

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

REGION 2
700 HEINZ AVE., SUITE 200
BERKELEY, CA 94710-2737



May 20, 1992

(510) 540-3821

Elizabeth Adams
RWQCB
San Francisco Region
2101 Webster Street, Suite 500
Oakland, California 94612

[Faint stamp and handwritten initials 'EA']

MOFFETT FIELD OU-4 RI

Dear Ms. Adams:

The Department of Toxic Substances Control (Department) is forwarding the enclosed comments on the above report for your consideration. On the bases of our review more information is needed before the report is accepted.

The Risk Assessment comments will be provided to you in a separate letter.

Should you have any questions, please call me at (510) 540-3821.

Sincerely,

[Handwritten signature: Cyrus Shabahari]

Cyrus Shabahari
Waste Management Engineer
Site Mitigation Branch

Enclosure

1406

D/R 4



GENERAL COMMENTS:

The Department of Toxic Substance Control (Department) does not concur with the established background levels. Some previous investigations have been omitted from the report, thus rendering it incomplete. Decision was made to drop some inorganics from Risk Assessment because these metals were below the background levels.

There are no discussion on how background levels were selected. The agencies must approve these levels before any data could be dismissed.

There has been much discussion on the plume allocation in the report. The RI report is a technical document thus must be free of any cost recovery issue. Moreover, there are some areas that no or very little investigation has been performed. Without such investigation the plume allocation will not be accurate. For example, Hanger 1 is proposed to be investigated to help the Navy for cost recovery issues, but it is missing from the RI report.

The RI report is a technical document designed to define the nature of contamination. The potential responsible party search does not fall in the scope of an RI report. Therefore, all references in this report to the plume allocation for the purpose of cost recovery should be deleted.

Sites 9, 12, and 15 contain many USTs, Sumps and Oil/water separators of which only few have been removed. The contamination left in place could leach into the groundwater. This report has not discussed any leaching which could occur. Some of these tanks or sumps are possibly leaking. Consequently, it becomes impossible to assess the sources of the westside groundwater contamination. Any one of those tanks or sumps could be an additional source of groundwater contamination.

Results from building 29 investigation have been omitted. The data must be included in the report. Any data omission must accompany an explanation.

Some Phase I data were accepted and some were not. This inconsistency has not been explained. It seems that The Navy has utilized the data selectively. This practice is not acceptable.

Chapter four of the text did not discuss the TPH contaminated areas on the Westside. From the previous investigation some areas have been contaminated by TPH. For example, site 14 investigation provided data to ascertain its condition. Please explain the TPH of 3900 ppb in W14-1(A2).

SPECIFIC COMMENTS:

1. Page ES-3,
 - A. Paragraph 1, TPH migrating onto the NASA is a concern which has not been investigated thoroughly. This migration must be stopped.
 - B. Paragraph 3, Models are very subjective and do not reflect the actual scenario. Models are based on series of assumptions. These assumptions must be identified.
2. Page 1-5, paragraph 4, the base closure date is set for September 1997.
3. Page 1-8, paragraph 2, hanger 1 has been excluded from any investigation. Data collected around the hanger indicate a possible source.
4. Page 1-9, paragraph 3, more information is needed on the nature of these wells.
5. Page 2-2, paragraph 1, what happened to site 19?
6. Page 2-4 paragraph 5, how do you know if the ponds do not impact the westside groundwater? There could be channels under the runway transporting the contamination.
7. Page 2-13, paragraph 1, please identify if Navy is working on these tanks. It is possible that the contamination is migrating onto the NASA property. Navy must put in-place some control measures if that is the case.
8. Page 2-15, last paragraph, has there been any study done on the storm drain? This could be a potential horizontal conduit.
9. Page 2-16, paragraph 1, more evidence that Hanger 1 could be a source.
10. Page 2-18, paragraph 3, please explain how these tanks could contribute contamination onto Moffett Field. Site 9 Tech Memo indicates TPH contaminating the groundwater whereby migrating onto the NASA property.
11. Page 3-12, paragraph 2, table 2.3-1 does not contain any background levels. Generic background levels are not acceptable.
12. Page 3-16, paragraph 2, please identify the agricultural

