



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

May 11, 1999

Mr. Stephen Chao
Naval Facilities Engineering Command
Engineering Field Activity, West
900 Commodore Way, Bldg. 210
San Bruno, CA 94066-2402

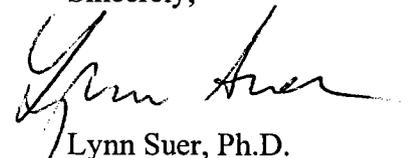
Re: Comment on Northern Channel Corridor Hydrogeological Investigation Draft Work Plan,
dated February 26, 1999

Dear Mr Chao:

The U.S. Environmental Protection Agency has reviewed the above referenced document. In general, this Work Plan is adequate to evaluate Northern Channel Corridor hydrogeology and the stated objectives as outlined in Sections 2.0 and 5.1.1 (i.e., the potential hydraulic connection between surface water/groundwater and the influence of Building 191 pumping). The attached comments are directed towards producing a more complete work plan and refined investigation.

If you have any questions, please contact me at (415) 744-2396.

Sincerely,


Lynn Suer, Ph.D.
Remedial Project Manager

Attachment

cc: Joseph Chou, RWQCB
Tim Mower, TTEMI
Sandy Olliges, NASA
James McClure, RAB
Peter Strauss, RAB

**United States Environmental Protection Agency
Comments on**

**Moffett Federal Airfield
Northern Channel Corridor
Hydrogeological Investigation
Draft Work Plan
February 26, 1999**

Specific Comments

- 1) Page 1, Section 2.0 Objective, first paragraph, last sentence. The reference to landfill number 2 is confusing, as it could be mistaken for Site 2, which was also a landfill. It would be clearer to simply refer to the golf course landfill as Site 22.
- 2) Page 1, Section 2.0 Objective, second paragraph. Be more specific in explaining how this information will be used to make remedial decisions. The objective seems to be to determine whether pumping at Building 191 is a necessary component of the remedies for Site 22 and OUs 1 and 5.
- 3). Page 1, Section 2.0 Objective, second paragraph. Potential impacts of Building 191 pumping on remedies for OUs 1 and 5 should be mentioned here.
- 4). Page 3. Section 3.1, last paragraph. This paragraph should be expanded to explain more explicitly the role of pumping at Building 191 in the remedies for OUs 1 and 5, and Site 22. Again, what specific hydrogeologic information would lead to the conclusion that pumping should be continued (or discontinued)?
- 5). Page 18, Section 5.1.3. What specific water chemistry parameters will be monitored to enable determination of water source?
- 6). Page 18, Section 5.1.3. Why isn't wet season data also needed in order to make the decision to shut off the pumps?
- 7). The figures need to be labelled more fully to correlate with the text. As is, readers not familiar with MFA will have a difficult time understanding the project and particular features mentioned in the text. Figures 3-2 and 3-3 should be reworked as introductory base maps and should include labelling of project features mentioned in the text (i.e., Northern Channel corridor, Northern Channel, the North Patrol Road Ditch, Marriage Road Ditch, and Site 22). These features are mentioned in the text and intermittently shown on later figures but the reader has to dig to find out where they are located to get a grasp of project particulars. A perfect example is the first mention of the Marriage Road

Ditch (Section 3.2 Paragraph 2 - "which intersects the North Patrol Road Ditch one-half mile east of Building 191"). Refined figure labelling would make the work plan more user friendly.

- 8). Section 4.2.1 starting with paragraph 3: The text should be reworked into bullet or table format listing the transect, the proposed piezometers and existing wells (i.e., Transect 1 - PZNCC-1, -2 -3 and W3-22) and their corresponding screen interval (upper or lower A aquifer). Table 4-1 could conceivably be reworked to include this. Figure 4-1 could be improved by labelling Transects 1 through 5.
- 9). Section 4.3: Note to Field Geologists (not to be included in the work plan). When using hollow stem augers to install piezometers, make sure the driller does not glaze the bore hole wall. Often times turning the augers too fast in moist clayey soil creates a glaze on the borehole wall that is hard to develop out. Since these piezometers are to be used to measure hydraulic response, special care should be taken to ensure that they transmit water easily.
- 10). Section 4.7 should be retitled Surface Water and Stormwater Line Sampling. Stormwater alone implies that actual stormwater event samples will be collected, which I assume is not the case. It should also be noted that this sampling will coincide with ground water sampling (Section 4.5). Figure 3-3 indicates that the storm drains feeding the retention ponds and Building 191 start on the south side of Route 101. With the potential concern mentioned in Section 3.0 regarding the MEW Superfund Site, it may be appropriate to sample the storm drain at key locations for select MEW chemicals of concern, unless this is already understood or is specifically beyond the scope of this investigation.
- 11). Section 4.9 Water Level Survey. Water level surveys should be completed on the same day within a specific time frame (1 to 2 hrs maximum). This will ensure that the contour maps are as close to a water table snap shot as possible. It seems that enough water level rounds have been done at MFA whereby some type of water level survey protocol has been pre-established (including minimizing possible tidal effects). This protocol should be followed when doing water level rounds during the Aquifer Response Test.
- 12). Section 4.10 Aquifer Response Test. A table listing the rounds of water levels may be helpful here. In paragraph 2 it is not clear if water levels will be taken every day for 6 days after pump operation has resumed or 6 days after pump operation has resumed. With respect to times of the water level rounds I'd be more inclined to treat this like a well pumping/recovery test whereby water levels are collected frequently after the pump has been turned off and spacing those intervals out with time and well location with respect to the Building 191 cistern or surface water bodies subject to Building 191 discharge. The same would hold true when the pump was turned on. In addition, if it is not prohibitively expensive, pressure transducers/data loggers should be used in select locations to continuously monitor ground and surface water levels.

- 13). Appendix A per Section 4.2.1. My draft did not include a boring/well construction log for W3-22. Also some of the Well IDs listed on Table 4-2 should include the complete well name given on the boring/well construction log: W53-2 (A1) and the log for SB2-14 needs a notation that the well number is W2-14. A table listing well construction details and reference point elevation data at the front of Appendix A would help. This table should include a boring number/well cross reference.