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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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MCAS EL TORO
SSIC NO. 5090.3.A

26 June 2006

Mr. Darren Newton
BRAC Environmental Coordinator
Base Realignment and Closure
7040 Trabuco Road
Irvine, California 92618

RE: Draft Aquifer Characterization and Bench-Scale Treatability Testing, Installation Restoration Program (IRP) Site 1, Former Explosive Ordnance Disposal (EOD) Range, Former Marine Corps Air Station (MCAS) El Toro, California

Dear Mr. Newton:

EPA has reviewed the subject characterization document for IRP Site 1, the former EOD Range. While we have found the document to be well-prepared and the results of the characterization and laboratory efforts to be well-presented, we do have the attached comments -- many editorial in nature -- to offer for improvement of this technical report.

If you should have any questions, please feel free to contact me at 415-972-3349.

Sincerely,



Rich Muza
Remedial Project Manager
Federal Facility and Site Cleanup Branch

cc Content Arnold, NFECSSW SDIEGO
Arturo Tamayo, NFECSSW SDIEGO
Soid Hakim, DTSC
John Broderick, RWQCB
Bob Woodings, RAB Co-Chair
Marcia Rudolph, RAB Subcommittee Chair

received
7/6/06

**COMMENTS ON THE DRAFT AQUIFER CHARACTERIZATION AND
BENCH-SCALE TREATABILITY TESTING REPORT, IRP SITE 1, FORMER
EOD RANGE**

1. General – It is recommended that an overall editing of the document be performed. For example, in the following comments, numerous sections of the report are noted where figures and tables are mislabeled.
2. Section 2.0, General – The citations for figures and tables in this section are incorrect in many cases. It is recommended that this issue be addressed.
3. Figure 5 – The ground-water elevation contours presented in this figure are difficult to interpret. It seems apparent that this map was generated using a contouring program and the plotting of the results is confusing for the 660-feet, 650-feet, 640-feet, and 630-feet contour lines. It is recommended that this map be revised and clarified.
4. Section 4.0, General -- The citations for figures in this section are incorrect in many cases. It is recommended that this issue be addressed.
5. Section 6.3 & Table 13 – Composite A is labeled in the table as “monitored natural attenuation (MNA): no electron donors added”. However, it seems apparent from the discussion of the microcosm studies here and in Appendix N that all composite slurries were purged with nitrogen gas to reduce oxygen from naturally-occurring concentrations to less than 0.5 mg/l. Therefore, even under the MNA scenario in the microcosm testing all composites were altered to enhance anaerobic biodegradation. As such, Composite A was not a MNA scenario as the in-situ oxygen concentrations were changed in the laboratory to effect the oxidation-reduction potential and enhance anaerobic biodegradation.
6. Figures 12, 14, & 15 -- The ground-water elevation contours presented in these figures are difficult to interpret. It seems apparent that the maps were generated using a contouring program and the plotting of the results is confusing for the 665-feet, 655-feet, and 645-feet contour lines. It is recommended that these maps be revised and clarified.
7. Appendix N, Microcosm Study Report – As stated in Comment 5 above, Composite A was not a MNA scenario as the in-situ oxygen concentrations were altered in the laboratory. Therefore, the microcosm testing for Composite A would be a form of enhanced biodegradation as modifications were made in the test to lower dissolved oxygen and effect oxidation-reduction potential.