

JACOBS ENGINEERING GROUP INC.

MEMORANDUM

TO: Larry Nuzum, RPM
Southwest Division/San Diego

DATE: 15 May 1990

FROM: Edward Rogan (CH2M) ETR

SUBJECT: Subcontract No. 01-F000-89-0002
Navy CLEAN - Southwest Division
CONTRACT TASK ORDER #0018
Meeting Minutes
Technical Review Committee Meeting
MCAS El Toro, Santa Ana, California

On 26 April 1990 a Technical Review Committee (TRC) meeting was held at the MCAS El Toro. The meeting convened at 9:30 a.m. Attachment A presents the agenda and Attachment B presents a list of attendees.

Mike Rehor, MCAS El Toro, opened the meeting with a general overview of base activities. In particular, the tank 398 investigation progress was discussed and it was announced that a report documenting the results of the investigation would be available in June 1990.

Walter Sandza, Southwest Division, then presented a program update (see Attachment C) which included a discussion of a generic Installation Restoration program schedule and an introduction to the Jacobs scope of work under the CLEAN contract. Issues of note included:

- o Federal Facility Agreement (FFA) negotiations are to begin in mid- to late May 1990.
- o The Navy is expecting that the use of Orange County Water District (OCWD) ground-water data in the RI/FS will be "acceptable" to the EPA and other TRC members.

CH2M HILL was then introduced and proceeded with a discussion of current Remedial Investigation/Feasibility Study (RI/FS) related activities. It was explained that CH2M HILL is in the formative stage of the development of their proposed remedial investigations and that any feedback would be appreciated. It was also indicated that the previously developed work plans were being used as a point of departure. That is, CH2M HILL intended to take full advantage of previous effort.

The keys to the investigation were specified as:

- o Deep wells (> 400 feet)
- o Pump tests
- o Mapping of geochemical facies
- o Delineation of contaminant migration pathways

Attachment D presents an indication of the 22 sites chosen thus far for inclusion in the RI/FS. Attachment D also presents the locations of existing on-base shallow (70- to 100-foot) groundwater monitoring wells. Twenty-one of the 22 sites are 'on base' and the 22nd is the groundwater investigation. Issues discussed included:

- o Presently, at least four sites (2, 3, 5, 10) are considered to be likely volatile organic compound sources.
- o Potentially, all 21 on-base sites, and at least 18, will have groundwater monitoring wells installed and sampled for the hazardous substance list (HSL) parameters.
- o For the purposes of this investigation, the following definitions will be used:
 - Shallow = less than 100 feet
 - Intermediate = 100 feet to 400 feet
 - Deep = greater than 400 feet
- o A new cluster well with four to five intervals will be installed in the vicinity of site 7 for geographic coverage.
- o Individually cased well intervals versus multiport wells is still being evaluated by CH2M HILL.
- o Sites other than the 22 identified may be evaluated further by means of the PA/SI process.
- o Attachment D presents the proposed locations of several proposed shallow and cluster well locations.

Attachment E presents the locations of several existing and proposed shallow and cluster well locations off base, as well as carries over from Attachment D the locations of the proposed on-base shallow and cluster well locations for reference. In addition, pump test well locations are indicated as are the major surface water drainage facilities. Issues discussed include:

- o Short-term pump tests on all wells will be performed.
- o Long-term pump tests at strategic locations are to be determined.
- o The rationale for each proposed location was discussed briefly.
- o The interfacing of how the existing wells meshed with the proposed wells was discussed (areally and vertically).
- o Pump test wells will include piezometer installations.
- o The EPA has ruled out the racetrack as a source of the trichloroethylene (TCE) as a result of a PA (copy of report to be distributed by the EPA).
- o Surface water generally flows westward across the base towards the I-5 and I-405 interchange, then proceeds northwesterly along San Diego Creek.
- o Groundwater generally flows northwesterly.

- o OCWD pointed out that there may be shallow bedrock issues to deal with in the vicinity of the I-405 and Highway 133 interchange.
- o Attachment F provides a summary of the footage.

