250,000	\$2,475,302
5	\$0	\$0	\$3,250,000	\$2,610,824
6	\$0	\$0	\$3,250,000	\$2,753,767
7	\$0	\$0	\$3,250,000	\$2,904,536
8	\$0	\$0	\$3,250,000	\$3,063,559
9	\$0	\$0	\$3,250,000	\$3,231,289
10	\$1,000,000	\$1,000,000	\$5,250,000	<b>\$1,298,702</b>
11	\$0	\$0	\$5,250,000	\$1,369,806
12	\$0	\$0	\$5,250,000	\$1,444,803
13	\$0	\$0	\$5,250,000	\$1,523,906
14	\$0	\$0	\$5,250,000	\$1,607,340
15	\$0	\$0	\$5,250,000	\$1,695,342
16	\$0	\$0	\$5,250,000	\$1,788,161
17	\$0	\$0	\$5,250,000	\$1,886,063
18	\$0	\$0	\$5,250,000	\$1,989,325
19	\$0	\$0	\$5,250,000	\$2,098,241
20	\$1,000,000	\$1,000,000	\$7,250,000	<b>\$103,620</b>
21	\$0	\$0	\$7,250,000	
22	\$0	\$0	\$7,250,000	
23	\$0	\$0	\$7,250,000	
24	\$0	\$0	\$7,250,000	
25	\$0	\$0	\$7,250,000	
26	\$0	\$0	\$7,250,000	
27	\$0	\$0	\$7,250,000	
28	\$0	\$0	\$7,250,000	
29	\$0	\$0	\$7,250,000	
30	\$0	\$0	\$7,250,000	

## **Appendix 7**

**Unrealized Facility Benefit Refund Schedule**  
**Joint Regional Groundwater Project with OCWD/RWD**

**Method Used to Calculate Facility Benefit Reduction**  
**Years 3 through 22: Double Declining Balance (DDB)**  
**Years 23 through 42: Straight Line (SL)**

Year	Description of Benefit	Payments	Unrealized Facility Benefit	
			DDB	SL
1	Past Costs & Facility Design	\$1,207,200	—	—
3	Facility Construction	\$6,364,800	\$7,572,000	
4			\$7,193,400	
5			\$6,833,730	
6			\$6,492,044	
7			\$6,167,441	
8			\$5,859,069	
9			\$5,566,116	
10			\$5,287,810	
11			\$5,023,420	
12			\$4,772,249	
13			\$4,533,636	
14			\$4,306,954	
15			\$4,091,607	
16			\$3,887,026	
17			\$3,692,675	
18			\$3,508,041	
19			\$3,332,639	
20			\$3,166,007	
21			\$3,007,707	
22			\$2,857,321	
23				\$2,714,455
24				\$2,571,589
25				\$2,428,723
26				\$2,285,857
27				\$2,142,991
28				\$2,000,125
29				\$1,857,259
30				\$1,714,393
31				\$1,571,527
32				\$1,428,661
33				\$1,285,795
34				\$1,142,929
35				\$1,000,063
36				\$857,196
37				\$714,330
38				\$571,464
39				\$428,598
40				\$285,732
41				\$142,866
42				(\$0)

## **Appendix 8**

2. CONTRACT NO. To Be determined 3. SOLICITATION NO. 4. TYPE OF SOLICITATION  SEALED BID (IFB)  NEGOTIATED (RFP) 5. DATE ISSUED To be determined 6. REQUISITION/PURCHAS

7. ISSUED BY CODE N68711 Naval Facilities Engineering Command Southwest Division, BRAC Operations 20 Pacific Highway, San Diego, CA 92132-5190 8. ADDRESS OFFER TO (If other than Item 7) SAME AS ITEM 7  
 NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".

**SOLICITATION**  
 9. Sealed offers in original and 1 copy for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, until 7/17/00  
 10. CAUTION - LATE Submissions, Modifications, and Withdrawals: See Section I, Provision No. 52.214-7 or 52.215-10.  
 All offers are subject to all terms and conditions contained in this solicitation.

10. FOR INFORMATION CALL: SWDIV, BRAC Operations Office, San Diego A. NAME Theodoris Broussard, Contracting Officer B. TELEPHONE NO. (include area code) (NO COLLECT CALL) (619) 532-0764

**11. TABLE OF CONTENTS**

SEC.	DESCRIPTION	PAGE(S)	SEC.	DESCRIPTION	PAGE(S)
<b>PART I - THE SCHEDULE</b>			<b>PART II - CONTRACT CLAUSES</b>		
<input checked="" type="checkbox"/> A	SOLICITATION/CONTRACT FORM	1	<input checked="" type="checkbox"/> I	CONTRACT CLAUSES	15-64
<input checked="" type="checkbox"/> B	SUPPLIES OR SERVICES AND PRICES/COSTS	2-6	PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHE		
<input checked="" type="checkbox"/> C	DESCRIPTION/SPECS./WORK STATEMENT	7-17	<input checked="" type="checkbox"/> J	LIST OF ATTACHMENTS	65
<input checked="" type="checkbox"/> D	PACKAGING AND MARKING	N/A	PART IV - REPRESENTATIONS AND INSTRUCTIONS		
<input checked="" type="checkbox"/> E	INSPECTION AND ACCEPTANCE	18-19	<input checked="" type="checkbox"/> K	REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS	N/A
<input checked="" type="checkbox"/> F	DELIVERIES OR PERFORMANCE	20-21	<input checked="" type="checkbox"/> L	INSTRS., CONDS., AND NOTICES TO OFFERORS	N/A
<input checked="" type="checkbox"/> G	CONTRACT ADMINISTRATION DATA	22	<input checked="" type="checkbox"/> M	EVALUATION FACTORS FOR AWARD	N/A
<input checked="" type="checkbox"/> H	SPECIAL CONTRACT REQUIREMENTS	23-24			

OFFER (Must be fully completed by offeror) Applicable to Blocks 15, 16, 17 & 18 below.

**NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.**  
 12. In compliance with the above, the undersigned agrees, if this offer is accepted within \_\_\_\_\_ calendar days (60 calendar days unless a different period is inserted in the offer) from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered to the designated point(s), within the time specified in the Schedule.

13. DISCOUNT FOR PROMPT PAYMENT 10 CALENDAR DAYS \_\_\_\_\_% 20 CALENDAR DAYS \_\_\_\_\_% 30 CALENDAR DAYS \_\_\_\_\_% CALENDAR DAYS \_\_\_\_\_%  
 (See Section I, Clause No. 52.232-8)  
 ACKNOWLEDGMENT OF AMENDMENTS (offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated.)

AMENDMENT NO.	DATE	AMENDMENT NO.	DATE

15A. NAME AND ADDRESS OF OFFEROR (Reserved for Orange County Water District to complete) Orange County Water District 10500 Ellis Avenue Fountain Valley CA 92708 16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print) Jerry King, President William R. Mills Jr., General Manager  
 15B. TELEPHONE NO. (Include area code) (714) 378-3200 15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE - ENTER  SUCH ADDRESS IN SCHEDULE. 17. SIGNATURE [Signature] 18. OFFER DATE 6-6-2001

**AWARD (To be completed by Government)**

19. ACCEPTED AS TO ITEMS NUMBERED 20. AMOUNT As Cited in Supplemental Agreement 21. ACCOUNTING AND APPROPRIATION See Availability of Funds Clause - Section I  
 22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: 10 U.S.C. 2304(c)(1) 41 U.S.C. 253(c) ( ) 23. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified) ITEM G-1  
 24. ADMINISTERED BY (If other than Item 7) CODE 25. PAYMENT WILL BE MADE BY CODE  
 26. NAME OF CONTRACTING OFFICER (Type or print) TDB 27. UNITED STATES OF AMERICA (Signature of Contracting Officer) 28. AWARD DATE TDB

IMPORTANT - Award will be made on this Form, or on Standard Form 26, or by other authorized official written notice. STANDARD FORM 33 (Rev. 4-85)

APPROVED AS TO FORM  
 By [Signature]  
 General Counsel for  
 Orange County Water District

Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: To Be Determined

**PART I - THE SCHEDULE**  
**SECTION B - SUPPLIES OR SERVICES AND PRICES**

Base Years One through Ten

**Schedule of Work:**

Treatment of on-station SGU groundwater for VOCs, The former Marine Corps Air Station El Toro.

<b>CLIN</b>	<b>Description</b>	<b>Price</b>
0001	Year 1 - VOC SGU Treatment	\$195,869*
0002	Year 2 - VOC SGU Treatment	\$198,106*
0003	Year 3 - VOC SGU Treatment	\$200,409*
0004	Year 4 - VOC SGU Treatment	\$202,782*
0005	Year 5 - VOC SGU Treatment	\$205,226*
0006	Year 6 - VOC SGU Treatment	\$207,743*
0007	Year 7 - VOC SGU Treatment	\$210,336*
0008	Year 8 - VOC SGU Treatment	\$213,006*
0009	Year 9 - VOC SGU Treatment	\$215,757*
0010	Year 10 - VOC SGU Treatment	\$18,591*
<b>Total for CLINs 0001 through 0010</b>		<b>\$2,067,823*</b>

\*This proposed price schedule is based on information provided by Attachment B-1 of Section J, to include projected/proposed rates of capital recovery and annual SGU treatment requirements.

