



Cal/EPA

Department of
Toxic Substances
Control

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M60050.002677
MCAS EL TORO
SSIC #5090.3

FILE EPA



Pete Wilson
Governor

Peter M. Rooney
Secretary for
Environmental
Protection

February 13, 1998

Mr. Joseph Joyce
BRAC Environmental Coordinator
U.S. Marine Corps Air Station - El Toro
P. O. Box 95001
Santa Ana, California 92709-5001

Dear Mr. Joyce:

COMMENTS ON DRAFT TECHNICAL MEMORANDUM, IN-WELL AIR STRIPPING EVALUATION AT SITE 24 (VOC SOURCE AREA), MARINE CORPS AIR STATION (MCAS) EL TORO

The Department of Toxic Substances Control (DTSC) has completed the review of the above subject document dated January 1998, prepared by Bechtel National, Inc. In-well air stripping was identified as a potential technology to support vacuum-enhanced groundwater extraction in the draft Phase II Feasibility Study for Site 24. The technical memorandum examines the feasibility of conducting an in-well air stripping pilot test at Site 24 by comparing the aquifer characteristics at MCAS El Toro to those at Edwards Air Force Base. An in-well air stripping pilot test was conducted at Edwards Air Force Base, which has similar hydrogeologic characteristics and contamination to those found at El Toro. The evaluation shows that although the technology is effective in reducing TCE concentrations, the performance of in-well air stripping is most effective in homogenous aquifers with high hydraulic conductivity. Aquifer testing has shown that Site 24 is within the range specified for hydraulic conductivity; however, the aquifer is extremely stratified with silt and clay layers.

DTSC agrees with the conclusion that the high degree of heterogeneity and vertical anisotropy in the shallow groundwater unit at Site 24, combined with the thickness of the contaminated zone, would make the effective implementation of in-well air stripping difficult and unpredictable. We also concur on the recommendation not to consider conducting an in-well air stripping pilot test at Site 24.

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2/18/98

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If you have any questions, please call me at (562) 590-4891.

Sincerely,



Tayseer Mahmoud
Remedial Project Manager
Base Closure Unit
Office of Military Facilities
Southern California Operations

cc: Mr. Glenn R. Kistner
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Restoration Advisory Board Co-chair
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cc: Mr. Andy Piszkin
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