CH2M HILL proceeded with an explanation that this RI is intended to be a multimedia investigation not solely focused on groundwater. Sediments and surface and subsurface soils as well as surface waters will be evaluated. Footage summary does not include proposed on-base wells--to be determined by CH2M HILL.

CH2M HILL then proceeded with a brief discussion of site 2 as an example of an on-base investigation. It was explained that CH2M HILL is presently relying heavily on previously developed investigation plans. Multimedia sampling is planned at each site. Analyses are expected to include HSL parameters and major ions.

CH2M HILL next presented the schedule of RI/FS scoping document deliverables. It was announced that the agency review draft of the RI/FS Work Plan, the Sampling and Analysis Plan, the Health and Safety Plan, the Site Management Plan, and the Administrative File would be available on 13 July 1990. Agency review comments will be expected by 28 August 1990, and the documents will be issued in Draft Final form by 21 September 1990. Walter Sandza then reiterated his earlier discussion of the overall RI/FS generic schedule and indicated that the RI/FS would likely take at least 18 months.

At this point, OCWD presented an update of their off base TCE project (see Attachment G). It was announced that OCWD believes the TCE plume has reached Culver Drive in Irvine. TCE has been found in TIC wells 78, 82, 113 which are seasonal use wells. A brief mention of the OCWD well ET-1 project was made. OCWD plans to operate a 700-gpm pump and treat system located near the intersection of Irvine Center Drive and Jeffrey Road. The water reuse plans involve irrigation or landscaping. It was also mentioned that the TCE concentrations in the vicinity of ET-1 are typically 40 to 50 ppm.

The meeting was closed with a question and answer period. They are presented herein, as well as a few questions posed and answered during the meeting.

Q. Has the on-base wastewater treatment plant been considered as a source of contamination?

A. Yes, in fact, one of the sites is the sludge drying beds.

Q. Have the on-base sewage lines been considered as a source of contamination?

A. Yes, and this issue is presently being further evaluated by CH2M HILL.

Q. The Irvine Ranch Water District advised that recent and current drainage channel improvements should be considered.

A. CH2M HILL will investigate.

Q. OCWD pointed out that only MCAS wells 1, 2, 3, and 7 are multiport.

A. The plans will acknowledge this.

Q. The EPA and the California Department of Health Services (CDHS) questioned the plans for background wells?

A. There are existing background wells that have yet to be located as part of the monitoring well inventory. In addition, there are plans to install one in the Bee Canyon Wash. The goal is to establish background wells for all four washes.

- Q. What are the proposed screen lengths?
A. Anticipate 10 to 20 feet--still being evaluated by CH2M HILL.
- Q. Why are 4-inch casings being proposed as opposed to 6 inch?
A. Four inch is sufficient to pump up to 100 gpm and CH2M HILL does not expect, at this time, to need more than that. Six-inch wells are, however, proposed at the two long-term pump test locations due to the known contaminant locations where it is more likely that > 100 gpm may need to be pumped.
- Q. Stainless steel versus PVC casing?
A. To be determined on a case-by-case basis by CH2M HILL.
- Q. The CDHS advised that the groundwater investigation not be overemphasized at the expense of other media.
A. Agreed.
- Q. OCWD questioned whether the installation of wells has been prioritized by location?
A. To be determined by Southwest Division based upon MCAS El Toro and TRC priorities as well as funding capabilities.
- Q. Lead agency issues were discussed.
A. To be resolved by Southwest Division during FFA negotiations.
- Q. Southwest Division asked for the EPA's opinion of the "usefulness" of OCWD and other non-RI/FS generated data?
A. The Navy/CH2M HILL should present a case discussing the value and validity of the data in question--then the TRC will assess.

The next TRC meeting will be held between 13 July and 28 August 1990. The MCAS El Toro staff will coordinate scheduling.

