

Bechtel

401 West A Street
Suite 1000
San Diego, CA 92101-7905

CLEAN II Program
Bechtel Job No. 22214
Contract No. N68711-92-D-4670
File Code: 0214.1

IN REPLY REFERENCE: CTO-0114/0054

July 30, 1996

Commander
Naval Facilities Engineering Command
Southwest Division
Mr. Richard Selby, Code 0233
Building 128
1220 Pacific Highway
San Diego, CA 92132-5187

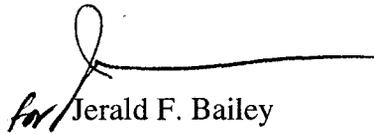
Subject: Response to Regulator Comments for the Draft Report on the Phase I Site Assessment at the Steam Tunnels (POI 38), Naval Training Center, California [CTO-0114]

Dear Mr. Kennedy:

Enclosed is our submittal which addresses the comment received from Cal/EPA Department of Toxic Substances Control (DTSC), in their letter dated 11 July 1996, regarding the Draft Phase I Steam Tunnels (POI 38) Site Assessment (SA) Report, dated 18 June 1996. The text of the Draft Phase I SA Report has been modified to incorporate the DTSC comment, and the revised page is included in this submittal. By substituting the enclosed page into the Draft version of the Phase I SA report, the document may be considered the Final Phase I SA Report. Three copies of these submittals and attachments have been enclosed for distribution within SWDIV. Additional copies of the revised page are also submitted for your distribution to regulatory and NTC personnel.

If further information is required, please contact me at (619) 687-8795 or M'balia Tagoe at (619) 687-8779.

Very truly yours,


for Jerald F. Bailey
Project Manager



N00247.000346
NTC SAN DIEGO
SSIC # 5090.3

DRAFT REPORT
ON PHASE I SITE ASSESSMENT
AT THE STEAM TUNNELS (POI 38)

DATED JUNE 1996

IS ENTERED IN THE DATABASE AND FILED AT
ADMINISTRATIVE RECORD NO. **N00247.000333**

Southwest Division
Naval Facilities Engineering Command
Contracts Department
1220 Pacific Highway, Room 135
San Diego, California 92132-5187

Contract No. N68711-92-D-4670

**COMPREHENSIVE LONG-TERM ENVIRONMENTAL
ACTION NAVY**

CLEAN II

**FINAL REPORT
ON PHASE I SITE ASSESSMENT
AT THE STEAM TUNNELS (POI 38)
NAVAL TRAINING CENTER
SAN DIEGO, CALIFORNIA**

CTO-0114/0054

July 1996

Prepared by:

BECHTEL NATIONAL, INC.
401 West A Street, Suite 1000
San Diego, California 92101



Signature: _____

M'balia Tagoe
M'balia Tagoe, CTO Leader

Date: _____

7-29-96

Section 2 Investigation Methodology

Duplicates are used to assess the precision of the laboratory. Because of the heterogeneity of the sediment samples, duplicates of the sediment samples were not collected in the field; therefore, laboratory reported duplicate analytical results were evaluated to assess the precision of the laboratory.

Matrix spikes are used to evaluate data accuracy and laboratory precision. Spikes are prepared by the laboratory by spiking samples with representative constituents for the analyses to be performed.

2.6 DATA VALIDATION

One hundred percent of the data collected was validated by Laboratory Data Consultants, Inc. (LDC), to establish and confirm data reliability and validity. Level C data validation was conducted in accordance with NFESC requirements and was performed based on QC criteria documented in the method for each analytical parameter. The results of data validation are discussed in Section 3.3.

2.7 DATA EVALUATION

Analytical laboratory results from sample analysis, data validation results, and field observations were reviewed and evaluated to assess the presence or absence of an environmental concern within the steam distribution system.

Decision rules were developed during the data quality objectives (DQOs) evaluation process as part of the project planning effort and were included in the project work plan. These decision rules were followed during data evaluation to arrive at recommendations on POI disposition. They are as follows.

- If the reported concentrations of metals in sediment samples (using the SPLP extraction procedure) are below 30 times the California Enclosed Bays and Estuaries Plan standards (WRCB 1993), then there is no risk to human health and the environment, and no further action will be proposed.
- If the reported concentrations of metals in sediment samples (using the SPLP extraction procedures) are equal to or greater than 30 times the California Enclosed Bays and Estuaries Plan standards, and there is no potential for migration of contaminants based on the condition of the tunnel at the locations of elevated metals, then there is no risk to human health and the environment, and no further action, with respect to an evaluation of subsurface contamination, will be proposed.
- If sediment is observed to have accumulated in a tunnel section, and the reported concentrations of metals in any of the sediment samples (using the SPLP extraction procedures) collected from that tunnel section are equal to or greater than 30 times the California Enclosed Bays and Estuaries Plan standards, then those samples collected from within a steam tunnel section with concentrations above this action level will be composited. The composite sample will be analyzed for total metals concentrations and compared against the total threshold limit concentration (TTLC) standards. If the total analytical metals

Section 2 Investigation Methodology

concentrations exceed the specific TTLC standard, then the waste is considered a hazardous waste by California standards. If the concentrations do not exceed the TTLC standards, but equal or exceed ten times the soluble threshold limit concentration (STLC) standards, then the waste is required to undergo the California waste extraction test (WET) procedure (Title 22 *California Code of Regulations*, Division 4.5, Chapter 11, Article 5, Appendix II). If the WET procedure results exceed the STLC standards, then the waste is also considered a California hazardous waste. All sediment classified as hazardous waste will be removed and disposed in accordance with applicable regulations.

- If the reported concentrations of metals in sediment samples (using the SPLP extraction procedures) are equal to or greater than 30 times the California Enclosed Bays and Estuaries Plan standards, and there is a potential for migration of contaminants based on the condition of the tunnel at the locations of elevated metals, then a potential risk to human health and the environment exists. A fate and transport evaluation will be performed taking into consideration the distance from the sampling location to the San Diego Bay, the degradation potential of the chemical of potential concern (COPC), and other factors. The results of this fate and transport evaluation will be used to determine if subsurface sampling is warranted.
- If no sediment is observed at an area with significant cracks, the results of sediment sampled from other locations within that tunnel section, if available, will be evaluated to determine the potential for a historical impact to the subsurface at the cracked location. If it is determined that the potential for subsurface contamination does not exist, then no further action will be recommended. Also, if no sediment is observed to have accumulated within a tunnel section or buried-steam line vault, then no further action will be recommended, regardless of the condition of the tunnel or vault.

Action levels developed for this Phase I SA project are presented in Table 2-1.

Table 2-1
Project-Specified Evaluation Criteria (µg/L)^a

Analyte	California Enclosed Bays and Estuaries Plan Standard	Thirty Times the California Enclosed Bays and Estuaries Plan Standard
Cadmium	9.3 ^b	279
Copper	2.9 ^c	87
Lead	5.6 ^b	168
Selenium	71 ^b	2,130
Thallium	1.8 ^d	54
Zinc	86 ^b	2,580

Notes:

- ^a µg/L – micrograms per liter
- ^b 4-day average water quality objective for protection of saltwater aquatic life
- ^c 1-hour average water quality objective for protection of saltwater aquatic life
- ^d water quality objective for protection of human health