Funds are not presently available for this contract The Government's obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Contracting Officer for this contract and until OCWD receives notice of such availability, to be confirmed in writing by the Contracting Officer. OCWD shall not be obliged to perform any work under this contract until it receives notice of the availability of such funds.

Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: To Be Determined

Option Years One through Thirty

**Schedule of Work:**

Treatment of on-station SGU groundwater for VOCs, the former Marine Corps Air Station El Toro.

0011	Option 1 - VOC SGU Treatment	\$100,189*
0012	Option 2 - VOC SGU Treatment	\$103,195*
0013	Option 3 - VOC SGU Treatment	\$106,290*
0014	Option 4 - VOC SGU Treatment	\$109,479*
0015	Option 5 - VOC SGU Treatment	\$112,764*
0016	Option 6 - VOC SGU Treatment	\$116,146*
0017	Option 7 - VOC SGU Treatment	\$119,631*
0018	Option 8 - VOC SGU Treatment	\$123,220*
0019	Option 9 - VOC SGU Treatment	\$126,916*
0020	Option 10 - VOC SGU Treatment	\$130,724*
0021	Option 11 - VOC SGU Treatment	\$134,646*
0022	Option 12 - VOC SGU Treatment	\$138,685*
0023	Option 13 - VOC SGU Treatment	\$142,846*
0024	Option 14 - VOC SGU Treatment	\$147,131*
0025	Option 15 - VOC SGU Treatment	\$151,545*
0026	Option 16 - VOC SGU Treatment	\$156,091*
0027	Option 17 - VOC SGU Treatment	\$160,774*
0028	Option 18 - VOC SGU Treatment	\$165,597*
0029	Option 19 - VOC SGU Treatment	\$170,565*
0030	Option 20 - VOC SGU Treatment	\$175,682*
0031	Option 21 - VOC SGU Treatment	\$180,952*
0032	Option 22 - VOC SGU Treatment	\$186,381*
0033	Option 23 - VOC SGU Treatment	\$191,972*
0034	Option 24 - VOC SGU Treatment	\$197,732*
0035	Option 25 - VOC SGU Treatment	\$203,664*
0036	Option 26 - VOC SGU Treatment	\$209,773*
0037	Option 27 - VOC SGU Treatment	\$216,067*
0038	Option 28 - VOC SGU Treatment	\$222,549*
0039	Option 29 - VOC SGU Treatment	\$229,225*
0040	Option 30 - VOC SGU Treatment	\$236,102*

**Total Options (CLINs 0011 through 0040)**

**\$4,766,532\***

\*This proposed price schedule is based on information provided by Attachment B-1 of Section J, to include projected/proposed rates of capital recovery and annual SGU treatment requirements.

Funds are not presently available for this contract. The Government's obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Contracting Officer for this contract and until OCWD receives notice of such availability, to be confirmed in writing by the Contracting Officer. OCWD shall not be obliged to perform any work under this contract until it receives notice of the availability of such funds.

Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: To Be Determined

SUMMARY PAGE

<b>Base Years</b>	<b>CLIN 0001 - 0010</b>	<b>\$2,067,823*</b>
<b>Options</b>	<b>CLIN 0011 - 0040</b>	<b>\$4,766,532*</b>
<b>Total</b>	<b>CLIN 0001 - 0040</b>	<b>\$6,834,355*</b>

\*This proposed price schedule is based on information provided by Attachment B-1 of Section J, to include projected/proposed rates of capital recovery and annual SGU treatment requirements.

Funds are not presently available for this contract Tie Government's obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Contracting Officer for this contract and until OCWD receives notice of such availability, to be confirmed in writing by the Contracting Officer. OCWD shall not be obliged to perform any work under this contract until it receives notice of the availability of such funds.

## **PART I - THE SCHEDULE**

### **SECTION C: DESCRIPTION/SPECIFICATION/WORK STATEMENT**

#### **STATEMENT OF WORK**

##### **Treatment of On-Station Shallow Groundwater Unit (SGU) Groundwater for Volatile Organic Compounds (VOCs)**

1. Orange County Water District (OCWD) shall accept and take ownership of groundwater extracted by the Department of the Navy (DON) from the former Marine Corps Air Station (MCAS) El Toro on-Station Shallow Groundwater Unit (SGU) and delivered by DON to OCWD for Volatile Organic Compound (VOC) treatment. OCWD shall, at its own expense, dispose of or otherwise discharge the SGU groundwater after VOC treatment either through acceptance at the Modified Irvine Desalter Project (IDP) for beneficial use or otherwise discharging via re-injection, irrigation, or surface water discharge in accordance with the Record of Decision (ROD) for Operable Units (OU) 1 and OU2A.
  
2. Scope of the project. OCWD and Irvine Ranch Water District (IRWD) have proposed a water supply development project (the Modified "IDP") which will, in part, accept, treat for VOC removal, and dispose of the groundwater that DON must remediate as part of the ROD for OU1 and OU2A. The United States will bear the VOC treatment costs and OCWD will bear all costs associated with a water supply system, including but not limited to TDS and nitrate treatment. This will be accomplished through a Settlement Agreement (the "SA") which is attached hereto as Attachment C-1 and is incorporated herein by reference. The SA describes each of the party's rights, responsibilities, and liabilities concerning the scope of the entire project. The SA will set forth the scope of the United States' financial contribution and liability for off-station VOC remediation, and will set forth the general scope of this contract for on-station shallow groundwater unit ("SGU") VOC remediation and disposal. The Total CERCLA Remediation Project (hereinafter referred to as the "CERCLA component of Modified IDP" or "CCMI") consists of the following components, which are described in detail in Appendix 4 to the SA: a Principal Aquifer (off station) component with costs shared by OCWD and the United States pursuant to the SA and a SGU (on-station) component designed, constructed, operated, and paid for by DON with OCWD required under this contract to accept, treat for VOCs, and take ownership of the SGU groundwater.
  
3. Scope of Agreements: The SA and this contract are intended by the parties thereto to resolve and settle any and all past, present and future claims, causes of action, and liabilities that OCWD and IRWD may have against the United States under Section 107(a) of CERCLA, 42 U.S.C. Section 9607(a), and all other applicable Federal, State or local laws or regulations for response costs incurred by OCWD and IRWD for groundwater remediation and water supply development projects in the vicinity of the former MCAS El Toro.
  
4. Definitions.
  - A. CERCLA definitions govern. Unless otherwise expressly provided herein, terms used in this contract, which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations.

## Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

B. "CCMI" shall mean the "CERCLA Component of the Modified IDP" as more fully set forth in Whereas Clause No. P. of the Recitals in the SA, Appendix 4 of the SA, and identified as the red-colored region in Appendix 5 (Map) of the SA.

C. The "SA" shall mean the "Settlement Agreement among the Settling Federal Agencies, Orange County Water District, and Irvine Ranch Water District in regard to the former Marine Corps Air Station El Toro Groundwater Remediation" including all Appendices thereto. In the event of any conflict between the terms of this contract and the terms of the SA, the terms of the SA shall take precedence unless otherwise noted herein.

D. For SA definitions refer to Section II in the SA

5. This contract shall be signed by OCWD and the Department of the Navy (each, a "Party" and collectively the "Parties") and shall only go into effect if and when the ROD for OU1 and OU2A is finalized pursuant to the FFA and such ROD identifies and selects Alternative 8A (as described in the CERCLA Proposed Plan for Remedial Action at OU1/OU2A) and Alternative 10B' (as described in the OU2A Feasibility Study Report for OU2A). In the event different alternatives are selected and approved, this contract shall become null and void. Under no circumstances will the failure of the contract to come into effect be treated as either a termination for the convenience of the government under Section I of this contract or a termination for default under Section I of this contract. Under no circumstances will the United States reimburse OCWD or its subcontractors for any costs whatsoever in the event that Alternative 8A and Alternative 10B' are not selected and approved.

### 6. General Information.

A. OCWD shall provide all labor, personnel, equipment, materials, supplies, transportation, reproduction, and mailing services to perform the requirements of this contract, in accordance with the terms, conditions and provisions of the SA

B. All site construction work at THE FORMER MCAS El Toro, if any, is to be performed during normal working hours, which shall be from 7:00 A. M. to 4:00 P.M., Monday through Friday, excluding Government holidays, unless approved by the Contracting Officer, upon reasonable advance request by OCWD. Subject to Paragraph 9 below, the shallow groundwater unit (SGU) will operate 24 hours per day, seven days a week throughout the year.

C. Each performance period will be one year in duration. OCWD shall accept, treat for VOCs, and take ownership of SGU groundwater on a continuous basis which shall commence in accordance with the time period established pursuant to the SA and after notice to OCWD by the Contracting Officer that funds for the first performance period are available.

### 7. Intentionally Omitted

### 8. VOC Treatment.

A. Uninterrupted VOC Treatment Services. Except as otherwise provided by this contract or in connection with short-term routine maintenance, OCWD shall provide the United States with uninterrupted VOC treatment services. OCWD shall accept and take ownership of groundwater extracted by DON from the

## Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

former MCAS El Toro on-station SGU and delivered by DON to OCWD for VOC treatment pursuant to the terms and conditions of this contract and as provided in the ROD and Federal Facility Agreement (FFA) documents as referenced in Paragraph III. C of the SA. The required amount of SGU groundwater to be accepted and treated in any given period of performance will be the lesser of the volume furnished by DON or 208,000,000 gallons at a maximum flow rate of 440 gallons per minute through 550 gallons per minute or such other rate as agreed to by the parties. Without any increases in the contract compensation, OCWD may, in its sole discretion, accept a larger flow of water from the United States, if available.

