



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

May 20, 1996

Joseph Joyce
BRAC Environmental Coordinator
Environment and Safety (Code 1AU)
MCAS El Toro
P.O. Box 95001
Santa Ana, CA 92709-5001

Dear Mr. Joyce:

EPA has reviewed the "Draft Workplan for Soil Vapor Extraction, Pilot Testing - Site 24" for MCAS El Toro, received on April 22, 1996. Please address the the following comments (Enclosure A) in the revised report. If you have any questions, I can be reached at 415/744-2368.

Sincerely,

A handwritten signature in cursive script that reads "Bonnie Arthur".

Bonnie Arthur
Remedial Project Manager
Federal Facilities Cleanup Office

Enclosure

cc: Mr. Tayseer Mahmoud, DTSC
Mr. Larry Vitale, RWQCB
Mr. Dante Tedaldi, Bechtel
Mr. Andy Pizskin, Southwest Div.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 9

75 Hawthorne Street
San Francisco, CA 94105-3901

MEMORANDUM

SUBJECT: Review of Draft Work Plan for Soil Vapor Extraction Pilot Testing-Site 24

FROM: Herbert Levine, Hydrogeologist
FFCO, Technical Support Section

A handwritten signature in black ink, appearing to read "Herb Levine".

TO: Bonnie Arthur, RPM
FFCO, Navy Section

I have reviewed the draft Work Plan for Soil Vapor Extraction Pilot Testing and have a couple of concerns. I am concerned that the well spacing might not provide an accurate estimate of the radius of influence. The two observation wells are about the same distance from the extraction well, around 100 ft (Figure 3-2). This might be adequate, however most design documents I have read suggest multiple observation points at varying distances from the extraction well (*Soil Vapor Extraction Technology*, EPA/540/2-91/003 Feb. 1991, *Review of Mathematical Modeling for Evaluating Soil Vapor Extraction Systems*, EPA/540/R-95/513, July 1995). Section 5 Data Evaluation states that the radius of influence will be determined at several locations, though only two are identified (Figure 3-2) which are the same distance from the extraction well. Observation points less than 100 ft. from the extraction well should be used. Please provide a rational and reference for the criteria of effective radius of influence, one percent of the applied vacuum. EPA guidance recommends a vacuum of 0.1 inch of water in the observation well.

Another concern is how the data evaluation will be presented. Section 5 is very brief and does not address how the objectives presented in Section 1.4 will be evaluated and presented.