



DEPARTMENT OF THE NAVY
SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132 - 5190

N00296.003301
MOFFETT FIELD
SSIC NO. 5090.3.A.

5090
Ser 06CH.AE/0193
February 17, 2004

Ms. L. Maile Smith
Weiss Associates
350 East Middlefield Road
Mountain View, CA 94043

Dear Ms. Smith:

Thank you for your letter of December 3, 2003, providing comments on the October 17, 2003 Draft Final Site Characterization and Baseline Human Health Risk Assessment Report for Orion Park and Wescoat Housing Areas (Draft Final Report) and the November 13, 2003 Restoration Advisory Board (RAB) presentation on the Moffett Housing groundwater and air investigation results. The Site Characterization and Baseline Human Health Risk Assessment Report for Orion Park and Wescoat Housing Areas was issued as final on December 19, 2003.

Your December 3, 2003, letter presented a general discussion on the Draft Final Report. Some of the general discussion provided an alternative interpretation of the data and/or alternative conceptual model. The Navy has developed a different conceptual site model based on a different interpretation of the data. Such difference of interpretation is common in hydrogeology, wherein discrete data points are evaluated to develop a conceptual subsurface model. The Navy thanks you for the alternative interpretations, and will not attempt to refute alternative ideas. The Navy's conceptual model of the subsurface environment will be refined as additional data are obtained in the future.

Discussion and comments related to the RAB have typically been addressed verbally at the RAB and are not being addressed herein.

The Navy's Draft Site Characterization and Baseline Human Health Risk Assessment Report for Orion Park and Wescoat Housing Areas (Draft Report) was issued January 16, 2003. The Draft Report was based on historical data and on the Navy's Phase I and Phase II field investigations at Moffett Community Housing, which were complete by September 2002. Reviewers of the Draft Report provided comments in February and March 2003. The Navy provided responses to comments (RTCs) on June 6, 2003, to the United States Environmental Protection Agency and the California Regional Water Quality Control Board. Edits as a result of the RTC process were incorporated into the Draft Final Report (October 17, 2003).

Although additional work was completed by others in the Moffett Housing area during the extensive review and revision process for the Site Characterization and Baseline Human Health Risk Assessment Report, the resulting data were not incorporated in the report. The document was based solely on the Phase I and Phase II field investigations at Moffett Housing plus historic Moffett site specific data (e.g., monitoring well chemical and water level data) obtained prior to October 2002.

The Phase I investigation results were used to identify housing units where additional data, including air sampling data, were collected for a human health risk assessment. It was

5090
Ser 06CH.AE/0193
February 17, 2004

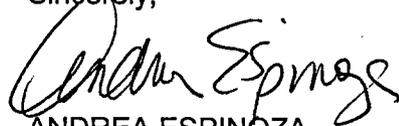
assumed that housing units located above first observed groundwater with volatile organic compounds had the highest potential for vapors migrating from the groundwater.

During the Phase II investigation, each of the permeable water bearing zones in both the A1 and the A2/B1 aquifer zones to a depth of about 55 feet bgs was sampled. Samples from the discrete water-bearing zones at any one location at various depths differed in contaminant concentrations. At several locations, the uppermost water-bearing zone had no detectable contaminants, while deeper strata within the same aquifer zone had high concentrations. Typically, the contamination concentration increased with depth within each aquifer zone.

In order to develop a conceptual model of the subsurface environment, it was necessary to compare monitoring well data located to the north and east of Orion Park, and within and to the north and east of Wescoat. Monitoring wells at Moffett have screens that range from 10 to 20 feet in length, and thus interconnect several, if not all, of the individual water bearing layers within each of the aquifer zones. A1 and A2/B1 aquifer zone monitoring well chemical quality data are thus a composite of the chemical quality of the individual permeable layers within each aquifer zone. The composite chemistry would be dependent on site-specific hydraulic and chemical parameters associated with the interconnected layers. Thus, although the uppermost permeable layer sampled by the DPT method might have non-detectable contamination, if the deeper units at the same location within the same aquifer zone had detectable contamination, a composite sample collected at that location (comparable to a monitoring well) would have detectable contamination. Since it is not possible to determine the relative percentage of chemical impacts from each layer with the available data, the Navy was conservative by taking the highest detected chemical concentrations as representative of the aquifer zone at a location. Therefore, the chemical isoconcentration plots presented in the October 2003, Draft Final Report could have a Phase I sample (first observable water) which shows no detectable contamination within a high concentration area for the overall aquifer zone.

If you have any questions, please feel free to contact me at (619) 532-0911 or at andrea.espinoza@navy.mil.

Sincerely,



ANDREA ESPINOZA
BRAC Environmental Coordinator
By direction of the Commander

5090
Ser 06CH.AE/0193
February 17, 2004

Copy to:

Ms. Alana Lee
U.S. Environmental Protection Agency
Region 9
75 Hawthorne St., SFD-73
San Francisco, CA 94105

Ms. Adriana Constantinescu
Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

Mr. Cliff Kirchof
Schlumberger Limited
225 Schlumberger Drive
Sugar Land, Texas 77478

5090
Ser 06CH.AE/0193
February 17, 2004

Blind copy to:
06CH
06CH.AE
06CH.WD
06CH.MP
05G.DS (2 copies)
06CH Chron file
Read file
Serial file

Writer: W. Doctor, Code 06CH.WD, 2-0928
Typist: N. Lilley, 06BU.NL, 02/17/04

E-mail/MEW RTC ltr 3Dec03.doc

AS
06CH.AE