B. OCWD shall be responsible for the disposal and/or discharge of the SGU groundwater after VOC treatment either through acceptance at the CCMi for beneficial use or otherwise discharging via re-injection, irrigation, or surface water discharge in accordance with the ROD for OU1 and OU2A. In no event will the costs associated with disposal of the SGU groundwater be a basis for the recovery of any additional costs by OCWD whatsoever.

C. Payment for Services. Payment for all services under the contract shall be subject to Paragraph 9 below related to temporary and permanent shutdowns. Payments will be made after the successful completion of each period of performance, as identified in Section B of the contract. Within 30 days of the successful completion of each performance period, OCWD shall submit invoices to the cognizant Contracting Officer for certification. Payment shall be made pursuant to the Prompt Payment Act, 31USC 3901, et seq.

1. OCWD will be paid an annual connection charge pursuant to Section B of this contract, including Attachment B-1 (column c), not to exceed \$1,213,190. The connection charge will be paid in not more than ten equal installments and during the base contract only.

2. OCWD will also be paid a service rate on an annual basis for VOC treatment and groundwater disposal pursuant to Section B and Attachment B-1 (column d) of this contract. In the event OCWD accepts and treats less than 208,000,000 gallons of SGU groundwater during a performance period, whether it be within the base contract or an option year, the VOC treatment and groundwater service payment set forth in Attachment B-1 (column d) will be reduced on a pro rata basis, based on the actual volume of SGU groundwater accepted and treated during the performance period. Clause 52-241-6 of this contract shall be interpreted in a manner consistent with this provision.

### 9. Shutdowns.

A. Temporary Shutdown. In the event that contaminants not listed in Appendix 3 to the SA are detected in extracted groundwater, in local groundwater monitoring or extraction wells, or if concentration or equivalent mass levels of contaminants listed in Appendix 2 of the SA are detected at the point of connection of DON'S SGU groundwater conveyance pipeline (described in Appendix 4 of the SA and depicted on the map in Appendix 5 of the SA) or at the CCMi central VOC treatment plant intake in excess of the Evaluation Concentration Levels for those contaminants as set forth in Appendix 2 of SA , the Party discovering said contaminants or levels shall promptly notify DON, the United States Environmental Protection Agency (USEPA), the California Department of Toxic Substances Control (DTSC), the California Department of Health Services (DHS) and the Santa Ana Regional Water Quality Control Board (RWQCB). Without further notice, OCWD may temporarily shutdown operation of the CCMi. In the event of any shutdown lasting longer than five days, OCWD shall provide written notice of such shutdown to the contracting officer. This notice shall contain the precise reason for the shutdown and its anticipated duration.

## Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

B. Shutdown Resolution. Within seven (7) calendar days following the initial prompt notification to DON, USEPA, etc., the Parties shall determine whether through adjusting flow rates, blending or similar measures:

1. The CCMI can continue to adequately treat extracted groundwater to ensure compliance with applicable Federal and State drinking water standards at the point of distribution into the water supply infrastructure following treatment, or

2. In the absence of Federal or State drinking water standards, whether the continued supply of CCMI waters poses no potential health threat to the public.

3. If the standards in Paragraphs 9.B.1 or 2 can be met, OCWD shall immediately resume operations.

4. In the event that OCWD determines that the standards set forth in Paragraphs 9.B.1 or 2 cannot be met at the point of distribution into the water supply infrastructure following treatment, OCWD may continue temporary shutdown of the CCMI. OCWD shall develop and submit within sixty (60) calendar days for approval to DON, USEPA, and CALEPA (including DTSC, DHS and the RWQCB) a Response Plan. The Response Plan shall propose all practicable means available to minimize the extent and duration of termination of all or a portion of the CCMI groundwater extraction and/or treatment activities. The Response Plan shall specify a timetable for resumption of operations.

C. Additional Treatment at the CCMI. If the approved Response Plan under Paragraph 9. B. 4 provides that the CCMI shall continue to operate but that additional treatment technology at the CCMI shall be required beyond the design capacity of the VOC treatment and reverse osmosis systems or to develop different treatment technologies, any claim for compensation by OCWD for the cost of constructing and operating such additional treatment technology shall be addressed in accordance with Changes Clause Provisions and Paragraph 14.

D. The Government may temporarily shutdown operation of the SGU extraction system without prior notice to the contractor. Such shutdown may be for any reason deemed necessary by the Government. When such shutdown occurs, the Contracting Officer shall provide OCWD with written notice of the shutdown and its anticipated duration, as soon as reasonably practicable. Under no circumstances will such shutdown be valid grounds for recovery under this contract. .

E. Payments and Temporary Shutdown Periods. In the event of a Temporary Shutdown of the CCMI treatment system, the annual service rate payment to OCWD as set forth in Paragraph 8. C. 2 will be reduced on a pro rata basis during the shutdown period, OCWD shall continue to be credited the full connection charge set forth in Paragraph 8. C. 1 for that annual performance period.

F. Effect of Temporary Shutdown Under this Contract. A temporary shutdown shall not be grounds for seeking relief under the termination for convenience provisions of this contract. Other than as specified under Paragraph 9 of this contract, a temporary shutdown shall not be deemed a basis for recovery of any costs including delay and/or overhead costs under the Changes Clause in Section I of this contract.

G. The contract shall not be terminated for default for any temporary shutdown that is conducted in accordance with the procedures enumerated herein.

## Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

### H. Permanent Shutdown not permitted Under the Contract.

Notwithstanding any other provision of this contract, OCWD shall continue to provide the VOC treatment services regardless of whether or not the SGU groundwater can be used for a municipal water supply. In the event that OCWD determines pursuant to applicable regulations that the groundwater cannot be used for water supply purposes after treatment, OCWD shall be responsible for otherwise disposing of the treated groundwater at no additional cost to the government.

Permanent termination by OCWD of SGU VOC treatment activities required by this contract shall be deemed a breach of the contract unless DON is relieved of its obligation to USEPA and CALEPA to remediate VOC contamination in the SGU by an amendment to the ROD. In the event of a termination of services contrary to this provision, in addition to any other remedies covered by this contract, the United States shall be entitled to recover from OCWD all incremental costs incurred by the United States in obtaining alternate VOC remediation services over and above the amount to be paid to the contractor for the connection charge and service rate at the time the services are terminated pursuant to the contract payment schedule. In the event of such termination, the connection charge and service rate for the performance period in which the contract was breached, as well as all future connection charges and service rates as set forth in Attachment B-1 (columns c & d) to this contract, will not be recoverable.

J. Permanent Shutdown Permitted Under the Contract. Notwithstanding any other provision of this contract, a permanent shutdown without breach of this contract will apply when DON is relieved of its obligation to USEPA and CALEPA to remediate VOC contamination in the SGU by an appropriate amendment to the ROD. If such time is within the base contract (ten-year period), OCWD will be paid the balance of the connection charge according to Attachment B-1 (column c) of this contract. The service rate will be reduced on a pro rata basis, based on the volume of SGU groundwater accepted and treated during the performance period prior to the termination of services by DON.

### 10. Bonds, Permits, and Licenses.

A. Bonding Requirements. OCWD shall obtain and provide a performance bond as per Section III, paragraph D of the SA and provide copies of such bond to the Contracting Officer.

B. OCWD Responsibility for Permits, Licenses, Etc. Except with regard to DON'S obligations as provided in the FFA (Appendix 1 to the SA), OCWD shall be responsible for obtaining all required licenses, permits, and approvals necessary for the construction and operation of the non-CERCLA portion of the Modified IDP, and shall be the lead agency responsible for compliance with the California Environmental Quality Act, Public Resources Code sections 210000 et seq. as necessary to construct and operate the Modified IDP. The CMI portion of the Modified IDP is exempt from permit requirements under CERCLA.

11. Reasonable Access to the Former MCAS El Toro ("the Site"). DON shall provide OCWD and its subcontractors with reasonable access to the Site, so long as DON owns the Site. DON shall also provide OCWD and its subcontractors a license to use property at the Site to perform this contract. In the event DON sells or leases the Site, DON shall reserve and record in such sale or lease agreements continuing access, rights-of-Way licenses and easements as necessary for OCWD to perform the contract. DON shall inform all prospective purchasers and/or lessees that a CERCLA remediation action system will be operating pursuant to a ROD with USEPA and CALEPA and OCWD and its subcontractors shall have the right, upon reasonable notice

## Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

to all purchasers and/or lessees, and so as not to unreasonably interfere with the purchaser or lessee's operations, to perform this contract. OCWD and its subcontractors shall also have the right to sample soil and groundwater on the Site pursuant to Paragraph VI . A of the SA.

### 12. Access to Records and Information.

A. During the term of this contract, OCWD and its subcontractors shall provide DON, USEPA and CALEPA with reasonable access, during normal business hours, to the CCMI facilities and to all records that are not within the scope of the attorney-client communication or attorney work product or deliberative process privileges and that are relevant to the construction and operation and maintenance of those facilities, for purposes of evaluating OCWD's and its subcontractors' compliance with this contract. OCWD and its subcontractors shall also provide reasonable access to DON, USEPA, and CALEPA, during normal business hours, to sample pre-treated and treated groundwater and groundwater collected in groundwater monitoring wells.

