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Dean Gould
BRAC Environmental Coordinator
BRAC Operations, Code 06CC.DG
SWNAVFACENGCOM
1230 Columbia St., Suite 870
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RE: Draft Phase II, FS, Site 16

Dear Mr. Gould,

Thank you for the opportunity to submit comments on the Site 16 draft Feasibility Study on behalf of the City of Irvine. We have the following comments:

1. 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 over the MCL (8.7 µg/L at 16MW2) (note that the discussion of 1,2 DCA on p. 1-53 reverses the data—the 8.7 µg/L sample is noted as 16MW3; please indicate the correct well/data points) This compound is a co-product of the manufacture of trichloroethylene (TCE), tetrachloroethylene (PCE), 1,1,1-trichloroethane (TCA) and 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; please give a citation for that as opposed to being a co-product of manufacture). 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. The enclosed set of memoranda from Charles Bennett discusses aspects of this issue in more detail
2. 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. Please provide a reference to an accepted method citing use of Henry's law is valid for determining

concentrations of a gas in soil. If unavailable, an alternative method that has widespread acceptance should be used.

3. 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. 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. 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.

Thank you for the opportunity to comment on the draft FS. If you need further information, please contact me at your convenience.

Sincerely,



Michael S. Brown, Ph.D.

Enc.

Cc: Triss Chesney, DTSC
Glenn Kistner, USEPA
Patricia Hannon, SARWQCB
Dan Jung, City of Irvine