



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

AR\_N00247\_000043  
NTC SAN DIEGO  
SSIC NO. 5090.3.A

IN REPLY REFER TO:

5090  
17/0412  
APR 17 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 Mar 91

Encl: (1) California Department of Health Services ltr of 9 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 Department of Health Services.

2. Enclosure (1) is forwarded for your information and appropriate action.



P. N. JOHNSON

Copy to:  
CNTECHTRA  
NTC San Diego  
SWNAVFAC (Code 09PY)

**DEPARTMENT OF HEALTH SERVICES  
TOXIC SUBSTANCES CONTROL PROGRAM  
REGION 4**

45 WEST BROADWAY, SUITE 350  
LONG BEACH, CA 90802  
(213) 590-4868



April 9, 1991

P. N. Johnson  
Commanding Officer  
Naval Training Station  
San Diego, CA 92133-1000

Dear Capt. Johnson:

REFERENCE: 5090-17/0263 NAVAL TRAINING CENTER (NTC) SAN DIEGO

The Department of Health Services/Toxic Substances Control Program (Department) has received and reviewed the document entitled "NTC, San Diego, Navy Exchange Gas Station, Draft Site Inspection Work Plan" dated March 4, 1991 and prepared by Jacobs Engineering Group Inc. in association with International Technology Corporation, CH2MHILL, and Grigsby/Graves.

We are generally pleased with the approach of this Site Inspection Workplan; however, we have a few concerns that the navy should address.

The Department looks forward to assisting in the further development and refinement of this document. Enclosed please find our specific comments and recommendations on the subject document. If you would like to discuss these comments, please call me at (213) 590-4909.

Sincerely,

A handwritten signature in cursive script that reads "Emad Yemut".

Emad B. Yemut  
Waste Management Engineer  
Site Mitigation Branch

Encl (1)

## General Comments

A more detailed discussion on NEESA Data Quality Objective (DQO) Level C should be provided in the QAPP. DQOs are important because they form the basis for sample frequency, location, and action levels. Since the level of detail and data quality needed for a study is based on the intended use of the data, it is crucial that specific DQOs be established.

As indicated on page A-1, if the objective of the scope of work under CTO#0041 is to complete a Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Site Inspection (SI) for the Navy Exchange Gas Station located at the Training Center; five general levels of analytical options to support data collection are identified by CERCLA. These levels (Level I, II, III, IV and V) are described in Data Quality Objectives for Remedial Response Activities, Development Process by EPA.

## Specific Comments

1. Section 2.3 Identification and Location of the Investigated Site  
Page 2-7

A summary of the preliminary assessment study performed by SCS Engineers, 1986 at the Navy Exchange Gas Station should be provided for example: Analytical data for samples collected, locations of borings and monitoring wells.

2. Section 3.8 Surface Water Hydrology  
Page 3-20

The storm drain discharge to the Boat channel and San Diego Bay is not referenced to the NPDES permit.

3. Section 5.5.4 Contaminant Transport Pathways  
Page 5-6

What about surface water and soil pathways? The rationale for ruling these two pathways out should be provided.

4.  
Section 5.6  
Page 5-7

Proposed Field Investigation

Since the water table in the artificial fill and underlying bay deposits NTC San Diego is probably saline and subject to tidal fluctuations.

It's appropriate to consider the tidal influence on the groundwater depth when the groundwater elevation maps is constructed.

5.  
Section 5.6.4  
Page 5-11

Soil and Groundwater Sampling Program

The discussion presented in this section is limited to subsurface soil sampling. Surface sampling should be provided to fully evaluate the extent of contamination and to prepare a risk assessment.

6.  
Section 6.0  
Page 6-1

Proposed Analytical Program

The Department feels that soil and groundwater samples should be analyzed for volatile organics using EPA methods 624/8240 and 610/8100/8310; and for semivolatile organics using EPA methods 625/8250/8270.

The Quality Assurance Project Plan (QAPP) was reviewed and found to contain all the essential elements required by EPA. However there are a few items in the QAPP that need verification and/or correction. They are as follow:

7.  
Section 4.2  
Page A-15

Drilling and Soil Sampling Methods

This section refer the description of the soils sample collection procedure to SOP No. 20 which is not included in Appendix B.

8.  
Section 4.2  
Page A-16

Drilling and Soil Sampling Methods

A table listing the number of borings, depth, number of samples, and QA/QC samples should be included.

9.  
Section 4.2  
Page A-16

Drilling and Soil Sampling Methods

The text should state that well and borehole abandonment procedures will meet all applicable State and Federal regulations, including

Occupational Safety and Health Act (OSHA) requirements. Procedures used should be thoroughly documented and records should be maintained to demonstrate the adequacy of abandonment procedures.

10.  
Section 4.3  
Page A-16

Well Installation and Groundwater Sampling

Perform a seive analysis of the section of formation to be screened in order to properly design the filter pack and screen slot size to match the formation.

11.  
Section 4.3  
Page A-16

Well Installation and Groundwater Sampling

Turbidity measurements should be added to the field parameters measured.

12.  
Section 4.3  
Page A-19

Well Installation and Groundwater Sampling

Measurement of the water table at the well subsequent to purging should be undertaken to verify the rate and capacity of recharge before sampling.

13.  
Section 4.3  
Page A-19

Well Installation and Groundwater Sampling

The procedure followed if a "Nonaqueous phase layer" is encountered should be provided.

14.  
Section 4.4  
Page A-19

Groundwater Monitoring

Plot the results of the continuous recording devices installed in the well in parallel with the results of the tidal tables.

15.  
Section 4.6  
Page A-21

Sample Containers and Preservatives

Use a 1 liter glass container with teflon-lined cap.

Recommendations

In order to facilitate the review and crosschecking of the sample test results, and the laboratory QA/QC data, it is recommended that the following items be provided as part of the final report:

1. A tabulated summary of all samples analyzed showing the laboratory method employed, date of sampling, date of sampling

receipt by the laboratory, date of extraction and date of analysis for each sample.

2. A tabulated summary of all QA/QC analyses performed showing the laboratory method employed, the date of extraction and the date of analysis for each QA/QC sample.
3. A summary of all positive and out-of-range laboratory QA/QC results, including a discussion of any actions taken to correct the out-of-range QA/QC results and an explanation of the significance of the positive QA/QC results to the actual field soil sample test results.