



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street

San Francisco, CA 94105-3901

October 19, 1995

Mr. Stephen Chao
Naval Facilities Engineering Command
Engineering Field Activity, West
900 Commodore Way, Bldg. 101
San Bruno, CA. 94066-2402

Re: *Draft Final RI/FS Quality Assurance Project Plan, dated July, 1992*

Dear Mr. Chao,

Moffett Federal Airfield, with the concurrence of the regulatory agencies, has been using the subject Quality Assurance Project Plan (QAPjP) for the past few years. Recent discovery of illegal activities at various environmental laboratories (e.g. expired hold times, fraudulent data, etc.) has prompted the U.S. Environmental Protection Agency (EPA) to review existing QAPjPs that are presently in use at Superfund sites. The intent of the review is not to question completed field work already accepted by the agencies, but to ensure that future sampling and analysis will be performed according to the most recent guidance. The QAPjP was reviewed by EPA's Quality Assurance Management Section in accordance with the guidance documents "EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations" (EPA QA/R-5, Draft Interim Final, August 1994), and "U.S. EPA Region 9 Guidance for Preparing Quality Assurance Project Plans for Superfund Remedial Projects" (9QA-03-89, September 1989). The present QAPjP is based on the guidance presented in "Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans" (EPA QAMS/005/80, February 1983). As a result, it does not address all of the required elements of EPA QA/R-5.

Comments follow. Please provide any change pages necessary to the original document for insertion. A completely new document is unnecessary. While much field work has been accomplished without incident at MFA, this review will hopefully prevent future sampling and analysis problems. Call me at 415-744-2385 if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Michael D. Gill".

Michael D. Gill
Remedial Project Manager
Federal Facilities Cleanup Office

cc: C. J. Chou (DTSC), M. Bessette (RWQCB), K. Eichstaedt (URS), S. Olliges (NASA),
P. Strauss (MHB), M. Young (PRC) (Fax)

COMMENTS

Draft Final RI/FS Quality Assurance Project Plan, dated July, 1992

1. Section 2.0, Project Organization and Responsibilities; Section 2.1, Project Organization; Figure 2-1, NAS Moffett Field Project Organization. The discussion of project organization in Section 2.1 of the QAPjP and the organizational chart in Figure 2-1 should be updated to reflect the personnel currently acting in the described capacities on the project. This information, which was last compiled in 1992, is out of date.
2. Section 3.0, Data Quality Objectives. The information on data quality objectives (DQOs) is presented in general terms, with a list of possible data collection activities. Specific DQOs should be established for each future investigation in their respective field work plans, for all matrices and parameters of concern, according to the procedures outlined in the EPA guidance document, "Data Quality Objectives Process for Superfund, Interim Final Guidance" (EPA/540/G-93/071). This analysis should outline existing data gaps that make collection of additional data necessary, and indicate how proposed investigation activities will facilitate decision making. The application of the DQO process will ensure that the data collected are sufficient and of adequate quality for their intended uses.
3. Table 4-2, Sample Container, Holding Times, and Preservative Requirements - Surface Water and Ground Water. The reference to Standard Method (SM) 403 (14th Edition) in Table 4-2 of the QAPjP should be replaced with SM2320, 18th Edition.
4. Table 4-2, Sample Container, Holding Times, and Preservative Requirements - Surface Water and Ground Water; Section 6.1.9, Inorganic and Physical Measurements; Table 6-2, Analytical Methods for Surface Water and Ground Water Samples; Table 6-13, Reporting Limits for Inorganic and Physical Measurements. It is unclear whether ortho-phosphate will be determined as part of the anion scan by EPA Method 300.0. Section 6.1.9 and Table 6-13 list ortho-phosphate as a target analyte. However, Tables 4-2 and 6-2 do not include applicable information for ortho-phosphate analysis. This discrepancy should be addressed. Note that the technical and contract holding times for ortho-phosphate as determined by Method 300.0 are 48 and 24 hours, respectively.
5. Section 5.2, Sample Custody Procedures, Laboratory Procedures; Section 6.0, Analytical Methods and Quality Assurance/Quality Control (QA/QC) Procedures; Section 6.2.3, Calibration Standards. Specific information concerning the laboratory quality control (QC) checks that will be performed for each analysis should be provided in any future field work plans. This is particularly important for procedures not covered under any of the Contract Laboratory Program (CLP) Statement of Work (SOW) documents. The information presented in the QAPjP is general and cursory; method-specific information for both organic and inorganic analyses should be provided in the field work plans. The laboratory Standard Operating Procedures (SOPs) should address the various instrument