B. The Parties shall provide to each other, upon written request, copies of all documents and information within their possession or control that is not within the scope of the attorney-client communication or attorney work product or deliberative process privileges and that relates to the performance of this contract, including, but not limited to, plans, reports, maps, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample tracking routing, correspondence or other documents or information of official record relating to the performance of this contract.

1. DON shall provide OCWD a copy of analytical data reports for all validated analytical data collected by DON and its authorized representatives and contractors in groundwater monitoring wells and on-station extraction wells required by the ROD within sixty (60) calendar days after such reports become available to DON.

2. OCWD and its subcontractors shall provide DON copies of analytical data reports for all quality assured and controlled analytical data collected by OCWD and its subcontractors in groundwater monitoring wells, CCMI production wells, and finished water (post treatment) within sixty (60) calendar days after such reports become available to OCWD and its subcontractors.

C. In the event monitoring activities undertaken pursuant to this contract cause damage to one or more of the monitoring or production wells or create a condition in the well(s) which prevents the future intended use of the well(s) within the scope of this contract (e.g., equipment lodged), then the Party responsible for causing the damage or creating said condition shall promptly remedy the condition at its sole cost to ensure that the intended use of the well(s) satisfies all applicable federal, state and local regulatory operation, maintenance, quality assurance/quality control, and safety standards.

D. In the event monitoring or sampling equipment used by any Party to this contract at one or more monitoring or production wells subject to this contract, is lost or damaged during well monitoring activities by one of the Parties, then it will be the sole responsibility of the Party that owns the equipment to retrieve and/or repair its own equipment.

E. OCWD and its subcontractors shall provide the Contracting Officer, following request, complete, true and correct copies of technical and cost documentation relating to the performance of this contract. OCWD and

## Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

its subcontractors shall make available to the United States, such information gathered or testimony in support of any future contribution, cost recovery or other civil claims made and proceedings instituted by the United States under federal or state statutory or common law, at law or in equity, against third parties for reimbursement of all or a portion of the costs incurred pursuant to this contract. The United States shall provide such information, documentation, and testimony to OCWD and its subcontractors in such claims instituted by the Parties hereto against third parties as provided by law.

13. Required Reports. OCWD shall be responsible for providing the Contracting Officer with copies of all reports and documents in accordance with the requirements of the FFA in Paragraph III. C in the SA.

14. Changes Clause Provisions. OCWD agrees that it will only seek to recover costs relating to groundwater deliveries to OCWD from the SGU under the Changes Clause (Part II, Section I, Paragraph 52.243-1 and Alternate 1) of this contract under the following specific circumstances and that the Changes Clause shall be interpreted in a manner consistent with these circumstances:

A. OCWD expressly warrants and represents that it will make no attempt to seek additional monies for work, circumstances, events, and chemicals found at the former MCAS EL Toro other than in the specific circumstances stated herein and that it will abide by the "Mutual Release of Liability and Covenant Not to Sue" language in Paragraph VII. B of the SA. OCWD may seek recovery under the Changes Clause of this contract for:

1. Any valid claim for CERCLA response costs by OCWD and its subcontractors necessary and consistent with the NCP based upon the following new or previously unknown conditions or information concerning releases of hazardous substances, pollutants or contaminants when OCWD and its subcontractors demonstrate that such releases:

a. Are a result of DON's activities and

b. Result in the incurrence of additional necessary responses costs consistent with the NCP for construction or treatment by OCWD and its subcontractors in order to comply with regulatory standards or provide adequate protection of human health and the environment.

2. New or previously unknown conditions as used in this paragraph are defined as:

a. Hazardous substances, pollutants or contaminants released as a result of DON's activities which do not appear on the List of chemicals in Appendix 3 to the SA and are identified after the effective date of this contract; or

b. Concentration levels of hazardous substances, pollutants or contaminants which exceed the Evaluation Concentration Level (ECL) values set forth in Appendix 2 to the SA are identified in monitoring data collected and analyzed after the effective date of this contract and the increased concentration levels are attributable to DON activities; or

c. Legally enforceable Federal or State drinking water standards which address hazardous substances, pollutants or contaminants included in Appendix 2 to the SA that are more stringent than those in effect as of the effective date of this contract are enacted or promulgated after the effective date of the contract.

## Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

### 15. Intentionally Omitted.

### 16. Disputes Procedures.

Notwithstanding any other provision contained herein, prior to exercising any rights available under the Disputes Clause of this contract (Par. 52.233-1), or the Contract Disputes Act (41 U.S.C. Sections 601-613), each Party agrees to submit its objections and views in writing to the other Party. The Parties will then attempt to resolve the dispute within thirty (30) working days after receipt of the objections and views. If agreement is not reached during this period or such longer period as the Parties jointly agree to, the Parties may pursue such remedies as are available under the Disputes Clause of this contract

17. Water Rights. OCWD warrants and represents that the actions it agrees to undertake under this contract are consistent with all applicable laws and regulations regarding ownership and allocation of water rights.

### 18 Retention of Records.

OCWD, its subcontractors, and the United States shall retain all documents of record relating to the performance of this contract in a manner and for a time period that complies with Section 24 of the FFA.

### 19. Other Provisions.

A. The Parties shall at all times cooperate with all federal, state and local agencies involved in the investigation and remediation of hazardous substances at the Site.

B. The Parties shall comply with all applicable federal and state laws and regulations in performing their obligations under this contract; in the event of conflict between such laws, federal law shall be paramount and controlling.

C. In the event of any death or injury to any person, or the loss of or damage of any property, caused by officers, employees, or contractors of the United States in connection with any of the United States' activities hereunder or in the event of any legal or equitable action instituted between the OCWD or its subcontractors, OCWD's or its subcontractors' officers, employees and contractors and the United States, the liability, if any, of the United States shall be determined in accordance with the applicable provisions of the Federal Tort Claims Act (28 U.S.C. Sections 2671-2680).

Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

**PART I - THE SCHEDULE**

**SECTION E: INSPECTION AND ACCEPTANCE**

<b><u>Title</u></b>	<b>Page No.</b>
FAR 52.246-4 Inspection of Services - Fixed Price (Aug 1996)	

Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

**52.246-4 - Inspection of Services - Fixed-Price.  
(Aug. 1996)**

(a) *Definition: "Services,"* as used in this clause, includes services performed, workmanship, and material furnished or utilized in the performance of services.

(b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the services under this contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.

(c) The Government has the right to inspect and test all services called for by the contract, to the extent practicable at all times and places during the term of the contract. The Government shall perform inspections and tests in a manner that will not unduly delay the work.

(d) If the Government performs inspections or tests on the premises of the Contractor or a subcontractor, the Contractor shall furnish, and shall require subcontractors to furnish, at no increase in contract price, all reasonable facilities and assistance for the safe and convenient performance of these duties.

(e) If any of the services do not conform with contract requirements, the Government may require the Contractor to perform the services again in conformity with contract requirements, at no increase in contract amount. When the defects in services cannot be corrected by re-performance, the Government may –

(1) Require the Contractor to take necessary action to ensure that future performance conforms to contract requirements; and

(2) Reduce the contract price to reflect the reduced value of the services performed.

(f) If the Contractor fails to promptly perform the services again or to take the necessary action to ensure future performance in conformity with contract requirements, the Government may –

(1) By contract or otherwise, perform the services and charge to the Contractor any cost incurred by the Government that is directly related to the performance of such service; or

(2) Terminate the contract for default.

Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

**PART I - THE SCHEDULE**

**SECTION F: DELIVERIES OR PERFORMANCE**

## Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

### **PART I - THE SCHEDULE**

#### **F-1 TERM OF CONTRACT**

Term of contract for contracts utilizing fiscal year funds: The contract awarded as a result of this offer shall extend from the date of contract award, through 365 calendar days from the date of award to represent one full year, for a total of ten (10) years of SGU VOC treatment services pursuant to CLINs 0001 through 0010, cited in Section B of this contract.

#### **F-2 OPTIONS**

The United States government reserves the right to exercise options for additional services pursuant to CLINs 0011 through 0040, as cited in Section B and in accordance with the provisions of FAR Clause 52.217-9, "Option to Extend the Term of The Contract", as referenced in Section I of this contract.

#### **F-3 WORK SCHEDULE/PERIOD OF PERFORMANCE**

OCWD/IRWD shall arrange its work so as not to interfere with the normal occurrence of business at the former MCAS El Toro. Whenever non-essential services have been scheduled on the date a holiday occurs, such services shall be performed on the following work day.

OCWD/NAVY

Effective Start Date: :To Be Determined

## **PART I - THE SCHEDULE**

### **SECTION G: CONTRACT ADMINISTRATION DATA**

#### G-1 Contract Administrative Data

The Administrative Contracting Officer for this contract is:

Department of Navy  
Southwest Division, Naval Facilities Engineering Command  
1220 Pacific Highway  
San Diego, CA 92132

G-2 The Contracting Officer's Technical Representative (COTR) for this contract shall be designated at time of contract award.

G-3 The cognizant payment office for this contract shall be designated at time of contract award.

