



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

Date: January 24, 1995

MEMORANDUM

SUBJECT: Comments on the Naval Station Treasure Island
Final Field Sampling Plan dated December 26, 1991 and
Final Quality Assurance Project Plan dated
September 8, 1991

FROM: Rachel Simons, Remedial Project Manager, U.S. EPA,
Region IX

TO: Ernie Galang, EFA-West, Navy

This letter transmits review comments from U.S. EPA's Quality Assurance Management Section (QAMS) for the subject documents. The review was performed by David R. Taylor, Ph.D., Chemist, the Quality Assurance Management Section, U.S. EPA, Region IX.

Please note that this review was performed without access to the QA/QC information in the Draft Final Phase IIB Remedial Investigation Work Plan Addendum dated January 3, 1995. As discussed in the January 23, 1994 RPM/BCT meeting, these comments can be addressed in writing or verbally .

Naval Station Treasure Island
Final Field Sampling Plan (FSP), Revision 1
dated December 26, 1991

This review was based on guidance provided in "Preparation of a U.S. EPA Region 9 Field Sampling Plan for Private and State-Lead Superfund Projects," April, 1990 (EPA Document Control Number 9QA-06-89).

Major Concerns

1. [Section 3.0, Field Sampling Plan Objectives and General Data Needs] The FSP should identify the contaminants of concern (COCs) and specify the action levels, if any, for these analytes. This information, as well as associated data quality objectives for the COCs may be provided in the Quality Assurance Project Plan (QAPjP) which can be referenced.

2. [Section 4.10, Analytical Procedures; Table 3, Sample Criteria for Water Samples; Section 4.1.1, Designation and Documentation of Samples] Section 4.1.1 indicates that Contract Laboratory Program (CLP) protocols will be specified on the sample labels for volatile organic compound analyses, semivolatile organic compound analyses, metals analyses, and pesticide analyses. Table 3 indicates that SW-846 protocols will be followed. The FSP should state unequivocally whether SW-846 or CLP protocols will be followed. If SW-846 protocols will be used, the method numbers for the different metals should be indicated for each metal. The QAPjP is also not clear on which analytical protocols will be followed and the separate QAMS review memorandum on this document should also be consulted.

3. [Table 3, Sample Criteria for Soil Samples; Sample Criteria for Water Samples] Table 3 includes several analyses which are not listed in the Quality Assurance Project Plan (QAPjP), including cyanide, explosives, chlorinated herbicides, extractable total petroleum hydrocarbons, purgeable total petroleum hydrocarbons, and asbestos. Information, including quality control requirements and acceptance criteria and detection limits should be provided in the QAPjP for these analyses and it is also recommended that this information be provided in the FSP. It is also recommended that EPA Method 8151A be used for chlorinated herbicides and that EPA Method 8015B be referenced for fuel analyses since these methods are more current than those in Table 3.

Final Quality Assurance Project Plan (QAPjP)
dated September 8, 1991

This review was based on the document, "U.S. EPA Region 9 Guidance for Preparing Quality Assurance Project Plans for Superfund Remedial Projects," (Document Control No. 9QA-03-89, September, 1989).

Major Concerns

1. [Section 3.0, Data Quality Objectives for Measurement Data] The QAPjP should identify the contaminants of concern (COCs) for the project and preferably indicate data quality objectives (DQOs) for these analytes. These DQOs should apply to both laboratory QC and field QC analyses such as field duplicates. Presently, no COCs are identified; instead generic lists of method analytes are provided.

2. [Section 7.0, Analytical Procedures and Detection or Quantitation Limits; Section 9.0, Internal Quality Control Checks and Frequency; Section 9.3, Off-Site Laboratory] Section 7.0 indicates that an unnamed off-site laboratory

will follow the "strict QA/QC requirements of the EPA methods." However, the EPA SW-846 methods which are specified recommended rather than require different QC analyses or procedures, and QC programs are implemented based on the laboratory's internal QA program. Since no laboratory is identified, nor a laboratory QA plan provided for review, the QC program cannot be fully assessed.

The QAPjP should describe the project's QC program in detail, specify what QC data are to be reported, identify the acceptance criteria for the QC data, and indicate what corrective action procedures will be followed when acceptance criteria are not met. The QAPjP presently contains a list of QC analyses in Section 9.3, and provides acceptance criteria for some, but not all of these QC procedures. For example, tuning, calibration, blank, field precision, and laboratory control sample recovery criteria are not specified. It should also be clarified whether contract laboratory program (CLP) protocols will be followed (see comment below and also comments in the review memorandum on the Field Sampling Plan).

3. **[Section 8.1.2, Off-Site Laboratory Data Reduction]** This section indicates that off-site laboratory data will be reduced using the format of the EPA-approved methods. It should be clarified what the laboratory will be required to do in this area.
4. **[Section 8.2.4, Off-Site Laboratory Data Reporting]** The QAPjP indicates that reporting will be based on the NEESA document, "Sampling and Chemical Analysis Quality Assurance Requirements for the Navy Installation Restoration Program" (NEESA 20.2-047B). This document is based on the 1988 CLP Statement of Work, rather than on SW-846. SW-846 methods do not specify either a reporting format, nor do they specify a list of required deliverables. This section should be expanded to describe what information the laboratory will be required to report, including whether raw data will be required, and also to describe the reporting format, if any, which will be required. If data validation following the "Function Guidelines" will be required, reporting in CLP format should be strongly considered. However, reporting in CLP format in turn raises the question whether CLP protocols rather than SW-846 protocols should be followed.
5. **[Section 8.2.2, Laboratory Data Validation]** The data validation process described in the QAPjP is not clear. The QAPjP indicates that the guidelines for Navy Level D QC will be used. However, Navy Level D is based on CLP protocols, which are not being followed for this project. It is recommended that the process by which data will be reported and evaluated and rejected, estimated, and qualified be described in greater detail, especially for COCs, since data

validation guidelines for the referenced analytical methods are not available.

6. [Section 9.2, Field Measurements] Although the frequency with which field QC checks will be conducted is described in this section, no information is provided on what constitutes an acceptable check. For example, if an interference check sample is injected using a decontaminated syringe, will any contamination be permitted? If any contamination is found what corrective action will follow? If a calibration check standard is run after every 10 samples, what will be an acceptable agreement with the initial curve?
7. [Section 13.2, Off-Site Laboratory Activities] This section indicates that internal corrective action procedures are contained in the laboratory QA plans. No laboratories are identified nor are any laboratory QA Plans provided. This deficiency should be addressed.

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