- well. Is there a reference in a map? Any samples taken? How do you know that it is not contaminated?
13. Page 3-23, paragraph 3, please provide figure 3.6-9 for review.
 14. Page 4-1,
 - A. Paragraph 3, which of the MEW wells have been selected, and why?
 - B. Last paragraph, are you saying that MEW results were not validated therefore rejected? But in paragraph 2 selected MEW results have been used. Please clarify.
 15. Page 4-6, paragraph 4, if Phase I data have not been validated then, how could they be used to established background levels?
 16. Page 4-7, paragraph 2, please provide a 1,2-DCA(cis) contour map.
 17. Page 4-8,
 - A. Paragraph 1, the text implies that since the PCE plume in the A1 aquifer follows a man-made permeable zone or preferred pathway, its remediation could be different. Please clarify. In addition, the soil beneath the sump could be contaminated. The sump removal does not mean that the site is clean. The Department believes that if the PCE contaminated soil is not mitigated, the PCE would leach into the groundwater thereby, compounding the problem.
 - B. Paragraph 4, there is no evidence that suggest NASA to be a TCE source on Navy property. In fact, solvent plume is migrating onto NASA's property.
 18. Page 4-9, paragraph 2, on Page 4-8 paragraph 3, TCE level was identified 12,000 ppb in W09-18(A1). However, in this paragraph TCE in the same well said to be 27000. Which one is it? There is not enough information to justify the Navy's assessment that sites, 15 and 18 are not a source.
 19. Page 4-12, paragraph 1, site 8 could be the northern extent of the plume, since the highest detected level is 16 ppb.
 20. Page 4-13, last paragraph, data for Building 29 investigation are missing. The data from the Building 29 Technical Memorandum indicate high levels of aluminum in the groundwater. The highest level was found in W9-44(A1) at

175,000 ppb. Building 29 Investigation must be included in the RI report.

21. Page 4-14, paragraph 1,2, and 3, data from building 29 investigation have not been included.
22. Page 4-18, paragraph 1, site 9 Field Investigation Tech Memo, figure 10 shows 1,2-DCE in A1 aquifer is moving onto NASA's property. 1,2-DCE plume does not seem to be in the same location as mentioned. Please clarify.
23. Page 4-25, last paragraph, are there any MEW MWS at or close to these sites? If yes, please provide data.
24. Page 4-27, paragraph 4, please provide an explanation for this sudden increase in TCE concentration. This increase could be from a nearby source.
25. Page 5-1 paragraph 2, please provide more information on phase I data. What are the "other" sources?
26. Page 5-2, paragraph 4, please provide a reference to the model.
27. Page 5-3,
 - A. Paragraph 3, the report must include a description of all the assumptions for the model.
 - B. Paragraph 4, explain the "interpretations and the evaluations". Provide reference.
28. Page 6-1, last paragraph, please explain how data gaps were identified when phase I data were not validated.
29. Page 6-5, top paragraph, it has been determined that Moffett has contributed to the A aquifer.
30. Page 6-8, last paragraph, if no information is available how could it be determined that site 16 is not a source?
31. Page 6-9, paragraph 4, please provide information on any investigation, if conducted.
32. Page 6-12,
 - A. paragraph 2, please provide figures 6.2-1 through 6.2-9 for review.
 - B. Paragraph 3, if phase I data are not validated they can not be used. The data can not be selectively used to

support Navy's conclusion or decisions.

- C. The data in Appendix B are incomplete. Building 29 investigation results are omitted.
 - D. Last paragraph, the salt water intrusion in the groundwater has not been established yet. Therefore, the Department can not accept the contribution of high levels of inorganics to salt water intrusion.
33. Page 6-13, paragraph 2, the purpose of this paragraph is not understood. It is true that humans need potassium or calcium in their diet but dismissing high levels of sulfates or iron because they represent essential nutrients is not acceptable.
34. Page 6-14, bullet 4, the Department does not agree with high levels of aluminum to be within the background level.
35. Page 7-5, paragraph 3, there is at least one exposure pathway; groundwater discharges into the bay contaminating the fish. Therefore, the Department does not agree with the provided conclusion.