



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

M60050.002659
MCAS EL TORO
SSIC #5090.3

July 3, 1997

Mr. Joseph Joyce
BRAC Environmental Coordinator
AC/S, Environment (1AU)
MCAS El Toro
P.O. Box 95001
Santa Ana, CA 92709-5001

Re: EPA Review Comments on Draft Ground Water Remediation Work Plan and Draft Quality Assurance Project Plan for MCAS El Toro, California

Dear Mr. Joyce:

The United States Environmental Protection Agency (EPA) has reviewed the documents referenced above. Agency comments are attached to this cover letter. Please note that EPA cannot approve the Work Plan or the Quality Assurance Project Plan until the comments have been satisfactorily addressed.

If you have any questions, please contact Dave Taylor of EPA's Quality Assurance Program at (415) 744-1497.

Sincerely,

A handwritten signature in cursive script that reads "Glenn R. Kistner".

Glenn R. Kistner
Remedial Project Manager
Federal Facilities Cleanup Branch

Attachments

cc: Tayseer Mahmoud, DTSC
Larry Vitale, RWQCB
Bernie Lindsay, SWDIV
Pat Brooks, Bechtel
Dave Taylor, U. S. EPA

Rec'd
7/17/97



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

July 2, 1997

MEMORANDUM

SUBJECT: Draft Groundwater Remediation Pilot Test Work Plan and Draft Quality Assurance Project Plan for the Marine Corps Air Station (MCAS) Site, El Toro, California (EPA QA Program Document Control Numbers [DCNs] H6CA006W97VSF1 and H6CA007Q97VSF1)

FROM: David Taylor, Ph.D., Chemist
Quality Assurance Program, PMD-3

THROUGH: Vance S. Fong, P.E., Manager
Quality Assurance Program, PMD-3

TO: Glenn Kistner, Remedial Project Manager
Navy Section, SFD-8-2

The draft work plan (WP) and draft quality assurance project plan (QAPP), prepared by Bechtel National, Inc. (BNI) on behalf of the Department of the Navy, Southwest Division Naval Facilities Engineering Command and dated June 1997, were reviewed. The review was based on guidance provided in "EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations" (EPA QA/R-5, August 1994), "Preparation of a U.S. EPA Region 9 Field Sampling Plan for Private and State-Lead Superfund Projects" (9QA-06-93, August 1993), and "Data Quality Objectives Process for Superfund" (EPA/540/G-93/071, September 1993).

The WP was reviewed for field sampling plan (FSP) elements. Although the WP includes some FSP information, a BNI final FSP dated 1995, is referenced for much of the field sampling

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information. The QAPP includes most of the elements required by agency guidance and the WP describes the process used to establish data quality objectives for the project. A number of relatively minor concerns were identified and are included in the following comments.

The subject WP and QAPP cannot be approved by the Region 9 QA Program until the following concerns are addressed.

Concerns

1. [General] The WP references the 1995 BNI FSP and CLEAN II standard operating procedures (SOPs) for sampling related information. It is recommended that the WP indicate the specific sections of the 1995 BNI FSP being referenced. The WP should also state that the BNI 1995 FSP will be available on site.
- 1B. It is recommended that the QAPP include an approval page for signatures of those expected to officially approve the document. The QAPP should also include a distribution list of persons and organizations receiving copies of the approved documents and revisions.
2. [QAPP: Section 3.2.1, Detection Limits; Appendix B: Table B-1, Project Required Detection Limits by Methods] The QAPP discusses situations where detection limits are higher than the preliminary remediation goals (PRGs) listed in Table B-1 and states that the required compound list and performance criteria of the listed methods must be satisfied by alternative methods. However, the QAPP does not identify alternative methods for the instances where the detection limit is greater than the PRG. This issue should be resolved before sampling activities begin.
3. [QAPP: Section 6.2.2, Performance Evaluation Samples] Section 6.2.2 states that performance evaluation (PE) samples may be submitted to the fixed base laboratory through the routine NFESC evaluation process or through the Navy CLEAN Performance Evaluation and Proficiency Testing Program. The QAPP should state the conditions that double

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blind PE samples will be submitted. It is recommended that the QAPP indicate that PE samples *will be* submitted.

4. [QAPP: Table 3-1, Tolerance Limits for Field Measurements; Appendix A: Table A-1, Field Screening Instruments and Typical Detection Ranges] Table 3-1 of the QAPP specifies a tolerance limit of ± 3 nm (nanometers) for anion analysis and Table A-1 of Appendix A specifies a detection range of 400-900 nm for cation, anion, and bacteria analyses by Hach kits. Nanometers refer to the wavelength monitored by the colorimeter, not analyte concentration. These tables should be revised to indicate tolerance and detection limits in concentration units, e.g., mg/L.
- 5A. [QAPP: Table 4-1, Analytical Parameters, Sample Containers, Preservatives, and Holding Times for Organics and Inorganics] Table 4-1 should be revised to indicate that samples collected for total dissolved solids (TDS), total suspended solids (TSS), and alkalinity will be preserved by cooling to $4^{\circ}\text{C} \pm 2^{\circ}$. Samples collected for these analytes should not be preserved with acid.
- 5B. The holding time for TDS and TSS in Table 4-1 should be revised from 28 to 7 days; the holding time for alkalinity should be revised from 28 to 14 days, as per Table II of Part 136.6 of 40 CFR. In addition, for samples where nitrate is not preserved, the holding time should be 48 hours.
- 5C. It is recommended that one vial from each aquifer be pH tested to confirm that sufficient hydrochloric acid has been added to the vial to obtain a sample pH of <2 . The pH check vial should be discarded.
6. [QAPP: Section 6.3, Standard Operating Procedures] Section 6.3 lists the relevant SOPs for the project. Agency guidance requires that all SOPs be included with the QAPP. The QAPP should indicate that the SOPs are mandatory reading and will be available on site.

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- 7A. [QAPP: Section 7.2, Data Verification and Validation] Section 7.2 indicates that an independent subcontractor will perform data validation. The subcontractor relationship should be depicted in the organization chart.
- 7B. It is recommended that this section include the documentation required from the laboratory. This should include the sufficient documentation to perform full data validation, including quality control (QC) summaries, bench sheets, sample and standard preparation logs, and raw data. The QAPP should also stipulate that gas chromatography/mass spectrometry (GC/MS) tapes will be made available upon request by EPA.
8. [QAPP: Section 8.1, Performance and System Audits] Section 8.1 should state that copies of laboratory audit reports summarizing auditing activities and findings, and any corresponding corrective actions that were implemented as a result of these audit activities, should be submitted to EPA Region IX.
9. [WP: Section 3.5.2, Laboratory Analysis] Section 3.5.2 lists alkalinity, carbonate, and bicarbonate by EPA Method 310.1. EPA Method 310.1 determines total alkalinity; if the carbonate and bicarbonate fractions are desired, it is recommended that the project utilize Standard Methods 2320.
10. [WP: Section 3.5.1, Groundwater Sampling Procedures] Section 3.5.1 indicates that filtered and unfiltered samples will be collected for metals analysis. The plan should indicate the pore size of the filter and whether the filtration will take place in the field. Section 4.3 of the QAPP indicates that preservatives will be added to the sample containers in the laboratory before sample collection. The samples must be filtered before addition of acid.