



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

MCO

M60050.001053
MCAS EL TORO
SSIC # 5090.3

SEP 11 01 14

September 5, 1995

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 "Final Quality Assurance Project Plan," received August 3, 1995. Many of EPA's comments were addressed sufficiently with the exception of the items listed below. The "Final Quality Assurance Project Plan" was reviewed by a second reviewer, due to Ms. Lisa Hanusiak's schedule conflicts. These additional comments are included in Enclosure A. Generally, it is not our preference to provide new comments on a draft final document, however, an excellent QAPP and the resulting high data quality are essential to the success of the remedial investigation at MCAS El Toro.

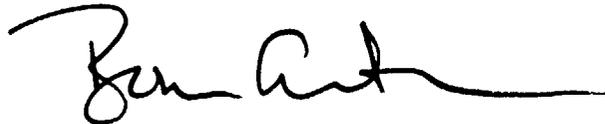
- 1) Major Concerns, Comment #2A; Precision and accuracy objectives in terms of RPD and percent recovery were included for all analytes with the exception of hexavalent chromium.
- 2) Major Concerns, Comment #4; This item was partially addressed. Section 6.3 has been expanded to discuss a number of laboratory QC checks; however, the discussion is of a general nature, and many laboratory QC checks, such as surrogate spiking and laboratory control samples are not addressed. Additionally, the response to this comment refers to "[a] laboratory specific QA manual" for this information. As soon as the laboratories have been identified, the laboratory QA manuals should be evaluated in terms of project quality assurance objectives.
- 3) Other Concerns, Comment #4; This item was not satisfactorily addressed. The response to this comment indicates that the topics cited in EPA's comment are discussed in the Work Plan, Field Sample Plan, Data Management Plan and Quality Control Management Plan. EPA guidance requires that these topics be addressed in the QAPP. Since these topics are addressed in other documents, it is permissible to provide a brief summary of these topics in the QAPP. It is important that a rationale for the

Mr. Joseph Joyce
September 5, 1995
Page 2

choice of analytical parameters be included in the QAPP. EPA guidance also requires that a discussion is included concerning reconciliation of results obtained from the project with DQOs.

If you have any questions, I can be reached at 415/744-2368.

Sincerely,

A handwritten signature in black ink, appearing to read "Bonnie Arthur", with a long horizontal flourish extending to the right.

Bonnie Arthur
Remedial Project Manager
Federal Facilities Cleanup Office

Enclosure

cc: Mr. Juan Jimenez, DTSC
Mr. Larry Vitale, RWQCB
Mr. Jason Ashman, SW DIV
Mr. Dante Tedaldi, Bechtel

ENCLOSURE A

EPA COMMENTS ON THE FINAL QUALITY ASSURANCE PROJECT PLAN FOR MCAS EL TORO

1) Table 4-2, Sample Containers, Preservatives, and Holding Times for Inorganics; Samples collected for sulfate analysis should not be preserved with acid, especially sulfuric. Sulfate should not be analyzed from the same container as chemical oxygen demand (COD).

2) Appendix A: Laboratory Analytical Methods. All analyses planned for the project should be discussed in the relevant sections of the QAPjP. A number of laboratory analytical methods are discussed in Appendix A that are not addressed in the appropriate sections of the QAPjP.

3) Methods Field Screening. This section indicates that some metals may be analyzed utilizing ion-selective electrodes (ISE). ISE is not addressed in Section 3.2.1.2, Field Screening, of the QAPjP or included in Table A-1, Field Screening Instruments and Sensitivity Levels. If ISE will be utilized, these areas of the QAPjP should incorporate the appropriate information including QA objectives.

4) Mineralogical and Grain-Size Analyses. This section states that background concentrations for metals at MCAS El Toro must be established; however, Section 6.2, Field Quality Control Checks, indicates that no background samples are envisioned in this sampling effort. This discrepancy should be clarified. This section also states that mineralogical analysis using X-ray diffraction, differential thermal analysis and petrographic techniques will be used. These analytical techniques are not addressed in other sections of the QAPjP. It is recommended that this section be expanded to discuss specific details such as the number of samples required for these analyses.

5) Table B-1, Project Required Detection Limits by Method. It is unclear how the proposed detection limits for metals in soil were established. For example, Table B-1 specifies a 7 ug/L detection limit for chromium in water, and a 7 ug/kg detection limit in soil. If 1 gram of soil sample is digested into a final volume of 100 mL, the resultant detection limit equivalent to the response of a 7 ug/L water sample is 0.7 ug/g, or 700 ug/kg. The detection limits specified for metals in soil should be proportionally consistent with achievable detection limits in water.

6) The 5 ug/L detection limit specified for sulfate by EPA Method 375.4 is significantly lower than the 1 mg/L minimum detectable limit stated in the method. If this detection limit is necessary, a rationale should be provided and the method modification necessary to achieve the detection limit discussed.