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ATTACHMENT A

AGENDA

**TRC MEETING
MCAS EL TORO RI/FS**

26 April 1990

1. General Overview (MCAS El Toro)
2. Program Update (Southwest Division)
3. Current RI/FS Activities (CH2M HILL)
4. Schedule
5. OCWD Update
6. Questions and Answers

ATTACHMENT B

**IRP TECH REVIEW COMMITTEE MEETING
26 APRIL 1990
BLDG. 65, MCAS EL TORO**

Name	Organization	Phone
Michael Rehor	MCAS El Toro - Env. Director	714/726-2821
George Martires, P.E.	MCAS El Toro - IR Program	714/726-3701
Ed Rogan	CH2M HILL	714/250-5500
John Hamill	EPA	415/334-1248
Kurt Schmidt	SAIC	619/535-7449
Roy Herndon	OCWD	714/693-8167
Ken Williams	Regional Water Quality Control Board	714/782-4130
Gary Stewart	Regional Water Quality Control Board	714/782-4130
Bill Mavity	Woodbridge Village Assn.	714/786-9412
Manny Alonzo	DHS/TSCP Reg. 4	213/590-4904
Larry Nuzum	SOUTHWEST DIV	619/532-1230
Lauran Howard	IRWD	714/476-7615
Bob McVicker	IRWD	714-476-7653
Rick Samuel	IRWD	714/476-7633
Mike Padian	Irvine Co.	714/720-2243
Chuck Elliott	CH2M HILL	916/920-0300
Ram Ramanujam	DHS/TSCP/HQ	916/322-7865
Hal Dihm	CH2M HILL	916-920-0300
Walter Sandza	SOUTHWEST DIV	619/532-2449
Claire Best	DHS	213/590-4949
Kristin Stultz	DHS/Community Relations	213/590-4991
Jeanne Light	SOUTHWEST DIV	619/532-2484
William Collins	SOUTHWEST DIV	619/532-2450