OCWD/NAVY

Effective Start Date: :To Be Determined

## **PART I - THE SCHEDULE**

### **SECTION H: SPECIAL CONTRACT REQUIREMENTS**

#### **H-1 Pre-Performance Conference**

Prior to commencing work, the contractor may be required to meet with the Contracting Officer and/or designated technical personnel at a mutually agreeable time and place to discuss and develop mutual understandings concerning scheduling, performance and administration of the contract.

#### **H-2 Privity of Contract**

As a result of awarding this contract, the Government's obligation remains solely with the prime contractor, Orange County Water District (OCWD), in accordance with the terms and conditions cited herein and in the Settlement Agreement, cited and referenced in Section J.

#### **H-3 Subcontract to IRWD**

To the extent necessary to perform this contract, OCWD will enlist Irvine Ranch Water District (IRWD), as subcontractor.

#### **H-4 Order of Precedence (Pre-disputes)**

For disputes arising under the terms and conditions of this contract, such disputes will be governed by the Pre-disputes procedures, paragraph C.16, and the Disputes clause (FAR 52.233-1) of the contract. All disputes arising under the terms and conditions of the Settlement Agreement shall be governed by VII.F, "Disputes Resolution Procedures", of the Settlement Agreement.

#### **H-5 Indemnification and Contribution Protection.**

A. OCWD hereby agrees to defend, indemnify and hold the United States harmless from any and all past, present or future liability, costs, claims, demands, duties, damages, debts, causes of action, administrative or judicial, at law or equity, under federal, state, or local law (collectively referred to as "claims"), by any person or entity not a party to the SA to the same extent as set forth in the SA.

B. OCWD hereby indemnifies and holds harmless the United States from and against any and all claims, liens, demands, causes of actions, obligations, damages, liabilities, judgments and costs, including attorney's fees and expenses, known or unknown and now or hereafter existing which arise as a result of, or in connection with OCWD's activities or those activities of its agents, employees and subcontractors in performance of this contract except to the extent caused in whole or in part by the deliberate or negligent acts of the United States after the date of execution of this contract on or with property owned by DoN or any other instrumentality of the United States at the time of such acts (this exception will not be construed to cover any claim relating to the actual or threatened release of hazardous, toxic or solid wastes, substances, pollutants or contaminants that originate in the SGU groundwater and migrate into the Principal Aquifer).

## Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

C. As of the effective date of this contract, the Parties agree the United States is entitled to protection from contribution actions or claims as provided in Section 113(f) of CERCLA, 42 U.S.C. Section 9613(f), federal common law, or other applicable law, for matters addressed in this contract and the SA.

### **H-6 Changes Clause Provisions**

OCWD agrees to the specific limitations on the scope of recovery available under the Changes Clause of this contract, as set forth in Section C. 14 of this contract

### **H-7 Yearly Funding**

OCWD's obligations to perform under this contract shall be contingent upon notice of availability of funds from the Contracting Officer. See Section B.

### **H-8 Service Provisions Applicability**

Paragraph 1-52-241-6 (2) of this contract shall apply to flow rate and volume meters.

Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

**PART II- CONTRACT CLAUSES**

**SECTION I - REQUIRED PROVISIONS OR CLAUSES**

**UTILITY SERVICE**

		<b>Page#</b>
52.243-1	Changes- Fixed-Price.	21
52.202-1	Definitions.	21
52.203-5	Covenant Against Contingent Fees.	23
52.203-6	Restrictions on Subcontractor Sales to the Government.	24
52.203-7	Anti-Kickback Procedures.	24
52.204-4	Printing/Copying Double-Sided on Recycled Paper.	26
52.204-1	Approval of Contract.	26
52.204-2	Security Requirements.	26
52.216-24	Limitation of Government Liability.	26
52.223-13	Certification of Toxic Chemical Release Reporting.	27
52.223-10	Waste Reduction Program.	27
52.223-14	Toxic Chemical Release Reporting.	28
52.232-18	Availability of Funds.	29
52.233-1	Disputes.	29
52.236-7	Permits and Responsibilities.	31
52.236-9	Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements	31
52.241-3	Scope and Duration of Contract.	31
52.241-4	Change in Class of Service.	32
52.241-5	Contractor's Facilities.	32
52-241-6	Service Provisions.	33
52-242-13	Bankruptcy.	34
52-244-6	Subcontracts For Commercial Items and Commercial Components	34
52.249-2	Termination for Convenience of the Government (Fixed-Price). (Sep 1996) Alternate I	35
52.249-8	Default (Fixed-Price Supply or Service).	38

**52.243-1 Changes- Fixed-Price.**

(Aug 1987)

(a) The Contracting Officer may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this contract in any one or more of the following:

(1) Drawings, designs, or specifications when the supplies to be furnished are to be specially manufactured for the Government in accordance with the drawings, designs, or specifications.

(2) Method of shipment or packing.

(3) Place of delivery.

(b) If any such change causes an increase or decrease in the cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, the Contracting Officer shall make an equitable adjustment in the contract price, the delivery schedule, or both, and shall modify the contract.

(c) The Contractor must assert its right to an adjustment under this clause within 30 days from the date of receipt of the written order. However, if the Contracting Officer decides that the facts justify it, the Contracting Officer may receive and act upon a proposal submitted before final payment of the contract

(d) If the Contractor's proposal includes the cost of property made obsolete or excess by the change, the Contracting Officer shall have the right to prescribe the manner of the disposition of the property.

(e) Failure to agree to any adjustment shall be a dispute under the Disputes clause. However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

*Alternate I (Apr 1984).* If the requirement is for services, other than architect-engineer or other professional services, and no supplies are to be furnished, substitute the following paragraph (a) for paragraph (a) of the basic clause:

(a) The Contracting Officer may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this contract in any one or more of the following:

(1) Description of services to be performed.

(2) Time of performance (i.e., hours of the day, days of the week, etc.).

(3) Place of performance of the services.

**52.202-1 Definitions. (Oct. 1995)**

(a) 'Head of the agency' (also called 'agency head') or 'Secretary' means the Secretary (or Attorney General, Administrator, Governor, Chairperson, or other chief official, as appropriate) of the agency, including any deputy or assistant chief official of the agency; and the term 'authorized representative' means any person, persons, or board (other than the Contracting Officer) authorized to act for the head of the agency or Secretary.

(b) 'Commercial component' means any component that is a commercial item.

Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

(c) 'Commercial item' means—

(1) Any item, other than real property, that is of a type customarily used for non-governmental purposes and that-

(i) Has been sold, leased, or licensed to the general public; or

(ii) Has been offered for sale, lease, or license to the general public;

(2) Any item that evolved from an item described in paragraph (c)(1) of this clause through advances in technology or performance and that is not yet available in the commercial marketplace, but will be available in the commercial marketplace in time to satisfy the delivery requirements under a Government solicitation;

(3) Any item that would satisfy a criterion expressed in paragraphs ©)(1) or ©)(2) of this clause, but for-

(i) Modifications of a type customarily available in the commercial marketplace; or

(ii) Minor modifications of a type not customarily available in the commercial marketplace made to meet Federal Government requirements. 'Minor' modifications means modifications that do not significantly alter the non-governmental function or essential physical characteristics of an item or component, or change the purpose of a process. Factors to be considered in determining whether a modification is minor include the value and size of the modification and the comparative value and size of the final product. Dollar values and percentages may be used as guideposts, but are not conclusive evidence that a modification is minor;

(4) Any combination of items meeting the requirements of paragraphs (c)(1), (2), (3), or (5) of this clause that are of a type customarily combined and sold in combination to the general public;

(5) Installation services, maintenance services, repair services, training services, and other services if such services are procured for support of an item referred to in paragraphs (c)(1), (2), (3), or (4) of this clause, and if the source of such services-

(i) Offers such services to the general public and the Federal Government contemporaneously and under similar terms and conditions; and

(ii) Offers to use the same work force for providing the Federal Government with such services as the source uses for providing such services to the general public;

(6) Services of a type offered and sold competitively in substantial quantities in the commercial marketplace based on established catalog or market prices for specific tasks performed under standard commercial terms and conditions. This does not include services that are sold based on hourly rates without an established catalog or market price for a specific service performed;

## Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

(7) Any item, combination of items, or service referred to in subparagraphs ©)(1) through ©)(6), notwithstanding the fact that the item, combination of items, or service is transferred between or among separate divisions, subsidiaries, or affiliates of a Contractor; or

(8) A non-developmental item, if the procuring agency determines the item was developed exclusively at private expense and sold in substantial quantities, on a competitive basis, to multiple State and local Governments.

(d) 'Component' means any item supplied to the Federal Government as part of an end item or of another component.

(e) 'Non-developmental item' means'--

(1) Any previously developed item of supply used exclusively for governmental purposes by a Federal agency, a State or local government, or a foreign government with which the United States has a mutual defense cooperation agreement;

(2) Any item described in paragraph (e)(1) of this definition that requires only minor modification or modifications of a type customarily available in the commercial marketplace in order to meet the requirements of the procuring department or agency; or

(3) Any item of supply being produced that does not meet the requirements of paragraph (e)(1) or (e)(2) solely because the item is not yet in use.

(f) 'Contracting Officer' means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer.

(g) Except as otherwise provided in this contract, the term 'subcontracts' includes, but is not limited to, purchase orders and changes and modifications to purchase orders under this contract.

