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MCAS EL TORO  
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CTO # 0145

MOD #

APPROVAL

OTHER

Govt (Agency) Comments "Draft Operable Unit 1  
Remedial Investigation Report"

ACTION REQUIRED

WORK AUTHORIZATION  
(R. Ward)

TITLE: AGENCY COMMENT "DRAFT OPERABLE  
UNIT 1 REMEDIAL INVESTIGATION  
REPORT"

OTHER

\_\_\_\_ AUTHOR: SHERRILL BEARD/DTSC

\_\_\_\_ DATE: 09/06/94

\_\_\_\_ CATEGORY: 3.4

CC:  
SAN DIEGO

PASADENA

OTHER

- PMO File
- E. BANKS (PM)
- B. ROBSON
- S. MONTJO
- L. JONES
- DATABASE ENTRIES
- J. HUGHES
- J. SHEKER (Tickler)
- H. MONEGUE (Property)
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- PAS File (distribution)
- R. PORTILLO (LRCM)
- D. LONGPRE (QA)
- D. SMITH (H&S)
- M. MCCLURE (SM)
- M. BELL (CM)
- R. WARD (RFPs)
- CA: \_\_\_\_\_ \*
- B. MICHELL (PCM)
- K. Spathias (for distr)
- CS/E: \_\_\_\_\_ \*
- \_\_\_\_ CTO NOTEBOOK

- Lead PjM (for Activity) \_\_\_\_\_ \*
- CTO PjM \_\_\_\_\_ \*
- G. Rumford (Interim MTPQC) (JEG)
- S. TSAI (RCM) (IT)
- R. GATES (IT) (for distribution)
- K. TOMEO (CH2M) (RCM)
- M. EMBREE (CH2M) (for distribution)
- TR: \_\_\_\_\_ \*

Dist: RFPs-(PM, LRCM, CM, PCM 280 PJM) Fax initial RFP to R. Ward, CM, LRCM, PCM, & PM. They will review for CP funds and dist. further w/WAF	MODs, Stop Work Orders- (RCMs, CM, CA, LPjM, PJM, PCM, CSE, 280 PJM)	COMMENTS-(Full set to LRCM, RCM(s), LPjM, PJM, TR, MTPQC cover sheet to others noted). PM to receive full sets of Code 185 comments/top copy of all others.	CLOSE-OUT LETTERS-PM, RCM(s), CM, CA, PCM, CSE, MTPQC, LPjM, PJM)
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\*LOCATION DESIGNATOR: 1-Pasadena 2-Denver 3-CH2M 4-IT 5-San Diego

\*\*\*NOTE: Location designator dictates further distribution to applicable RCMs.

**DEPARTMENT OF TOXIC SUBSTANCES CONTROL**

Region 4

West Broadway, Suite 425  
Long Beach, CA 90802-4444**M E M O R A N D U M**

**TO:** Albert A. Arellano, Jr., P.E.  
Unit Chief  
Office of Military Facilities  
Base Closure Unit  
245 West Broadway, Suite 425  
Long Beach, California 90802

**FROM:** Facility Management Branch  
Geotechnical Support Unit  
245 West Broadway, Suite 425  
Long Beach, California 90802

**DATE:** September 6, 1994

**SUBJECT:** COMMENTS ON MARINE CORPS AIR STATION EL TORO, CALIFORNIA,  
INSTALLATION RESTORATION PROGRAM, REMEDIAL  
INVESTIGATION/FEASIBILITY STUDY DRAFT OPERABLE UNIT 1  
REMEDIAL INVESTIGATION REPORT

**INTRODUCTION**

As requested, the Geotechnical Support Unit (GSU) of the Department of Toxic Substances Control (DTSC) has reviewed the document entitled *Marine Corps Air Station (MCAS) El Toro, California Installation Restoration Program, Remedial Investigation/Feasibility Study Draft Operable Unit 1 (OU-1) Remedial Investigation Report (RI Report)*, dated July 1, 1994. The RI Report was prepared by Southwest Division, Naval Facilities Engineering Command, in conjunction with Jacobs Engineering Group, Inc., IT Corporation and CH2M Hill.

The RI Report summarizes Phase I, Rounds 1 and 2, groundwater data at MCAS El Toro, and had the stated objectives to provide interpreted groundwater data enabling a preliminary assessment of the nature and extent of contaminants, to refine the conceptual site model for the regional groundwater VOC contamination, and to gather preliminary data to establish viable remedial action alternatives. The RI Report has generally accomplished these objectives, however it should be noted in the Executive Summary that this report is an interim document



that will require refinement pending evaluation of four rounds of groundwater data.

Listed below are general issues and specific comments which should be directed to MCAS El Toro and their consultants. Before approval of this document, GSU recommends that the following comments be addressed by incorporation into the final RI report.

#### GENERAL ISSUES

1. In reference to the groundwater VOC and benzene plumes on- and off-site, a discussion regarding vertical extent of contamination should be presented in the final RI Report. Additionally, it is recommended that either the final RI Report or the submittal of the OU-1 Interim-Action Feasibility Study include a discussion regarding the vertical extent of contaminated groundwater and the relationship to the wells that will be utilized for the Irvine Desalter Project.
2. There have been many conversations, especially during the soil gas survey, regarding the redox equilibria of the groundwater beneath and adjacent to MCAS El Toro. It is reasonable to conclude from the TCE and DCE concentrations, in addition to the nitrate data, that TCE is degrading anaerobically. However, there are numerous references in Section 4.5 (Inorganic Chemicals) discussing metal concentrations in groundwater reflecting oxidizing conditions in the aquifer. This apparent discrepancy must be resolved.
3. Without additional information, it is not appropriate to propose the unlikely existence of DNAPL. Until additional monitoring wells are installed and samples analyzed and evaluated, any determination regarding the presence of DNAPLs on-site should be deferred.

#### SPECIFIC COMMENTS

1. Information provided indicated that on-site potable water supplies used during well construction may have been contaminated with TFH-diesel, and resulted in the contamination of groundwater monitoring wells. Please ensure that this problem does not recur during any future studies.

Mr. Arellano  
September 6, 1994  
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2. Please organize the figures within the text so that individual sections are not divided by sets of figures. The present location of the figures within the RI Report makes it cumbersome to follow the text easily. Either include the figures within an appendix or place the figures at the end of each section.
3. Please reconcile any inconsistencies in citing figures and tables and provide references where appropriate, such as Figure 3-6. Also please keep figure symbols consistent throughout the RI Report, for example different symbols are used to represent "interpreted occurrence of intermediate horizon of finer-grained material" in Figure 3-14 and Figure 3-15.

Thank you for the opportunity to review and comment on this document. If you have any questions or comments, please feel free to contact me at extension 5528.

*Sherrill Beard*

Sherrill Beard  
Hazardous Substances  
Engineering Geologist  
Geotechnical Service Unit

*Sherrill Beard*

Concur: *for* Karen Thomas Baker, CEG  
Unit Chief  
Geotechnical Services Unit