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MCAS EL TORO
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Research • Service

18 April 2000

To:
Mr. Dean Gould
BRAC/BEC
Department of the Navy, Southwest Division
1220 Pacific Highway
San Diego, CA 92132-5190

via fax: 619-532-0780

Dear Mr. Gould:

Specific comments on the Site 16 draft Feasibility Study are contained in Attachment I and other comments are in Attachment II (which was submitted under separate cover).

We have enclosed a set of documents for your response that should be considered as part of our comments in Attachment II. The documents have been submitted before as part of earlier RAB comments. If you need further information, please contact me at your convenience.

Sincerely,

Charles R. Bennett Ph. D.
Chr, RAB Technical Subcommittee

BL Associates
224 W. Jacaranda Place
Fullerton, CA 92832
714-773-5525

Attachment I

Specific Comments Regarding Draft Phase II
Feasibility Study, OU-3 Site 16
18 April 2000

1. Henry's Law: Use of Henry's law to determine concentrations of soil gas that will provide evidence of a reduction of source concentrations of TCE may not be valid. The use of Henry's law is appropriate to the calculation of concentrations of a gas above a solution under ideal conditions, not in a soil environment. Please supply a reference, if there is one, for its use in determining a cleanup standard. Unless there is an accepted method that the use of Henry's law is valid for determining potential water concentrations of a pollutant in soil, it should not be used.

2. 1,2 DCA: The Hydro Punch and groundwater monitoring well data in Table 1-4 indicate that 1,2 DCA was identified in several samples, one of which was well over the CA MCL of 0.5 ppb (it was 8.7 $\mu\text{g}/\text{L}$ at 16MW2). Please note that the discussion of 1,2 DCA on p. 1-53 reverses the data, the 8.7 $\mu\text{g}/\text{L}$ sample is noted as 16MW3. Please indicate the correct well/data points. Moreover, there was no discussion in the text of this pollutant. That is, the pollutant 1,2 DCA was an omission from assessment in this report, despite its exceeding both the CA and Federal MCL's at Site 16.

This compound is a co-product of the manufacture of trichloroethylene (TCE), tetrachloroethylene (PCE), and 1,1,1-trichloroethane (TCA). It is considered by EPA to be a probable carcinogen itself. The text appears to infer (p. 1-53) that 1,2 DCA is a breakdown product of TCE; If this inference was intentional, please provide a citation for this, as it is unlikely on a scientific basis (see Attachment II).

The well in which the 1,2 DCA was identified above the MCL (16MW2) apparently does not have a significant level of the co-product, TCE. This well is approximately 500 feet downgradient from the center of the characterized plume (Figure 1-10). There is no discussion about how this might have occurred or its significance. This may have several different consequences. First, if 1,2 DCA is an indicator of how the co-product, TCE, may be moving, then the characterization of the plume will be incorrect and the subsequent remediation effort will not be effective. Alternatively, the TCE may be remediated, but the 1,2 DCA may remain away from the remediated plume at levels above the MCL. The significance of the finding of 1,2 DCA away from the plume should be assessed and discussed.

3. Mitigation of 1,2 DCA: In identifying soil concentrations that will eliminate loading to groundwater, there is no discussion of whether levels of 1,2 DCA will be reduced to below MCLs (federal and state) if TCE target levels are achieved.

4. Upsets: The discussion of alternatives that involve disposal of treated water to surface waters should include the identification of the receiving waters (e.g., Newport Bay) and the potential impacts on the bay from treated flows during the course of the remediation effort. This should include an analysis of the risk of upsets whereby contaminated groundwater at higher than MCL levels may flow to the receiving waters.

5. POTW's: In addition, the discussion of alternatives that involve disposal of treated waters to publicly owned treatment works (POTW) should analyze potential impacts on the POTW's use of treated waters in a recycling program.

Attachment II

Previous correspondence (sent under separate cover)

ATTACHMENT II

COMMENTS FROM MICHAEL S. BROWN & ASSOCIATES
ON BEHALF OF THE CITY OF IRVINE ON THE
DRAFT PHASE II FEASIBILITY STUDY

DATED 14 APRIL 2000

THIS RECORD IS ENTERED IN THE DATABASE AND FILED
AS

RECORD NO. M60050_000487

DTSC COMMENTS ON THE
DRAFT PHASE II FEASIBILITY STUDY FOR THE
CRASH CREW TRAINING PIT NO.2

DATED 18 APRIL 2000

THIS RECORD IS ENTERED IN THE DATABASE AND FILED
AS

RECORD NO. M60050_002878

U.S. EPA COMMENTS ON THE
DRAFT PHASE II FEASIBILITY STUDY FOR THE
CRASH CREW TRAINING PIT NO.2

DATED 18 APRIL 2000

THIS RECORD IS ENTERED IN THE DATABASE AND FILED
AS

RECORD NO. M60050_002879