### **52.203-5 Covenant Against Contingent Fees.**

(APR 1984)

(a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of the contingent fee.

(b) 'Bona fide agency,' as used in this clause, means an established commercial or selling agency, maintained by a contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

## Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

'Bona fide employee,' as used in this clause, means a person, employed by a contractor and subject to the contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

'Contingent fee,' as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

'Improper influence,' as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

### **52.203-6 Restrictions on Subcontractor Sales to the Government.**

(JUL 1995)

(a) Except as provided in (h) of this clause, the Contractor shall not enter into any agreement with an actual or prospective subcontractor, nor otherwise act in any manner, which has or may have the effect of restricting sales by such subcontractors directly to the Government of any item or process (including computer software) made or furnished by the subcontractor under this contract or under any follow-on production contract.

(b) The prohibition in (a) of this clause does not preclude the Contractor from asserting rights that are otherwise authorized by law or regulation.

(c) The Contractor agrees to incorporate the substance of this clause, including this paragraph ©), in all subcontracts under this contract which exceed \$100,000.

### **52.203-7 Anti-Kickback Procedures.**

(JUL 1995)

(a) Definitions.

'Kickback,' as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided, directly or indirectly, to any prime Contractor, prime Contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract.

'Person,' as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

'Prime contract,' as used in this clause, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

'Prime Contractor' as used in this clause, means a person who has entered into a prime contract with the United States.

Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

'Prime Contractor employee,' as used in this clause, means any officer, partner, employee, or agent of a prime Contractor.

'Subcontract,' as used in this clause, means a contract or contractual action entered into by a prime Contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract.

'Subcontractor,' as used in this clause, (1) means any person, other than the prime Contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a subcontract entered into in connection with such prime contract, and (2) includes any person who offers to furnish or furnishes general supplies to the prime Contractor or a higher tier subcontractor.

'Subcontractor employee,' as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

(b) The Anti-Kickback Act of 1986 (41 U.S.C. 51-58) (the Act), prohibits any person from—

(1) Providing or attempting to provide or offering to provide any kickback;

(2) Soliciting, accepting, or attempting to accept any kickback; or

(3) Including, directly or indirectly, the amount of any kickback in the contract price charged by a prime Contractor to the United States or in the contract price charged by a subcontractor to a prime Contractor or higher tier subcontractor.

(c)(1) The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.

(2) When the Contractor has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Contractor shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Department of Justice.

(3) The Contractor shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause.

(4) The Contracting Officer may (i) offset the amount of the kickback against any monies owed by the United States under the prime contract and/or (ii) direct that the Prime Contractor withhold from sums owed a subcontractor under the prime contract the amount of the kickback. The Contracting Officer may order that monies withheld under subdivision (c)(4)(ii) of this clause be paid over to the Government unless the Government has already offset those monies under subdivision (c)(4)(i) of this clause. In either case, the Prime Contractor shall notify the Contracting Officer when the monies are withheld.

(5) The Contractor agrees to incorporate the substance of this clause, including subparagraph (c)(5) but excepting subparagraph (c)(1), in all subcontracts under this contract which exceed \$100,000.

Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

**52.204-4 Printing/Copying Double-Sided on Recycled Paper.**

(JUN 1996)

(a) In accordance with Executive Order 12873, dated October 20, 1993, as amended by Executive Order 12995, dated March 25, 1996, the Offeror/Contractor is encouraged to submit paper documents, such as offers, letters, or reports, that are printed/copied double-sided on recycled paper that has at least 20 percent post consumer material.

(b) The 20 percent standard applies to high-speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, white woven envelopes, and other uncoated printed and writing paper, such as writing and office paper, book paper, cotton fiber paper, and cover stock. An alternative to meeting the 20 percent post consumer material standard is 50 percent recovered material content of certain industrial by-products.

**52.204-1 Approval of Contract.**

(DEC 1989)

This contract is subject to the written approval of identify Theodoris Bressard, Contracting Officer, shall not be binding until so approved.

**52.204-2 Security Requirements.**

(AUG 1996)

(a) This clause applies to the extent that this contract involves access to information classified 'Confidential,' 'Secret,' or 'Top Secret.'

(b) The Contractor shall comply with-

(1) The Security Agreement (DD Form 441), including the National Industrial Security Program Operating Manual (DOD 5220.22-M); and

(2) Any revisions to that manual, notice of which has been furnished to the Contractor.

(c) If, subsequent to the date of this contract, the security classification or security requirements under this contract are changed by the Government and if the changes cause an increase or decrease in security costs or otherwise affect any other term or condition of this contract, the contract shall be subject to an equitable adjustment as if the changes were directed under the Changes clause of this contract.

(d) The Contractor agrees to insert terms that conform substantially to the language of this clause, including this paragraph (d) but excluding any reference to the Changes clause of this contract, in all subcontracts under this contract that involve access to classified information.

**52.216-24 Limitation of Government Liability.**

(APR 1984)

(a) In performing this contract, the Contractor is not authorized to make expenditures or incur obligations exceeding the limitations of the SGU Settlement Agreement.

Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

(b) The maximum amount for which the Government shall be liable if this contract is terminated is cited in the SGU Settlement Agreement.

**52.223-13 Certification of Toxic Chemical Release Reporting.**

(OCT 1996)

(a) Submission of this certification is a prerequisite for making or entering into this contract imposed by Executive Order 12969, August 8, 1995.

(b) By signing this offer, the offeror certifies that—

(1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or

(2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: [Check each block that is applicable.]

(i) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023©);

(ii) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

(iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(iv) The facility does not fall within Standard Industrial Classification Code (SIC) designations 20 through 39 as set forth in section 19.102 of the Federal Acquisition Regulation; or

(v) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

**52.223-10 Waste Reduction Program.**

(OCT 1997)

(a) Definition. 'Waste reduction,' as used in this clause, means preventing or decreasing the amount of waste being generated through waste prevention, recycling, or purchasing recycled and environmentally preferable products.

Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

(b) Consistent with the requirements of Section 701 of Executive Order 12873, the Contractor shall establish a program to promote cost-effective waste reduction in all operations and facilities covered by this contract. Any such program shall comply with applicable Federal, State, and local requirements, specifically including Section 6002 of the Resource Conservation and Recovery Act (42 U.S.C. 6901, et seq.) and implementing regulations.

**52.223-14 Toxic Chemical Release Reporting.**  
(OCT 1996)

(a) Unless otherwise exempt, the Contractor, as owner or operator of a facility used in the performance of this contract, shall file by July 1 for the prior calendar year an annual Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023(a) and (g)), and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106). The Contractor shall file, for each facility subject to the Form R filing and reporting requirements, the annual Form R throughout the life of the contract.

(b) A Contractor owned or operated facility used in the performance of this contract is exempt from the requirement to file an annual Form R if–

(1) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

(2) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

(3) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(4) The facility does not fall within Standard Industrial Classification Code (SIC) designations 20 through 39 as set forth in section 19.102 of the Federal Acquisition Regulation (FAR); or

(5) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

(c) If the Contractor has certified to an exemption in accordance with one or more of the criteria in paragraph (b) of this clause, and after award of the contract circumstances change so that any of its owned or operated facilities used in the performance of this contract is no longer exempt–

(1) The Contractor shall notify the Contracting Officer; and

(2) The Contractor, as owner or operator of a facility used in the performance of this contract that is no longer exempt, shall–

(i) Submit a Toxic Chemical Release Inventory Form (Form R) on or before July 1 for the prior calendar year during which the facility becomes eligible; and

## Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

(ii) Continue to file the annual Form R for the life of the contract for such facility.

(d) The Contracting Officer may terminate this contract or take other action as appropriate, if the Contractor fails to comply accurately and fully with the EPCRA and PPA toxic chemical release filing and reporting requirements.

(e) Except for acquisitions of commercial items as defined in FAR Part 2, the Contractor shall—

(1) For competitive subcontracts expected to exceed \$100,000 (including all options), include a solicitation provision substantially the same as the provision at FAR 52.223-13, Certification of Toxic Chemical Release Reporting; and

(2) Include in any resultant subcontract exceeding \$100,000 (including all options), the substance of this clause, except this paragraph (e).

### **52.232-18 Availability of Funds**

(Apr 1984)

Funds are not presently available for this contract. The Government's obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Contracting Officer for this contract and until OCWD receives notice of such availability, to be confirmed in writing by the Contracting Officer.

### **52.233-1 Disputes.**

(OCT 1995)

(a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613). The dispute resolution procedures in this Section 52.233-1 and the Contract Disputes Act of 1978 apply to issues relating directly to the treatment of extracted SGU groundwater under this contract and do not apply to disputes arising under the SA and the PA component of the CCMI.

(b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.

(c) 'Claim,' as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. A claim arising under a contract, unlike a claim relating to that contract, is a claim that can be resolved under a contract clause that provides for the relief sought by the claimant. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding \$100,000 is not a claim under the Act until certified as required by subparagraph (d)(2) of this clause. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

(d)(1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer.

(2)(i) Contractors shall provide the certification specified in subparagraph (d)(2)(iii) of this clause when submitting any claim--

(A) Exceeding \$100,000; or

(B) Regardless of the amount claimed, when using--

(1) Arbitration conducted pursuant to 5 U.S.C. 575-580; or

(2) Any other alternative means of dispute resolution (ADR) technique that the agency elects to handle in accordance with the Administrative Dispute Resolution Act (ADRA).

(ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.

(iii) The certification shall state as follows: 'I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am duly authorized to certify the claim on behalf of the Contractor.'

(3) The certification may be executed by any person duly authorized to bind the Contractor with respect to the claim.

(e) For Contractor claims of \$100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over \$100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in the Act.

(g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use ADR. If the Contractor refuses an offer for alternative disputes resolution, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the request. When using arbitration conducted pursuant to 5 U.S.C. 575-580, or when using any other ADR technique that the agency elects to handle in accordance with the ADRA, any claim, regardless of amount, shall be accompanied by the certification described in subparagraph (d)(2)(iii) of this clause, and executed in accordance with subparagraph (d)(3) of this clause.

(h) The Government shall pay interest on the amount found due and unpaid from (1) the date that the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in FAR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the

## Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under the contract, and comply with any decision of the Contracting Officer.

### **52.236-7 Permits and Responsibilities.**

(Nov 1991)

OCWD shall, without additional expense to the Government, be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State, and municipal laws, codes, and regulations applicable to the performance of the work. OCWD shall also be responsible for all damages to persons or property that occur as a result of OCWD's fault or negligence. OCWD shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.

### **52.236-9 Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvement**

(Apr 1984)

(a) OCWD shall preserve and protect ail structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the former MCAS El Toro, which are not to be removed and which do not unreasonably interfere with the work required under this contract. OCWD shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, OCWD shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.

(b) OCWD shall protect from damage all existing improvements and utilities (1) at or near the former MCAS El Toro and (2) on adjacent property of a third party, the locations of which are made known to or should be known by OCWD. OCWD shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If OCWD fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to OCWD.

### **52.241-3 Scope and Duration of Contract.**

(FEB 1995)

(a) Until DON is relieved of its obligation to USEPA and CALEPA to remediate VOC contamination in the SGU by appropriate amendment to the ROD, OCWD agrees to furnish and the Government agrees to purchase this utility service in accordance with the applicable tariff(s), rules, and regulations as approved by the applicable governing regulatory body and as set forth in the contract.

(b) It is expressly understood that neither the Contractor nor the Government is under any obligation to continue any service under the terms and conditions of this contract beyond the expiration date.

## Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

(c) The Contractor shall provide the Government with one complete set of rates, terms, and conditions of service which are in effect as of the date of this contract and any subsequently approved rates.

(d) The Contractor shall be paid at the applicable rate(s) under the tariff and the Government shall be liable for the minimum monthly charge, if any, specified in this contract commencing with the period in which service is initially furnished and continuing for the term of this contract. Any minimum monthly charge specified in this contract shall be equitably prorated for the periods in which commencement and termination of this contract become effective.

### **52.241-4 Change in Class of Service.**

(FEB 1995)

(a) In the event of a change in the class of service, such service shall be provided at the Contractor's lowest available rate schedule applicable to the class of service furnished.

(b) Where the Contractor does not have on file with the regulatory body approved rate schedules applicable to services provided, no clause in this contract shall preclude the parties from negotiating a rate schedule applicable to the class of service furnished.

### **52.241-5 Contractor's Facilities.**

(FEB 1995)

(a) The Contractor, at its expense, unless otherwise provided for in this contract, shall furnish, install, operate, and maintain all facilities required to furnish service hereunder, and measure such service at the point of delivery specified in the Service Specifications. Title to all such facilities shall remain with the Contractor and the Contractor shall be responsible for loss or damage to such facilities, except that the Government shall be responsible to the extent that loss or damage has been caused by the Government's negligent acts or omissions.

(b) Notwithstanding any terms expressed in this clause, the Contractor shall obtain approval from the Contracting Officer prior to any equipment installation, construction, or removal at the former MCAS El Toro. The Government hereby grants to the Contractor, free of any rental or similar charge, but subject to the limitations specified in this contract, a revocable permit or license to enter the service location for any proper purpose under this contract. This permit or license includes use of the site or sites agreed upon by the parties hereto for the installation, operation, maintenance, and repair of the facilities of the Contractor required to be located upon Government premises. All applicable taxes and other charges in connection therewith, together with all liability of the Contractor in construction, operation, maintenance and repair of such facilities, shall be the obligation of the Contractor.

(c) Authorized representatives of the Contractor will be allowed access to the facilities on Government premises at reasonable times to perform the obligations of the Contractor regarding such facilities. It is expressly understood that the Government may limit or restrict the right of access herein granted in any manner considered necessary (e.g., national security, public safety).

(d) Unless otherwise specified in this contract, the Contractor shall, at its expense, remove such facilities and restore Government premises to their original condition as near as practicable within a reasonable time after

Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

the Government terminates this contract. In the event such termination of this contract is due to the fault of the Contractor, such facilities may be retained in place at the option of the Government for a reasonable time while the Government attempts to obtain service elsewhere comparable to that provided for hereunder.

**52.241-6 Service Provisions.**  
(FEB 1995)

(a) Measurement of service.

(1) All service furnished by the Contractor shall be measured by suitable metering equipment of standard manufacture, to be furnished, installed, maintained, repaired, calibrated, and read by the Contractor at its expense. When more than a single meter is installed at a service location, the readings thereof may be billed conjunctively, if appropriate. In the event any meter fails to register (or registers incorrectly) the service furnished, the parties shall agree upon the length of time of meter malfunction and the quantity of service delivered during such period of time. An appropriate adjustment shall be made to the next invoice for the purpose of correcting such errors. However, any meter which registers not more than \_ five (5)\_\_\_ percent slow or fast shall be deemed correct.

(2) The Contractor shall read all meters at periodic intervals of approximately 30 days or in accordance with the policy of the cognizant regulatory body or applicable bylaws. All billings based on meter readings of less than \_ 365\_\_\_ days shall be prorated accordingly.

(b) Meter test.

(1) The Contractor at its expense, shall periodically inspect and test Contractor-installed meters at intervals not exceeding \_ five (5)\_\_\_ year(s). The Government has the right to have representation during the inspection and test.

(2) At the written request of the Contracting Officer, the Contractor shall make additional tests of any or all such meters in the presence of Government representatives. The cost of such additional tests shall be borne by the Government if the percentage of errors is found to be not more than\_\_\_ five (5)\_\_\_ percent slow or fast.

(3) No meter shall be placed in service or allowed to remain in service which has an error in registration in excess of \_\_\_ five (5)\_\_\_ percent under normal operating conditions.

(c) Change in volume or character Reasonable notice shall be given by the Contracting Officer to the Contractor regarding any material changes anticipated in the volume or characteristics of the utility service required at each location.

(d) Continuity of service and consumption. The Contractor shall use reasonable diligence to provide a regular and uninterrupted supply of service at each service location, but shall not be liable for damages, breach of contract or otherwise, to the Government for failure, suspension, diminution, or other variations of service occasioned by or in consequence of any cause beyond the control of the Contractor, including but not limited to acts of God or of the public enemy, fires, floods, earthquakes, or other catastrophe, strikes, or failure or breakdown of transmission or other facilities. If any such failure, suspension, diminution, or other variation of

Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

service shall aggregate more than \_\_\_\_hour(s) (not applicable see section C paragraph 8. C. 2) during any billing period hereunder, an equitable adjustment shall be made in the monthly billing specified in this contract (including the minimum monthly charge).

**52.242-13 Bankruptcy.**  
(JUL 1995)

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

**52.244-6 Subcontracts for Commercial Items and Commercial Components.**  
(APR 1998)

(a) Definitions.

'Commercial item,' as used in this clause, has the meaning contained in the clause at 52.202-1, Definitions.

'Subcontract,' as used in this clause, includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

(b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or non-developmental items as components of items to be supplied under this contract.

(c) Notwithstanding any other clause of this contract, the Contractor is not required to include any FAR provision or clause, other than those listed below to the extent they are applicable and as may be required to establish the reasonableness of prices under Part 15, in a subcontract at any tier for commercial items or commercial components:

(1) 52.222-26, Equal Opportunity (E.O. 11246);

(2) 52.222-35, Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era (38 U.S.C. 4212(a));

(3) 52.222-36, Affirmative Action for Handicapped Workers (29 U.S.C. 793); and

(4) 52.247-64, Preference for Privately Owned U.S.-Flagged Commercial Vessels (46 U.S.C. 1241) (flow down not required for subcontracts awarded beginning May 1, 1996).

Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

(d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

**52.249-2 Termination for Convenience of the Government (Fixed-Price).**

(Sep 1996) Alternate I

(a) The Government may terminate performance of work under this contract in whole or, from time to time, in part if the Contracting Officer determines that a termination is in the Government's interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.

(b) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

(1) Stop work as specified in the notice.

(2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract.

(3) Terminate all subcontracts to the extent they relate to the work terminated.

(4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.

(5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.

(6) As directed by the Contracting Officer, transfer title and deliver to the Government-

(i) The fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated; and

(ii) The completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government.

(7) Complete performance of the work not terminated.

(8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in subparagraph (b)(6) of this clause; *provided*, however, that the Contractor (i) is not

## Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.

(c) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.

