UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

VIA FACSIMILE AND REGULAR MAIL

July 29, 1997

Ms. Ingrid Chen
Raytheon Company
350 Ellis Street
Mountain View, CA 94043

Re: EPA Review and Conditional Approval of the Construction Operation and Maintenance Plan Regional Groundwater Remediation Program North of U.S. Highway 101, Middlefield-Ellis-Whisman Site, Mountain View, California, dated February 10, 1997

Dear Ms. Chen:

EPA staff have reviewed the Construction Operation and Maintenance Plan (COMP) Regional Groundwater Remediation Program North of U.S. Highway 101, Middlefield-Ellis-Whisman Site, and in accordance with the provisions of Section XI of the Consent Decree conditionally approve the COMP contingent on addressing the following comments to EPA's satisfaction.

In order to facilitate final revision of the COMP, EPA recommends that all revisions to text and figures be submitted in draft form to EPA for final approval. Detailed responses to EPA comments should be included as an appendix to the revised COMP, or addendum with the replacement pages. The response to comments section should provide the necessary detail to indicate where in the text the response to comment can be located to facilitate the public's review of the document.

GENERAL COMMENTS

1. The text should be updated to reflect the choice of remedial system construction contractor, roles and responsibilities, relationships of the design engineer, remedial system construction contractor and IQUAT.

2. The discharge of treated groundwater to the storm sewer under a National Pollutant Discharge Elimination System (NPDES) permit is not the most beneficial use of this resource. The Water Reuse Program Report (Smith, 1997) states that "the goal of the water reuse program is to attempt to meet the MEW Record of Decision's (ROD's) objective of 100 percent use of the treated groundwater at the MEW Site." The COMP

should summarize the findings of the Water Reuse Program Report and discuss the quantity and overall percentage of treated water that will be reused, the proposed pipelines involved, and any contingencies.

3. Figures and Tables should be updated to reflect the monitoring wells and extraction wells that the Navy and MEW Companies have agreed to sample.

SPECIFIC COMMENTS

1. Pages 29 and 30, Section 4.1.1.1 and 4.1.1.3. Please correct the following discrepancies found between the text and figures:

   (a) From Figure 4-5 it appears that the second section of Pipeline "A" runs north on Gorsky Road, however, the text indicates that it runs west on Gorsky Road. Please correct this discrepancy.

   (b) In Section 4.1.1.3 the text indicates that the first section of Pipeline "C" runs approximately 83 feet south to Edquiba Road, and then runs west approximately 132 feet along Edquiba Road...and the fourth section runs for approximately 439 feet. If the scale on Figure 4-1 is "as shown", then the pipeline lengths indicated above are incorrect. Additionally, the text should be corrected to indicate that the third section runs to Wells REG-41 and REG-6B1, and the fifth section of Pipeline "C" turns right and runs northeast along Westcoat Road. The text also indicates the final section is a 4" Schedule 40 PVC line. However, Figures 4-2 and 4-8 indicate that the final section is a 6"/12" double-contained recovery line.

2. Page 31, Sections 4.1.1.6 and 4.1.1.7. The COMP should be updated to reflect the reuse points as agreed to by NASA and indicated in the Water Reuse Program Report (Smith, 1997).

3. Page 33, Section 4.1.2 and page 74, Section 5.1. The construction schedule (Figure 5-1) should be revised to include the time line involved to obtain all access and encroachment agreements.

4. Page 42, Section 4.1.7.1. The section outlines a procedure to determine if the non-methane total volatile organic compound (VOC) value of the trench spoils is greater than 5 parts per million (ppm). However, the COMP does not discuss the procedure that will be implemented if methane/ethane values pose a potential hazard to workers (e.g., methane concentrations greater than the lower explosive limit [LEL]). For health and safety reasons, the text should address a plan of action should explosive gases be encountered in the trenches or indicate the likelihood of this being a potential hazard. The text should also discuss whether it is anticipated that methane will be encountered in the trenches.

5. Page 45, Section 4.1.7, fourth paragraph. It should be noted in the revised text that

although trichloroethene (TCE) is being utilized as an indicator compound for evaluating cleanup, all chemicals of concern must reach their respective cleanup standards regardless of the levels of TCE, as stated in the Explanation of Significant Differences, dated September 1990.

6. Pages 48, Section 4.8.1. The table indicates that the carrier pipe for Pipeline "H" will be 1" Schedule 40, however, Figure 4-2 indicates this carrier pipe to be 1 ½" Schedule 40. Please correct this discrepancy. Also, the carrier and containment pipe sizes for the lateral from well REG-4A and REG-6B1 should be shown on Figure 4-2.

7. Page 74, Section 5.0.

   (a) A subsection briefly discussing the procurement of equipment and materials should be added to the revised text.

   (b) Figure 5-1 indicates that the schedule for submittal of the Operation and Maintenance (O&M) Plan will be submitted to EPA in August 1997. Section 5.0 of the COMP should also indicate that within 90 days after the start of construction, a letter will be submitted to EPA detailing the schedule for verification of the extraction well design and a proposed date for the submittal of the O&M Plan.

   (c) Figure 5-1 indicates that the start of construction of the RGRP North of U.S. Highway 101 begins on the same date that EPA approves the COMP. Please clarify whether this is the intent or revise the schedule accordingly to reflect that construction shall begin within 60 days of EPA's approval of the COMP.

   (d) Figures 5-1 and 5-2 should be revised to update the proposed construction schedule.

8. Page 76, Section 5.3.2. This section should indicate that the site mobilization meeting will discuss corrective actions, contingencies, chain-of-command, anticipated submittals to EPA, and how decisions will be made that deviate from the plans and specifications.

9. Page 81, Section 5.6., second and sixth bullets. The text should be revised to summarize the findings of the Water Reuse Program Report regarding reinjection of treated groundwater. The COMP should briefly discuss the time line and reporting schedule to EPA concerning the monitoring of capture zones, maintenance of hydraulic control, and addition or relocation of recovery wells.

10. Page 83, Section 6.0. The summary of QA/QC protocols is in Appendix G of the Final Design, not Appendix C.

11. Page 91, Section 7.5.4. The text should clarify when the final discharge options will be known and when EPA will be notified.

12. Page 92, Section 7.5.1.5. The text should indicate the frequency of and include a time frame for when reports will be submitted to EPA.

13. Page 95, Section 8.2.3. The COMP should discuss coordination and scheduling of the baseline sampling event for the facility-specific/regional remediation work as outlined in the September 25, 1996 letter from Smith to EPA (to begin four months prior to the startup of the treatment system to be constructed at Moffett Field).

14. Table 6-1. The table should be revised to indicate that the air monitoring and noise level monitoring programs are discussed in the Site Safety Plan.

An addendum or replacement pages for the COMP will be due to EPA no later than September 22, 1997. Failure to cure these deficiencies in the time specified above constitutes a violation of the Consent Decree. Please contact me at (415) 744-2243 if you have any questions or concerns regarding the content of this letter.

Sincerely,

Loren E. Henning

Loren E. Henning
EPA MEW Project Manager

cc: Eric Miguel, Intel Corporation
Edward Strohbehn, Esq., McCutchen, Doyle, Brown & Enerson
Vincent T. Jones, Schlumberger Technology Corporation
Dennis Curran, Locus Technologies
Stephen Chao, U.S. Navy ✓
Sandy Olliges, NASA Ames
Alana Lee, B&V Special Projects

Acknowledgment of Receipt:

_____ Date:_____

Ingrid Y. Chen