

JACOBS ENGINEERING GROUP INC.

M60050.001037
MCAS EL TORO
SSIC # 5090.3

CLEAN TRANSMITTAL/DELIVERABLE RECEIPT

CONTRACT N68711-89-D-9296

Doc. Control Number: CLE-C01-01F145-I2-0100

TO: Southwest Division
Ms. Gena McClain, Code 0232
Head, Environmental ACO I Branch
Naval Facilities Engineering Command
Contracts Department, Building 131
1220 Pacific Highway
San Diego, California 92132-5187

DATE: 22 March 1995

CTO#: 145

LOCATION: MCAS El Toro

TASK/WORK ELEMENT: _____


John Dolegowski/Project Manager


Ken Tomeo/Resource Center Manager

DESCRIPTION: Project Note No. PN-0145-170, Contract Task Order (CTO) No. 145, 28 February 1995 Meeting with Irvine Ranch Water District to Discuss Discharge Options for the OU-1 IAFS

TYPE: Contract Deliverable CTO Deliverable Request for Change/Project Note

VERSION: _____
(e.g., Draft, Draft Final, Final, etc.)

REVISION #: _____

ADMIN RECORD Yes No Category _____ Confidential
(PJM to identify)

NEGOTIATED DELIVERY DATE: _____ ACTUAL DELIVERY DATE: _____

Number of Copies Submitted to Navy: _____

Copies To:	<u>J. Rogers - Code 18C1 w/attach</u>	<u>M. Huddleston - CH2M HILL w/o attach</u>
	<u>A. Piszkin - Code 1831.AP w/attach</u>	<u>Mike Bitner - CH2M HILL/ABQ w/attach</u>
	<u>J. Joyce - Code 1832.JJ w/attach</u>	<u>File - PMO w/attach</u>
	<u>V. Parpiani - MCAS El Toro w/attach</u>	<u>File - CH2M HILL w/attach</u>
	<u>K. Tomeo - CH2M HILL w/attach</u>	

Delivered To: Contracting Officer _____ RPM/EIC _____

Name: _____

Date/Time Received

	PROJECT NOTE NO. PN-0145-170 CLE-C01-01F145-I2-0100	PROJECT NO. 01-F145-H6
CONFIRMATION OF:	CONFERENCE X TELECOM OTHER	DATE HELD 28 February 1995 DATE ISSUED 22 March 1995 RECORDED BY Kimo Look/CH2M HILL PLACE Santa Ana, California
SUBJECT	Contract Task Order (CTO) No. 0145 Meeting With Irvine Ranch Water District to Discuss Discharge Options for the OU-1 IAFS Marine Corps Air Station (MCAS) El Toro RI/FS	
PARTICIPANTS: (* DENOTES PART-TIME ATTENDANCE)		
Andy Piszkin/Code 1831.AP Kimo Look/CH2M HILL-SCO Bob McVicker/IRWD		
ACTION REQ'D. BY	ITEM	
	<p>A meeting was held at the Irvine Ranch Water District's (IRWD's) office on 28 February 1995 from approximately 2:00 to 4:00 p.m. to discuss IRWD's conceptual interest in participating in various discharge options for the Interim-Action Feasibility Study (IAFS) for Operable Unit 1 (OU-1) of the Marine Corps Air Station (MCAS) El Toro Remedial Investigation/Feasibility Study (RI/FS). The following is a summary of salient points discussed at the meeting.</p> <p><u>Topics Discussed:</u></p> <ol style="list-style-type: none"> 1. IRWD's potential interest in and the feasibility of accepting extracted groundwater from the proposed new wells into IRWD's nonpotable water line <p>Bob McVicker indicated that, conceptually, IRWD would have sufficient demand to accept the projected 2,000 gallons per minute (gpm) flow from the new proposed Principal Aquifer wells being considered for the IAFS alternatives if the water were made available in the summer months. For feasibility level purposes, IRWD recommended that the connection into the nonpotable water system be made into the 36-inch nonpotable pipeline at Culver Drive.</p> <p>Total dissolved solids (TDS) are a concern for IRWD. However, based on the location of the proposed wells and the associated groundwater quality obtained from adjacent wells, it is anticipated that TDS levels may be acceptable (see Table 1). Water quality might further be improved through blending in the 36-inch pipeline.</p>	

PROJECT NOTE NO.
 PN-0145-170
 CLE-C01-01F145-I2-0100

PROJECT NO.
 01-F145-H6

ACTION REQ'D. BY	ITEM
	<p>2. IRWD's potential interest in and the feasibility of IRWD accepting extracted groundwater from the proposed new wells for upgrade to potable use</p> <p>IRWD would likely have limited interest in accepting water for potable use for a variety of reasons:</p> <ul style="list-style-type: none"> o IRWD has entered an agreement with OCWD to accept water from the Irvine Desalter Project for potable use. OCWD developed the program, in part, to address the migration of high TDS water into cleaner parts of the Orange County groundwater basin. IRWD is participating in the program because 1) Participation would not financially impact IRWD, and 2) The project provides regional benefits supported by IRWD. Should the Department of the Navy (DON) provide groundwater treated for volatile organic compounds (VOCs) to IRWD, IRWD would have to develop a program similar to Orange County Water District's (OCWD's) program to make the project viable. Since such a project offers no significant financial benefit to IRWD, and since IRWD's alternative water source (Metropolitan Water District [MWD]) provides reliable potable water, IRWD would have limited interest in developing a desalting program. o Based on an agreement between IRWD and The Irvine Company (TIC), IRWD has limited access to groundwater in the Irvine Forebay and Pressure Zone groundwater subbasins. IRWD is approaching its agreement-based pumping limits with the installation of IRWD Well No. 78. Use of the water from a DON project for potable use may cause IRWD to exceed its agreed limits. <p>3. IRWD is evaluating the impacts of Well ET-1 on its nonpotable water system and is considering the possibility of reducing or eliminating pumping of that well.</p> <p>Recently, TIC has approached the IRWD Board requesting that IRWD stabilize the fluctuation of TDS levels in its nonpotable system. TIC, the area's principal purveyor of agricultural water, uses IRWD's nonpotable water system to supplement its agricultural water supply. Agricultural crop tolerance to TDS varies, based on the type of crop cultivated and its stage of development. Varying TDS levels complicate the effective use of agricultural water. Well ET-1 impacts TDS levels in IRWD's nonpotable system through seasonal pumping of the well, the well's higher TDS levels relative to the other nonpotable water sources, and the limited dilution that occurs in the conveyance pipeline. (Well ET-1 is connected to a 24-inch pipeline at Irvine Center Drive) In addition, IRWD has recently completed IRWD Well No.78, which also supplements IRWD's nonpotable water supply. Well 78's TDS level is lower than that of Well ET-1 and it is connected into a 36-inch nonpotable pipeline where greater blending would occur. Based on these factors, IRWD is considering reducing or eliminating extraction from Well E1-1.</p>

Table 1
Estimated Groundwater Quality of Proposed Well
and Summary of Groundwater Quality of Adjacent Wells

Well	TDS ¹	TDS ²
TIC 113	519	964
TIC 108	767	644
TIC 78	567	
ET-1	825 ³	644
MCAS-7		1500 ⁴
North Lake		826
<i>Estimation of New Well Parameters</i>		
	Flow rate	TDS
Proposed well	2000 gpm	500-800 ?

Notes :

¹ Data from IRWD Agricultural Water Management Plan (1990)

² Data From MCAS El Toro OU-1 RI Report

³ OCWD Irvine Desalter Preliminary Design Report (PDR)

⁴ Average of zone data taken from multiport well