(d) After expiration of the plant clearance period as defined in Subpart 45.6 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept title to those items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

(e) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(f) Subject to paragraph (e) of this clause, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount to be paid or remaining to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (f) or paragraph (g) of this clause, exclusive of costs shown in subparagraph (g)(3) of this clause, may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be modified, and the Contractor paid the agreed amount. Paragraph (g) of this clause shall not limit; restrict, or affect the amount that may be agreed upon to be paid under this paragraph.

*Alternate I (Sep 1996):*

(g) If the Contractor and Contracting Officer fail to agree on the whole amount to be paid the Contractor because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined as follows, but without duplication of any amounts agreed upon under paragraph (f) of this clause:

(1) For contract work performed before the effective date of termination, the total (without duplication of any items) of—

(i) The cost of this work;

Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

(ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (g)(1)(i) of this clause; and

(iii) A sum, as profit on subdivision (g)(1)(i) of this clause, determined by the Contracting Officer under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Contracting Officer shall allow no profit under this subdivision (g)(1)(iii) and shall reduce the settlement to reflect the indicated rate of loss.

(2) The reasonable costs of settlement of the work terminated, including—

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

(h) Except for normal spoilage, and except to the extent that the Government expressly assumed the risk of loss, the Contracting Officer shall exclude from the amounts payable to the Contractor under paragraph (g) of this clause, the fair value, as determined by the Contracting Officer, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the Government or to a buyer.

(i) The cost principles and procedures of Part 31 of the Federal Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

(j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (e), (g), or (1) of this clause, except that if the Contractor failed to submit the termination settlement proposal or request for equitable adjustment within the time provided in paragraph (e) or (1), respectively, and failed to request a time extension, there is no right of appeal.

(k) In arriving at the amount due the Contractor under this clause, there shall be deducted—

(1) All unliquidated advance or other payments to the Contractor under the terminated portion of this contract;

(2) Any claim which the Government has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the Government.

Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

(l) If the termination is partial, the Contractor may file a proposal with the Contracting Officer for an equitable adjustment of the price(s) of the continued portion of the contract. The Contracting Officer shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the Contracting Officer.

(m)(1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

(n) Unless otherwise provided in this contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this contract for 3 years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and expenses under this contract. The Contractor shall make these records and documents available to the Government, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Contracting Officer, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

**52.249-8 Default (Fixed-Price Supply and Service)**

(Apr 1984)

(a)

(1) The Government may, subject to paragraphs (c) and (d) of this clause, by written notice of default to the Contractor, terminate this contract in whole or in part if the Contractor fails to—

(i) Deliver the supplies or to perform the services within the time specified in this contract or any extension;

(ii) Make progress, so as to endanger performance of this contract (but see subparagraph (a)(2) of this clause); or

(iii) Perform any of the other provisions of this contract (but see subparagraph (a)(2) of this clause).

(2) The Government's right to terminate this contract under subdivisions (a)(1)(ii) and (1)(iii) of this clause, may be exercised if the Contractor does not cure such failure within 10 days (or more if authorized in writing by the Contracting Officer) after receipt of the notice from the Contracting Officer specifying the failure.

## Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

(b) If the Government terminates this contract in whole or in part, it may acquire, under the terms and in the manner the Contracting Officer considers appropriate, supplies or services similar to those terminated, and the Contractor will be liable to the Government for any excess costs for those supplies or services. However, the Contractor shall continue the work not terminated.

(c) Except for defaults of subcontractors at any tier, the Contractor shall not be liable for any excess costs if the failure to perform the contract arises from causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include

- (1) acts of God or of the public enemy,
- (2) acts of the Government in either its sovereign or contractual capacity,
- (3) fires,
- (4) floods,
- (5) epidemics,
- (6) quarantine restrictions,
- (7) strikes,
- (8) freight embargoes, and
- (9) unusually severe weather.

In each instance the failure to perform must be beyond the control and without the fault or negligence of the Contractor.

(d) If the failure to perform is caused by the default of a subcontractor at any tier, and if the cause of the default is beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either, the Contractor shall not be liable for any excess costs for failure to perform, unless the subcontracted supplies or services were obtainable from other sources in sufficient time for the Contractor to meet the required delivery schedule.

(e) If this contract is terminated for default, the Government may require the Contractor to transfer title and deliver to the Government, as directed by the Contracting Officer, any

- (1) completed supplies, and

(2) partially completed supplies and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information, and contract rights (collectively referred to as "manufacturing materials" in this clause) that the Contractor has specifically produced or acquired for the terminated portion of this contract.

Upon direction of the Contracting Officer, the Contractor shall also protect and preserve property in its possession in which the Government has an interest.

(f) The Government shall pay contract price for completed supplies delivered and accepted. The Contractor and Contracting Officer shall agree on the amount of payment for manufacturing materials delivered and accepted and for the protection and preservation of the property. Failure to agree will be a dispute under the Disputes clause. The Government may withhold from these amounts any sum the Contracting Officer determines to be necessary to protect the Government against loss because of outstanding liens or claims of former lien holders.

Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

(g) If, after termination, it is determined that the Contractor was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Government.

(h) The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

Shallow Groundwater Contract

OCWD/NAVY

Effective Start Date: :To Be Determined

**PART III - LIST OF DOCUMENTS,  
EXHIBITS AND OTHER ATTACHMENTS**

**SECTION J: LIST OF ATTACHMENTS**

**Attachment Number**

**TITLE**

Attachment A-1

Schedule of Price & Payments

Attachment B-1

Settlement Agreement Among the Settling Federal Agencies (SFA), Orange County Water District (OCWD), and Irvine Ranch Water District (IRWD) - Marine Corps Air Station (MCAS) El Toro Groundwater Remediation- dated \_\_\_\_\_

# Attachment A-1

## Schedule of Price & Payments

Former MCAS El Toro VOC Treatment/Disposal of Shallow Groundwater					
<u>Service Contract Payments</u>					
Period of Performance #	Overhead (connection charge)	VOC Treatment & Groundwater Disposal Services		Annual Payments	Cumulative Payments
(a)	(b)	(c)	(d)	(e)	(f)
	0	\$0	\$0	\$0	\$0
Contract Year	1	\$121,319	\$74,550	\$195,869	\$195,869
Contract Year	2	\$121,319	\$76,787	\$198,106	\$393,975
Contract Year	3	\$121,319	\$79,090	\$200,409	\$594,384
Contract Year	4	\$121,319	\$81,463	\$202,782	\$797,165
Contract Year	5	\$121,319	\$83,907	\$205,226	\$1,002,391
Contract Year	6	\$121,319	\$86,424	\$207,743	\$1,210,134
Contract Year	7	\$121,319	\$89,017	\$210,336	\$1,420,470
Contract Year	8	\$121,319	\$91,687	\$213,006	\$1,633,476
Contract Year	9	\$121,319	\$94,438	\$215,757	\$1,849,232
Contract Year	10	\$121,319	\$97,272	\$218,591	\$2,067,823
Option Year	1	\$0	\$100,189	\$100,189	\$2,168,012
Option Year	2	\$0	\$103,195	\$103,195	\$2,271,207
Option Year	3	\$0	\$106,290	\$106,290	\$2,377,497
Option Year	4	\$0	\$109,479	\$109,479	\$2,486,976
Option Year	5	\$0	\$112,764	\$112,764	\$2,599,740
Option Year	6	\$0	\$116,146	\$116,146	\$2,715,887
Option Year	7	\$0	\$119,631	\$119,631	\$2,835,517
Option Year	8	\$0	\$123,220	\$123,220	\$2,958,737
Option Year	9	\$0	\$126,916	\$126,916	\$3,085,654
Option Year	10	\$0	\$130,724	\$130,724	\$3,216,377
Option Year	11	\$0	\$134,646	\$134,646	\$3,351,023
Option Year	12	\$0	\$138,685	\$138,685	\$3,489,708
Option Year	13	\$0	\$142,846	\$142,846	\$3,632,553
Option Year	14	\$0	\$147,131	\$147,131	\$3,779,684
Option Year	15	\$0	\$151,545	\$151,545	\$3,931,229
Option Year	16	\$0	\$156,091	\$156,091	\$4,087,320
Option Year	17	\$0	\$160,774	\$160,774	\$4,248,094
Option Year	18	\$0	\$165,597	\$165,597	\$4,413,691
Option Year	19	\$0	\$170,565	\$170,565	\$4,584,256
Option Year	20	\$0	\$175,682	\$175,682	\$4,759,938
Option Year	21	\$0	\$180,952	\$180,952	\$4,940,891
Option Year	22	\$0	\$186,381	\$186,381	\$5,127,272
Option Year	23	\$0	\$191,972	\$191,972	\$5,319,244
Option Year	24	\$0	\$197,732	\$197,732	\$5,516,976
Option Year	25	\$0	\$203,664	\$203,664	\$5,720,639
Option Year	26	\$0	\$209,773	\$209,773	\$5,930,413
Option Year	27	\$0	\$216,067	\$216,067	\$6,146,479
Option Year	28	\$0	\$222,549	\$222,549	\$6,369,028
Option Year	29	\$0	\$229,225	\$229,225	\$6,598,253
Option Year	30	\$0	\$236,102	\$236,102	\$6,834,355

**Attachment B-1**

**Settlement Agreement  
Among the Settling Federal Agencies (SFA),  
Orange County Water District (OCWD),  
and Irvine Ranch Water District (IRWD)-  
Marine Corps Air Station (MCAS) El Toro  
Groundwater Remediation**

**- dated \_\_\_\_\_**