



DEPARTMENT OF THE NAVY
SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132-5190

M60050.000761
MCAS EL TORO
SSIC #5090.3

5090
Ser 06CC.DG/993
December 6, 2000

Mr. John Broderick
California Regional Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3339

Dear Mr. Broderick:

Submitted for your review, is a summary of the Proposed Modifications to the Site 16 Pilot Study at Marine Corps Air Station, El Toro. These modifications were presented to the Base Closure Team (BCT) at the meeting held on 29 November 2000. The presentation materials were subsequently submitted to the Regional Water Quality Control Board by fax on 1 December 2000. Please review the summary document and contact me to indicate whether you concur with the proposed modifications. The Navy would like to implement the proposed modifications as soon as possible so your timely assistance in this matter would be greatly appreciated.

Should you have any questions or comments on the summary document, please feel free to contact me at (619) 532-0784, or Mr. Marc Smits at (619) 532-0793.

Sincerely,

A handwritten signature in cursive script, appearing to read "Dean Gould", is written over a large, stylized loop.

DEAN GOULD
Base Realignment and Closure
Environmental Coordinator
By direction of the Commander

Enclosure: 1. Proposed Modifications to the Site 16 Pilot Study at Marine Corps Air Station, El Toro dated 5 December 2000

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Copy to:

Ms. Polin Modanlou
El Toro Master Development Program
10 Civic Center Plaza, Second Floor
Santa Ana, CA 92701

Ms. Laszlo Saska
California Environmental Protection Agency
Department of Toxic Substances Control
Engineering Support Group
301 Capitol Mall - 4th Floor
Sacramento, CA 95814

Mr. Gregory F. Hurley
Restoration Advisory Board Co-Chair
Kutak Rock
620 Newport Center Drive, Suite 450
Newport Beach, CA 92660



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Ms. Triss Chesney
California Environmental Protection Agency
Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, CA 90630-4700

Dear Ms. Chesney:

Submitted for your review, is a summary of the Proposed Modifications to the Site 16 Pilot Study at Marine Corps Air Station, El Toro. These modifications were presented to the Base Closure Team (BCT) at the meeting held on 29 November 2000. The presentation materials were subsequently submitted to the Regional Water Quality Control Board by fax on 1 December 2000. Please review the summary document and contact me to indicate whether you concur with the proposed modifications. The Navy would like to implement the proposed modifications as soon as possible so your timely assistance in this matter would be greatly appreciated.

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Mr. Glenn Kistner
U.S. Environmental Protection Agency
Region IX
Mail Code STD-8-2
75 Hawthorne Street
San Francisco, CA 94105-3901

Dear Mr. Kistner:

Submitted for your review, is a summary of the Proposed Modifications to the Site 16 Pilot Study at Marine Corps Air Station, El Toro. These modifications were presented to the Base Closure Team (BCT) at the meeting held on 29 November 2000. The presentation materials were subsequently submitted to the Regional Water Quality Control Board by fax on 1 December 2000. Please review the summary document and contact me to indicate whether you concur with the proposed modifications. The Navy would like to implement the proposed modifications as soon as possible so your timely assistance in this matter would be greatly appreciated.

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**PROPOSED MODIFICATIONS TO THE
SITE 16 PILOT STUDY
At
MARINE CORPS AIR STATION EL TORO**

The Multi-Phase Extraction (MPE) Pilot System at Installation Restoration Program (IRP) Site 16, Marine Corps Air Station (MCAS) El Toro has been implemented as presented in the "Final Phase II Work Plan For the MPE Pilot Study, OU-3 IRP Site 16, Crash Crew Training Pit No.2 MCAS El Toro, California". The MPE system consists of a soil vapor extraction (SVE)/treatment system and groundwater extraction/treatment system removing soil vapor and groundwater from 16MPE1. The MPE system has been running continuously since 17 October 2000. As of 27 November, the system had collected and treated approximately 34 lbs. of trichloroethene (TCE), the primary COC in soil and groundwater (Figure 1). The Navy is proposing to continue operation of the MPE system to evaluate additional methods of increasing the overall efficiency of removal and treatment of the contaminants in the soil and groundwater.

The "Draft Phase II Feasibility Study, OU-3 Site 16" (Draft FS) issued in February 2000, presented an estimate of approximately 60 lbs. of TCE in soil and groundwater at Site 16. By extending the MPE pilot study, the Navy believes they can effectively remove the TCE present in soil and soil gas at the site that can load (contaminate) groundwater. If successful, the source of the TCE contaminating (or with the potential to contaminate) groundwater at the site could, in affect, be removed. The Navy will coordinate closely with the regulators to negotiate an agreeable soil gas threshold level for consideration as "clean" for soil (i.e., use model from Site 24 and information provided in Draft FS).

The Navy proposes to increase the MPE system efficiency via utilization of additional SVE and groundwater removal locations. These modifications would be performed utilizing existing wells and equipment (except for required pumps and well fixtures). Specifically, the modifications to the MPE pilot study would include the following (Figure 2):

- Conducting SVE at 16MW6 and 16MW7 (in addition to 16MPE1);
- Conducting groundwater extraction at 16MW1 and 16MW6 (in addition to 16MPE1);
- Modifying the SVE unit at the site to increase the SVE flow rate from 140 cubic feet per minute (cfm) to 200 cfm. This modification would potentially provide an extraction flow rate of approximately 66 cfm from each of the three SVE wells (16MPE1, 16MW6, and 16MW7); and

The groundwater treatment system does not require modification to treat the additional groundwater volume from 16MW1 and 16MW6, although two groundwater pumps and associated fixtures would be required to extract groundwater from these two wells.

By utilizing additional wells for SVE and groundwater extraction the time required for removal of the TCE in soil could be accelerated and the effective radius of influence of the MPE could also be increased. The Navy would continue monitoring activities to compare the new results with the modifications implemented to the previous results for the pilot study to determine any change in removal rates and radius of influence at the site.

The results of the MPE Pilot Study will be presented in a draft technical memorandum provided to the BCT for review in the first quarter of next year. The BCT review comments on this document will be incorporated into a final technical memorandum, and will be included as an appendix to the draft final FS. If the TCE soil source is effectively removed from IRP Site 16 during the MPE pilot study, the draft final FS would provide updated alternatives that would address only the contaminated groundwater at IRP Site 16. After BCT review of the draft final FS report, a final FS report will be issued which incorporates the BCT's comments on the new alternatives presented in the draft final FS.