



DEPARTMENT OF THE NAVY  
NAVAL TRAINING STATION  
SAN DIEGO, CALIFORNIA 92133-1000

AR\_N00247\_000046  
NTC SAN DIEGO  
SSIC NO. 5090.3.A

IN REPLY REFER TO:

copy 1812JK

5090  
17/ **0511**  
**08 MAY 1991**

From: Commanding Officer, Naval Training Station, San Diego  
To: Commanding Officer, Southwest Division, Naval Facilities  
Engineering Command

Subj: SITE INSPECTION WORKPLAN FOR THE NAVAL EXCHANGE GAS STATION

Ref: (a) NAVTRASTA San Diego ltr 5090 Ser 17/0263 of 19 Apr 91

Encl: (1) California Regional Water Quality Control Board ltr of  
15 Apr 91

1. Reference (a) requested review and approval on the subject workplan. Enclosure (1) provides the requested review comments and approval from the State of California Regional Water Quality Control Board.
2. Enclosure (1) is forwarded for your information and appropriate action.

  
P. W. JOHNSON

Copy to:  
CNTECHTRA  
NTC San Diego

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION

71 Clairemont Mesa Blvd., Ste. B  
San Diego, California 92124-1331  
Telephone: (619) 265-5114



April 15, 1991

Commanding Officer  
Attn: Ms. Martha Gandy  
Department of the Navy  
Naval Training Center  
San Diego, California 92133-1000

Dear Ms. Gandy:

RE: DRAFT SITE INSPECTION (SI) WORK PLAN FOR NAVY EXCHANGE GAS STATION, NAVAL TRAINING CENTER (NTC) (REF. NO. 5090 17/0311)

By letter dated March 26, 1991, your office requested Regional Board staff to review and comment on the above referenced work plan. This report was prepared by Jacobs Engineering Group Inc. under the Comprehensive Long Term Environmental Action Navy (CLEAN) program for NTC. The purpose of the SI is to conduct field sampling and analysis to determine if the on-site contamination is migrating off-site and if upgradient sources are potentially contributing to the on-site contamination.

Regional Board staff has reviewed the SI Work Plan and finds that the proposed plan provides an adequate approach to investigate the petroleum hydrocarbon release. However, staff has the following comments and concerns regarding the proposal which must be addressed in the final work plan:

#### GENERAL COMMENTS

1. The signature page must show appropriate registration/certification number(s) and affiliation of the signatories.
2. All boring logs must bear the stamp or signature of a California registered geologist or certified engineering geologist.

#### SPECIFIC COMMENTS

1. Page 3-9, 3.6 Seismic Activity

It is stated that both the Rose Canyon and Old Town Faults are northwest-trending "within the San Andreas System". This statement has been misused and is incorrect. Kennedy et al., 1975, actually stated that "Major faults in the San Diego area lie subparallel to the tectonic grain dominated by faults of the San Andreas system".

ENCL (1)

2. Page 3-17, second paragraph, last sentence.

The term "graben" is spelled incorrectly.

3. Page 3-18, second paragraph.

It is stated that the hydraulic conductivity in the artificial fill is moderate to high. What data is this based on? On page 5-5, it is stated that "no site-specific geologic or hydrologic information is known."

4. Page 3-19, third paragraph.

The Coronado hydrographic unit is now known as the Pueblo San Diego hydrographic unit. The Basin Plan has had many amendments since 1975. For future reference please review the latest update.

5. Page 4-3, 4.3 Drilling Permits

Well permits for monitoring and observation wells are required in San Diego County in accordance with County Well Ordinance No. 4286 as defined in San Diego County Code Section 67.440.

6. Page 5-6, 5.5.4 Contaminant Transport Pathways, second paragraph.

Hydraulic conductivity of  $10^{-4}$  to  $10^{-2}$  cm/sec is generally thought to be poor to moderate and not "high". Migration potential may not be as great as assumed.

7. Page 5-8, 5.6.3 Groundwater Monitoring Well Installation

The screened interval is poorly described in this section. A great elevation change in the ground-water level due to recharge or seasonal variations is not anticipated. Justification must be given for the extended screen above the water table. A ten to fifteen foot screened interval should be the maximum screened length used.

8. Page 5-11, 5.6.4 Soil and Groundwater Sampling Program, first paragraph.

Analytical laboratories must also be approved by the California Department of Health Services for the parameters analyzed.

9. Page 5-11, Sampling Procedures, second paragraph.

How will sample holding times affect the modification to the ground-water monitoring program?

10. Page 6-1, Proposed Analytical Program

Why are ethylene dibromide analyses only proposed for ground-water samples? In order to help establish from where the contamination came, ethylene dibromide analyses should also be run on soil samples.

#### APPENDIX A

1. Page A-16, 4.3 Well Installation and Groundwater Sampling, second paragraph.

Describe the rationale for this well design. Filter pack design shall be based on sieve analyses of the aquifer formation and the screened casing should then be sized appropriately. A minimum three-foot granular bentonite seal should be placed in the annulus immediately above the filter pack. Wells should be designed to meet EPA's turbidity criteria of approximately 5 NTU's.

2. Page A-16, 4.3 Well Installation and Groundwater Sampling, third paragraph.

To establish well stabilization the pH, conductivity, and temperature criteria should be listed.

3. Page A-17, Figure A.4

This design shows the filter pack extending as much as 4 feet above the screened interval. Four feet of filter pack above the screened interval is excessive. In this environment a maximum of two feet of filter pack above the screened interval should be more than adequate unless there is significant caving within the well.

4. Page A-21, Table A.1

Organolead (using DHS methodology) should be added to this list of sampling and preservation requirements.

5. Page A-49, 9.1 Field QA/QC

All duplicates, blanks, etc. must be submitted "blind" to the laboratory in order to verify QA/QC procedures.

Ms. Martha Gandy  
NTC Exchange Gas Station

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April 15, 1991

APPENDIX C

1. Page C-15, 4.1.1 Preassignment Training

It should be added for clarification that "An employer may also grandfather experienced personnel in accordance with OSHA 29 CFR 1910.120 paragraph (e)(9)."

Staff would be happy to meet with you to discuss these comments. If you have any questions, please contact John Anderson at (619) 265-5114.

Very truly yours,

*Robert Maris*

*for* ARTHUR L. COE  
Executive Officer

ALC:RWM:jpa:ntc\_gas.ltr

cc: Mr. Jeff Kidwell, Code 1812.JK, SW Division NAVFACENGCOM,  
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File: 166-92; NTC, San Diego