



Department of Toxic Substances Control

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Winston H. Hickox
Agency Secretary
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May 2, 2000

Mr. Dean Gould
BRAC Environmental Coordinator
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COMMENTS ON FEBRUARY PROGRESS REPORT AND RESPONSE TO
JANUARY 27, 2000 DTSC LETTER REGARDING NOVEMBER AND
DECEMBER 1999 PROGRESS REPORTS, VADOSE ZONE REMEDIATION
VOLATILE ORGANIC COMPOUND SOURCE AREA, INSTALLATION RESTORATION
PROGRAM (IRP) SITE 24, MARINE CORPS AIR STATION (MCAS) EL TORO

Dear Mr. Gould:

The Department of Toxic Substances Control (DTSC) completed the review of the subject report (Progress Report), dated February 2000 that was received by this office on February 28, 2000. The Progress Report describes the remediation activities of the soil vapor extraction system through the end of January 2000.

After review of the Progress Report, DTSC has the following comments.

1. Section 1, Introduction: The last paragraph states, "During Phase I operations significant remediation progress was achieved. . . . Based on these results, along with data gathered during Phase I operations, treatment verification sampling as described in the draft SEOR [System Evaluation and Optimization Report] and the draft final EDR [Engineering Design Report] is being proposed."

In general, DTSC agrees that progress on vadose zone remediation has been made. However, please consider that without a physical barrier, the volatile organic compounds (VOCs) in the saturated (groundwater) and vadose zones are in a dynamic relationship. If the vadose zone contains a relative abundance of VOCs, the concentrations in the vadose zone will promote a net flux of VOCs to the groundwater. Conversely, if the groundwater exhibits a relative

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abundance of VOCs, a net flux of VOCs from the groundwater to the vadose zone may be established. Essentially, due to this dynamic relationship, the vadose zone and groundwater cannot be remediated separately. Since groundwater remediation at Site 24 has not begun, the dynamic relationship may have shifted so that the groundwater may now be the source of VOCs for the vadose zone. The VOCs in contaminated groundwater may cause a rebound in VOC concentration in the vadose zone.

DTSC understands that the Department of the Navy is currently preparing a closure verification report. Please address the issue presented above in the report.

2. Section 2.5.1 Pneulog™ Evaluation, and Table 2-7: A summary of the Pneulog™ evaluation is provided in this section and the associated table.

DTSC understands that a Pneulog™ study generates vertical profiles of soil permeability, vapor flow rates, and contaminant distributions. This detailed vertical profile data would be useful to assess the remaining contaminant distribution and progress of remediation. Please provide a copy of both the graphical and tabular results for our information.

DTSC also reviewed the response, dated March 10, 2000, to our January 27, 2000 comments regarding the November and December 1999 Progress Reports. Thank you for providing the emission calculations and risk assessment to demonstrate that the central treatment system is in compliance with the applicable South Coast Air Quality Management District rules. DTSC has no further comments at this time.

Thank you for the opportunity to review and comment on the various on-going activities, and to work cooperatively towards the eventual cleanup of the site. If you have any questions, please call me at (714) 484-5395.

Sincerely,



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cc: See next page

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