calibration procedures (specifying, at a minimum, calibration frequency, acceptance criteria, and standard concentrations), QC checks and corrective action measures that will be performed when system failures occur. Although certain analytical requirements are specified in SW-846 and other EPA methods, many of these requirements are discretionary and may not be comprehensive. For all methods, the documentation requirements for data collection and reporting should be specified.

6. Section 6.4.3.2, Laboratory Control Samples or Blank Spikes. The analytical sequence for inorganic samples specified in this section is inconsistent with the procedure described in the CLP SOW. The LCS should be analyzed following the initial calibration verification (ICV) standard, initial calibration blank (ICB), contract required detection limit (CRDL) standard, and interference check standards. The QAPjP specifies that the LCS for CLP metals is analyzed immediately after the calibration standards.
7. Section 7.1, Review and Validation of Data. The text in Section 7.1 of the QAPjP references 1988 versions of Laboratory Data Validation Functional Guidelines for inorganic and organic analyses. It should be noted that current validation guidelines, dated February 1994, are available for use.
8. Section 8.1, Quality Assurance Oversight, Performance, System, and Field Audits. The total number of planned audits, frequency for conducting audits, and an audit schedule should be specified in Section 8.1 of the QAPjP.
9. Tables C-2, C-3, C-5, C-7, and C-8, Matrix Spike/Matrix Spike Duplicate (MS/MSD) and Surrogate Recovery Limits; Table C-4, Native Spike, Duplicate, and Internal Standard Recovery Limits. Acceptance criteria for precision and accuracy should be specified for all target analytes. Several of the tables list TBD (to be determined) in lieu of acceptance criteria for precision, and D (any detected amount) as a lower accuracy limit for certain analytical parameters. Numerical values (in terms of relative percent difference [RPD] for precision, and percent recovery for accuracy) should be specified for all analytes.

Several of the tables indicate that precision criteria will be determined at the time the subcontract laboratory is selected. Although adopting laboratory established acceptance criteria for precision and accuracy is adequate, defining criteria on a project specific basis is preferable. This will ensure that project DQOs are met, and that all project data are comparable, should the services of an alternative laboratory be required during the project.

Lower accuracy limits of less than 10% or of any detected amount ("D") are specified for several target analytes. In general, spike recoveries of less than 10% for organic analyses are not considered to demonstrate acceptable accuracy. It is recognized that in some cases the lower accuracy limits specified in the QAPjP are consistent with those published in the EPA document SW-846.

10. Table C-6, Organochlorine Pesticides/PCBs-CLP Method, MS/MSD and Surrogate Spike Recovery Limits. The surrogate compound, dibutylchloroendate, has been replaced with two surrogate compounds, tetrachlorometaxylene and decachlorobiphenyl, in the current version of the SOW for organic analyses (OLM03.1, August 1994).
11. Appendix D, SAS Procedures. The analytical procedures included in Appendix D of the QAPjP are no longer in use. The current procedures are described in Regional Analytical Program Client Request Forms (RAP CRFs). Copies of RAP CRFs for specific methods may be obtained from the Regional Sample Control Center (RSCC) Coordinator (415/744-1498).

It should be noted that the designations "Routine Analytical Services (RAS)" and "Special Analytical Services (SAS)" are no longer applicable. Contract Laboratory Program Analytical Services (CLPAS) have replaced RAS and the Regional Analytical Program (RAP) has replaced SAS. However, the use of either term (i.e., CLPAS and RAP) in the QAPjP may be confusing as neither program will be used for soliciting laboratory services for the planned investigation.