

365 Lennon Lane
Walnut Creek,
California 94598

JMM James M. Montgomery
Consulting Engineers, Inc.

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Western Division
Naval Facilities Engineering Command
ATTN: *Mr. Stephen G. Chao, P.E.*
Bldg 101 Code 1813SC
San Bruno, California 94066

Contract No: N62474-88-D-5086
CTO 0134

File: 2738.0372/2.1

**Subject: NAS Moffett Field Remedial Investigation/Feasibility Study
Responses to Agency Comments on Site Investigation Report for
Inferred Sources 8 and 9**

Dear Steph:

Please find enclosed three copies of the Responses to Agency Comments on the Site Investigation Report for Inferred Sources 8 and 9 at NAS Moffett Field. These responses explain how the comments were addressed. This document is in partial fulfillment of Contract No. N62474-88-D-5086, Contract Task Order 0134. If you have any questions, please call me.

Sincerely,

**JAMES M. MONTGOMERY,
CONSULTING ENGINEERS, INC.**

Joseph P LeClaire, Ph.D.
Project Manager

cc: Lewis Mitani
Wilford Bruhns
Cyrus Shabahari
Steven Anschutz
Thomas P. Adkisson
Cathy McDade

Environmental Protection Agency
Regional Water Quality Control Board
Department of Health Services
NAS Moffett Field
PRC Environmental Management, Inc.
Camp Dresser & McKee Inc.

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ADMIN RECORD

GEN 97

**RESPONSES TO DEPARTMENT OF HEALTH SERVICES (DHS) COMMENTS
ON SITE INVESTIGATION REPORT
FOR IS 8 & 9, MOFFETT FIELD**

DHS GENERAL COMMENTS

DHS General Comment 1

The soil samples from the monitoring wells could have been affected by the drilling techniques. The air rotary and mud rotary drilling techniques would result in highly disturbed soil thereby, producing unreliable soil samples. Please explain what factors were undertaken and how they were implemented to prevent jeopardizing the data quality.

Navy's Response

Soil samples for chemical analysis were not collected from either air or mud rotary borings but were collected from adjacent hollow stem auger borings. The mud-rotary borings were used for lithologic logging and a geophysical probe was lowered down the resulting borehole for measuring the electrical properties and gamma emission of the sediments. The air-rotary casing hammer method was employed to bore a large diameter hole through the shallow aquifer (A1) and into the deeper aquifer (A2) for the installation of the four deep monitoring wells. The air-rotary casing hammer drilling method was chosen because the drill casing prevents aquifer cross contamination.

DHS General Comment 2

The upward migration of contaminants from A2 to A1 aquifer should be further investigated to ascertain the likelihood of such condition. It is also important to know if this condition exists in other sites at Moffett Field. Please explain.

Navy's Response

Figures 10 and 11 show that the piezometric surface in the A2 aquifer is slightly higher than the A1 aquifer at those locations mentioned in the last paragraph of 4.1.5.1. To better ascertain the likelihood of vertical contaminant migration in the ground water, JMM is compiling water level data collected by consultants working for both the Navy and the MEW group (both past and present). These historical data will eventually be used in our groundwater flow model, piezometric surfaces in the A1 and A2 aquifers will be compared and changes with time observed to determine the potential for upward contaminant migration.

DHS SPECIFIC COMMENTS

DHS Specific Comment 1

Page 20, figure 3 shows the TCE value at RW5A to be 3700, but the text shows 4100. Please clarify.

Navy's Response

The text value for TCE at RW5A has been changed to 3700 to match the Figure 3. This value is verified in the MEW Remedial Investigation Report (HLA, 1988).

DHS Specific Comment 2

Page 31, paragraph 4, please identify the sampling time period, including dates.

Navy's Response

Well Owner	Round 1	Round 2
Navy	12/5-17/91	1/22-2/1/91
MEW	12/17-21/91	1/21-25/91

DHS Specific Comment 3

Page 58, last paragraph, please explain where well 20B1 can be found. The figures do not identify such well.

Navy's Response

The reference is to well 12B1 rather than well 20B1, this has been corrected in the text.

DHS Specific Comment 4

Page 58, paragraph 1, please identify the downgradient well with a concentration of 5,000 ug/l of TCE.

Navy's Response

The downgradient well referenced is MEW well 82A. This has been added to the text.

DHS Specific Comment 5

Page 67, paragraph 1, there is no information on well H05A. Please Clarify.

Navy's Response

The "ND" associated with H05A should read *nothing detected* rather than *no data*. Therefore, the available information indicates that TCE is not present in the A1 aquifer at point H05A during this sampling round.

DHS Specific Comment 6

Page 79, paragraph 1, please identify the MEW wells in the study area and provide a data reference.

Navy's Response

These wells are identified in this report in Section 3.8, page 31.

DHS Specific Comments 7

Page 63, figure 19a, it is not clear if some of the existing wells are screened at A1 or A2 aquifers/permeable zones, for example, E14, 97A etc. Please clarify.

Navy's Response

Generally the MEW wells ending in the suffix "A" are screened in the A1 aquifer. The MEW wells ending in B1 are screened in the A2 aquifer. For clarification on specific wells, the reader is encouraged to compare the screened intervals listed in Table 2 with aquifer depths listed in Table 1.

**RESPONSES TO CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD (CRWQCB)
COMMENTS ON SITE INVESTIGATION REPORT
FOR IS 8 & 9, MOFFETT FIELD**

CRWQCB Comment 1

On page 53, second paragraph, it notes that up to 32,100 ug/kg of bis (2-ethylhexyl) phthalate was found in the soil. It then notes that this compound is commonly found throughout Santa Clara Valley, implying there is no concern. Area background concentrations for this compound should be stated and only those concentrations found within the background range should be dismissed."

Navy's Response

The BNA compound, bis (2-ethylhexyl) phthalate, is a general plasticizer, and is commonly found in soils in commercial, industrial and even in residential areas. In this case, it appears that the sample containing bis (2-ethylhexyl) phthalate represents an isolated occurrence and is not indicative of a source of contamination.

CRWQCB Comment 2

On page 58, third bullet regarding the A1 aquifer, it states that four wells had TCE concentrations between 100 and 1000 ug/l. The next sentence states that Hydropunch data suggest the groundwater is free of TCE. These sentences appear contradictory. In other recent reports the Navy has pointed out that well data is more reliable than Hydropunch data. Therefore the suggestion that the groundwater is free of TCE should be removed.

Navy's Response

The suggestion that the groundwater is free of TCE based on HydroPunch data has been removed from the second and third bullets of the A1-Aquifer section on page 58.

**RESPONSES TO THE U.S. ENVIRONMENTAL PROTECTION AGENCIES (EPA'S) COMMENTS
ON SITE INVESTIGATION REPORT
FOR IS 8 & 9, MOFFETT FIELD**

EPA Comment

Our only comment to the SI report is on page 53, 3rd paragraph, the background range has not been established on NASMF (see EPA comments to Phase I Characterization Report Section 3, comment number 8, September 27, 1990). The report should be amended to reflect this fact.

Navy's Response

It is recognized that a background range for metals at Naval Air Station Moffett Field has not at this time been adequately addressed or developed. Navy consultants are currently working with the agencies to establish an appropriate methodology to develop this background range. The text of the Site Investigation Report has been changed to reflect that the "background range" developed in the Phase I Characterization Report is for reference only and doesn't represent a true background range.