

**RESPONSE TO RWQCB COMMENTS
ON DRAFT REPORT NORTH BASE HYDROGEOLOGIC STUDY
NAS MOFFETT FIELD**

Comments from Elizabeth Adams (Dtd. 9-28-92)

GENERAL COMMENTS

General Comment No. 1: The summaries describing the potential sources of VOC contamination in Section 3.3.2.1 and the conclusion, Section 5.0, need clarification. If the investigation supports the hypothesis that there are no sources for TCE and PCE within the North Base Area, then where is the contamination coming from and how does this contamination relate to other contamination on Moffett? Please elaborate on how the VOC contamination within the North Base area relates to other possible sources. In addition, the conclusion should state the status of remedial actions being undertaken for the 7 ppb of TCE which is being discharged presently into the Navy Channel.

Response to Comment:

Paragraph 7 of section 3.3.2.1 has been rewritten;

"1,1-DCA, 1,1,1-TCA and 1,1-DCE were detected in groundwater in the NBA and in upgradient monitoring wells adjacent to Site 8. No apparent sources of 1,1-DCA, 1,1-DCE or 1,1,1-TCA were detected in the NBA. The presence of these compounds in NBA groundwater indicates that the contamination in the North Base Area is either the distal end of the regional VOC plume, which extends south to the MEW companies, and includes Navy sources at Site 9 or undiscovered sources on either Navy or NASA property. The plume configuration for these compounds indicates that the transport of these compounds is strongly influenced by the pumping at Building 191. TCE, PCE and 1,2-DCE occurrences appear to be related to either the surface stormwater channel that parallels Lindberg Avenue or paleo channels trending northward from Site 8. TCE, PCE and 1,2-DCE detections were generally limited to the areas east of the Lindberg Avenue ditch with the exception of the distal end of the TCE plume. The lateral spreading of TCE at the end of the plume appears to be due to a static area in the piezometric surface at the north end of the Lindberg Avenue ditch."

The second paragraph of section 5.0 has been modified to include the following sentence of explanation;

"The presence of TCE, PCE and 1,2-DCE in the NBA groundwater appears to result from contaminated surface water infiltrating from the Lindberg Road ditch or migration of the regional VOC plume through paleo channels. The presence of 1,1-DCA, 1,1-DCE and 1,1,1-TCA in the NBA groundwater appears to be related to upgradient sources (the distal end of the regional VOC plume or undiscovered sources on Navy or NASA property)."

SPECIFIC COMMENTS

Specific Comment No. 1: Page 19, Section 3.1.1. Investigating the storm drainage system should include inspections of the structures for possible cracks and potential conduits which may be due to the eroding integrity of the piping system.

Response to Comment:

A sentence has been added to this paragraph;

"The integrity of the storm drain system will be evaluated during a horizontal conduits investigation to be conducted in 1992/1993.

Work plans for the Horizontal Conduits Investigation prepared by PRC/JMM preceding field work, will describe the inspection activities in detail.

Specific Comment No. 2: Page 24, Section 3.1.3.3. Please state whether an atmospheric transducer was used during the test for the tidal influence study, or whether the data was compared to barometric information for the same time period as the tests. Were changes in barometric pressure included in the evaluation of the data obtained during the study? Was the pump at Building 191 operating during the study? Could it have any influence on the groundwater elevations within this area?

Response to Comment: An atmospheric pressure transducer was not used during this tidal influence study, however a record of barometric pressure was obtained from NAS Moffett Field Flight Operations. The record shows that atmospheric pressure remained stable during the 24-hour test period. A sentence has been added to this paragraph;

"Barometric pressure remained stable over the testing period, so this did not effect groundwater elevation."

Pumping at Building 191 is from the well cistern (Figure 11) and not the shallow aquifer zone. Pressure pulses caused by pumping in the well cistern are not transmitted to the adjacent aquifer. Continuous discharge conditions are maintained on the lines draining the north end of the runway. The lowest point in the drain system is -7.70 at the drain outlet to Building 191.

Specific Comment No. 4: Pg. 35, section 4.2.3. Table 8 and Table 9 show different "U" values for the VOCs, 5 ppb in Table 8 and 10 ppb in Table 9. Please explain the reason for this difference.

Response to Comment: Two separate analytical laboratories were contracted to analyze the VOC samples collected for this project. The Contract Required Detection Limits (CRDL) for the first lab were 5.0 µg/L and 10 µg/L for the second lab. The following sentence has been added in paragraph 1 of section 4.3;

"CRDLs for VOC analysis were 5.0 µg/l for first round samples and 10 µg/l for second round samples, unless otherwise stated. Quantification of compounds detected below the CRDL were estimated and are reported with a "J" qualifier."