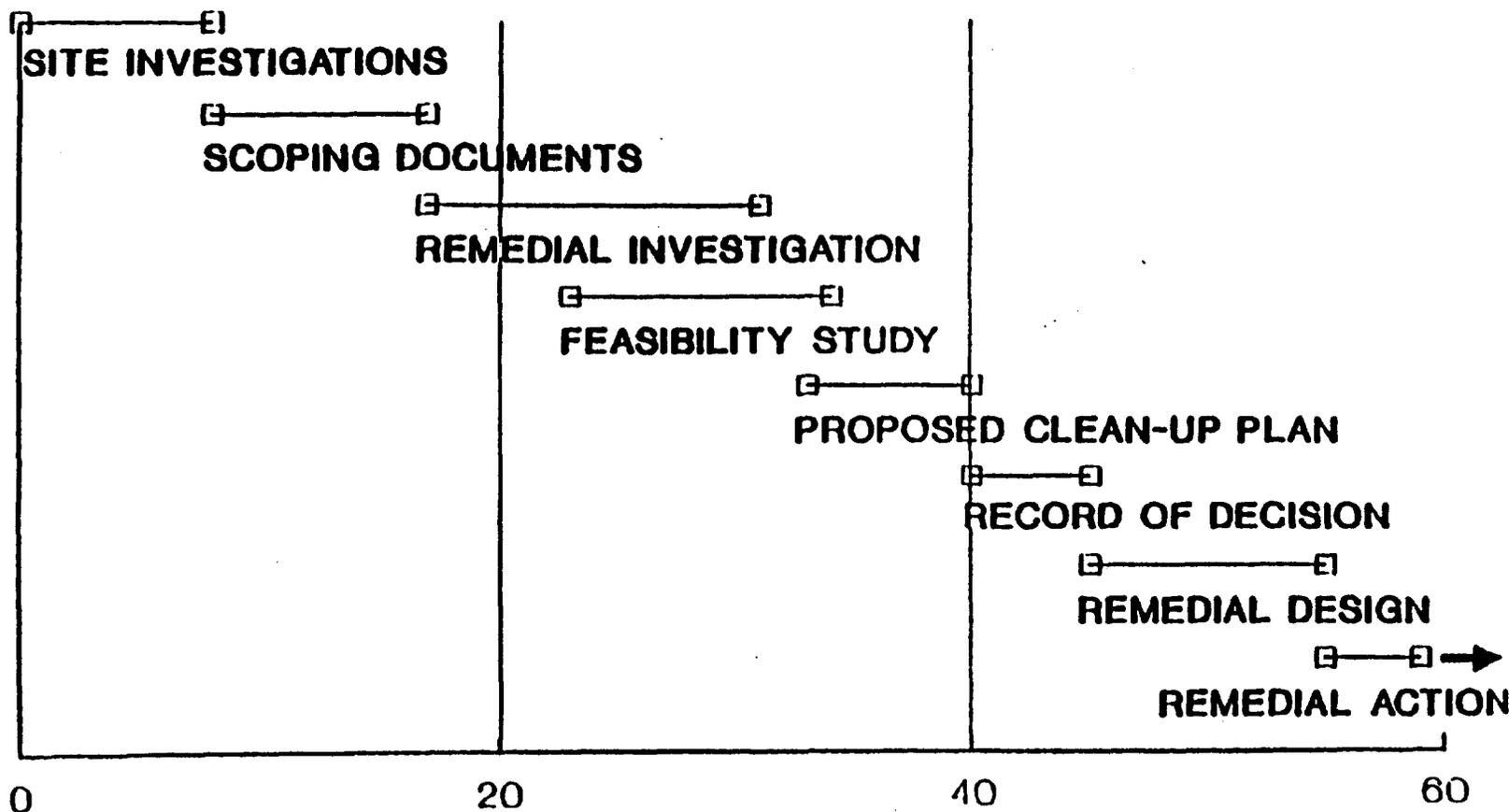
**ATTACHMENT B
(Continued)**

Name	Organization	Phone
Frannie Winslow	City of Irvine	714/724-7147
Ann Dotson	MCAS El Toro Community Plans	714/726-3702
Patti Henshaw	Orange County Health Care Agency	714/667-3600
Leila Barker	Orange County Health Care Agency	714/667-3769
John Faunce	MCAS El Toro	714/726-2266

PROGRAM UPDATE

- o Final NPL Listing**
- o Draft Federal Facilities Agreement
(FFA) prepared**
- o FFA negotiations planned**
- o New contractor - Jacobs Engineering/
CH2M Hill**
- o Integration of off-station and on-station
work plans**
(assume OCWD data acceptable to EPA)

IR PROGRAM GENERIC SCHEDULE



• ASSUMES PA COMPLETED

MONTHS

CONTRACTOR TASKS

- o Prepare NPL Remedial Investigation/
Feasibility Study Plans**
 - RI/FS Work Plan**
 - Sampling and Analysis Plan (SAP)**
 - Field Sampling Plan (FSP)**
 - Quality Assurance Project Plan (QAPP)**
 - Data Management Plan (DMP)**
 - Health and Safety Plan (HSP)**
- o Prepare Site Management Plan (SMP)**
- o Revise Community Relations Plan (CRP)**
- o Update/Index Administrative Record**
- o Operate TCE Pilot Treatment Plant**

ATTACHMENT
**INSTALLATION SUMMARY FOR REGIONAL
 VOC INVESTIGATION**

<u>WELL CATEGORY</u>	<u>NUMBER PROPOSED</u>	<u>CASING DIAMETER</u>	<u>TOTAL FEET</u>
MONITORING WELLS			
SHALLOW (~100 FT)	16	4 INCHES	1,600
INTERMEDIATE (~ 200 FT)	7	4 INCHES	1,400
INTERMEDIATE (~ 300 FT)	7	4 INCHES	2,100
DEEP (~ 400 FT)	4	4 INCHES	1,600
PUMP TEST	2	6 INCHES	300
PUMP TEST OBSERVATION	2	2 INCHES	300
			<hr/>
			TOTAL: 7,300 FEET

NOTES:

1. ALL INITIAL GROUNDWATER SAMPLES WILL INCLUDE ANALYSES FOR EPA 624 PURGEABLE COMPOUNDS AND MAJOR IONS.
2. OTHER WELLS WILL BE INSTALLED AS PART OF INDIVIDUAL SITE INVESTIGATIONS ON MCAS EL TORO.