



Harding Lawson Associates

August 4, 1995

27437 007

Elizabeth J. Adams, H-6-5
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, California 94105

***Comments on Draft Eureka Laboratory
Data Replacement Field Work Plan
Moffett Federal Airfield, July 11, 1995***

Dear Ms. Adams:

On behalf of Fairchild Semiconductor Corporation (Fairchild) and Raytheon Company (Raytheon), Harding Lawson Associates (HLA) is sending you the following comments on the Navy's July 11, 1995, document, *Draft Eureka Laboratory Data Replacement Field Work Plan, Moffett Federal Airfield* (Work Plan).

Fairchild and Raytheon are concerned that the U.S. Environmental Protection Agency (EPA) approved the Work Plan only 15 calendar days after the date of the Work Plan, so that inadequate time was available for other parties to prepare comments for EPA consideration. The Work Plan was approved by Michael D. Gill without your cosignature as the EPA Remedial Program Manager (RPM) for groundwater in the area addressed by the Work Plan. Fairchild and Raytheon understand that you are on vacation and it is not clear whether you had a chance to review the Work Plan prior to EPA approval.

HLA's specific comments on the content of the Work Plan follow.

Resampling of Monitoring Wells

The Work Plan asserts that sufficient data are available to render resampling of monitoring wells unnecessary. Prior to receiving the Work Plan, HLA understood that all of the affected Navy wells had been sampled multiple times after the sampling rounds in which Eureka Laboratories participated. However, on the basis of Table 1 of the Work Plan, it now appears that A-aquifer Navy Wells W89-4 and W89-7 were only sampled on one occasion when Eureka Laboratories was not involved. Therefore, these two wells each have only one set of data that the Navy has not classified as unusable. This is inconsistent with the approach taken throughout the studies on Moffett Field and nearby private sites where at least three rounds of reliable chemical data have been collected from monitoring wells. To provide a comparable level of assurance that the single round of data from these two wells is representative of field conditions, these two wells should be resampled at least once and preferably twice.

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Table 1 of the Work Plan indicates that private-party wells in the area addressed by the Work Plan have only been sampled once since the involvement of Eureka Laboratories. However, these wells all have multiple rounds of data collected prior to the involvement of Eureka Laboratories, so it is not necessary to resample them in order to have a comparable level of assurance that their data are representative. Note that the Navy's wells affected by this Work Plan apparently did not have any data collected prior to the involvement of Eureka Laboratories.

Resampling HydroPunch Sampling Locations

The Work Plan asserts that data from existing monitoring wells are sufficient to characterize the so-called IS 8 & 9 area and that the HydroPunch samples were only collected to "supplement" data collected from monitoring wells. These statements do not accurately indicate the significance of the HydroPunch data and lead to the Work Plan's technically unsound conclusion that the HydroPunch locations should not be resampled.

In particular, the Navy's assertion that the existing monitoring well network is adequate to characterize the west side of Moffett Field is not supported by the data. On the contrary, if existing HydroPunch data are ignored, the existing well network creates a seriously misleading impression of the distribution of chemicals on the west side of Moffett Field.

The Navy's assessment of the significance of HydroPunch data in the IS 8 & 9 area continues the Navy's history of inappropriate interpretation and use of direct-push groundwater data. This continuing problem has been described in detail in several HLA reports, most recently in the March 2, 1995, report, *Summary of Site 9 Potential Sources, Moffett Federal Airfield, MEW Study Area, Mountain View*.

In the case of the IS 8 & 9 area, the Navy's original HydroPunch data are very important to improving the Navy's inadequate characterization of the distribution of chemicals in groundwater. Monitoring wells in this area are spaced a minimum of several hundred feet from their nearest neighbors, and in many areas covered by the Work Plan, wells are of the order of 750 feet apart. HydroPunch data from several locations (eg. HydroPunch sample H89-13) are materially different from data from the nearest monitoring wells, demonstrating that the monitoring well network is inadequate. Therefore, the IS 8 & 9 HydroPunch locations should be resampled.

In several areas, available data indicate that an area previously sampled only by HydroPunch merits the collection of additional HydroPunch samples at previously unsampled locations and possibly the installation of one or more permanent monitoring wells. For example, data from HydroPunch samples H89-1, H89-2, and H89-3, considered with the historical data from Wells 79A and 61A, indicate that the Navy's Craft Hobby Shop, Building 543, is not materially affected by trichloroethene (TCE) from the area south of Highway 101.

Taking into account the additional data provided by HydroPunch H89-4 and the National Aeronautics and Space Administration (NASA) April 1993 report, *Report of Findings, Phase I*

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Building Assessments, Area 2, and Building 10 and 543, it appears likely that Building 543 is a source of TCE to shallow groundwater and should be more thoroughly investigated. In fact, this was the recommendation of the NASA report.

Suppression of the original HydroPunch data by the designation "unusable" and failure to resample the original locations would result in a technically unsound censoring of the already sparse data set on the west side of Moffett Field.

Soil Sampling

The Navy has historically overrelied on vadose-zone soil sampling for detecting sources of chemicals in groundwater at Moffett Field. The problems with this have been discussed in numerous previous HLA reports, including the previously referenced March 1995 report. HLA questions whether the proposed new soil sampling will be productive, because there seems to be no basis for believing that any of the particular locations selected for resampling are likely to be near an actual source, with the possible exception of the samples proposed to be near the sanitary sewer connection for Building 543. There is no point to the Navy collecting a few soil samples at random locations or at the locations of monitoring wells that are only located to assess regional-scale groundwater trends.

In contrast, the Navy seems to have completely ignored the evidence of soil contamination presented in the NASA report referenced above. That report recommended sampling at a number of specific locations where contamination is evident around Building 543, but none are planned for sampling in the Work Plan and the NASA report is not referenced in the Work Plan.

Thus, it appears that the proposed soil sampling activity will be of little or no practical value in reliably assessing the existence of sources on the west side of Moffett Field, and will continue to ignore concrete evidence of sources developed by others.

Summary

In summary, the Work Plan focuses attention on a soil sampling exercise that is likely to be largely and possibly entirely non-productive, while ignoring or even denying significant problems with the characterization of the west side of Moffett Field. Some of these real problems arise directly from the compromised data produced by the Navy's contractor, Eureka Laboratories, and should properly be addressed under this Work Plan. Other problems result from other Navy site-characterization choices, but could be addressed under the Work Plan. All of these issues have been discussed with

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the Navy and EPA on previous occasions, and have been documented in reports distributed to the Navy and EPA.

If you have any questions about this review, please call me.

Yours very truly,

HARDING LAWSON ASSOCIATES



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