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HUNTERS POINT
SSIC NO. 5090.3

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
215 Fremont Street
San Francisco, Ca. 94105

Commanding Officer, Western Division
Naval Facilities Engineering Command
Attn: Mr. Alex E. Dong, Code 1146
San Bruno, CA 94066-0720000

Dear Mr Dong:

Enclosed please find a copy of the comments sent to Harding Lawson regarding the Draft Quality Assurance Project Plan - U.S. Navy Treasure Island, Hunters Point Annex.

Sincerely,

A handwritten signature in cursive script that reads "Kent Kitchingman".

Kent Kitchingman
Quality Assurance Officer

Enclosures

REPRODUCED AT GOVERNMENT EXPENSE

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E/N8

APR 27 1988
MEMORANDUM

SUBJECT: Comments on the Draft Quality Assurance Project Plan - U.S. Navy Treasure Island, Hunters Point Annex

FROM: Denise Toll
Quality Assurance Management Section (P-3-2)

THRU: Kent Kitchingman, Chief
Quality Assurance Management Section, P-3-2

TO: Nick Morgan
Site Evaluation Section (T-4-6)

The following comments are in response to a request from Steve Farley of Harding & Lawson Consulting Firm for EPA to review the draft QAPP.

In reference to the comments submitted by the Department of Health Services, we will not address those comments referring to specific sampling procedures (Section 5 - 10) due to time constraints in the review process.

In addition to our comments on the Plan, refer to the enclosed letter from EPA to the Commander of the Western Division dated March 22, 1988, of which you were sent a copy. This letter addresses specific QA/QC requirements and modifications which should be incorporated into the Navy's QA program for the site.

If you have any questions regarding these comments, or the enclosed letter, please contact me at (415) 974-8004.

1. Page 8-2. Field filtering is performed when dissolved metals are requested for analysis. Explain why dissolved metals, rather than total metals, are the parameter of interest.
2. Page 14-1. Acurex Corp. is presently on EPA Project Officer hold, therefore, under the CLP heading, the symbol Y should be changed to P. Also, Anametrix Inc. has now become a CLP lab; the P should be changed to Y. All of the labs listed do not analyze each of the parameters mentioned in the QAPP. Please refer to DHS comment 14.

3. Page 15-1. After determining that particular data cannot be validated, where is this documented and how is this data stored?
4. Page 15-2. Appendix C discusses the information necessary for data validation. The actual approach to be used to validate the data should be discussed in an additional appendix.
5. Page 15-4. The term lot referred to on this page is defined on page 16-1 as 5-10 samples for organics and 10-20 samples for inorganics. In the CLP, 20 samples equals one lot for both organics and inorganics. Thus, lab duplicates and blanks are performed at a frequency of one for every 20 samples collected or one per day, whichever is greater.
6. Page 15-4-15-5. As stated in this section, surrogate spikes will be performed on all samples where appropriate. Please note that CLP protocol requires that surrogates be added to all blanks and QC samples for Volatiles, semi-Volatile and Pesticides/PCBs analysis (refer to the attached letter).
7. Page 16-2. The compounds and the spiking levels for the external spikes should be defined. With reference to the attached letter, blind spikes may be submitted at a frequency of one for every 20 samples collected.
8. Page 16-2. The method of calibration (internal or external standard) to be used for quantitation must be specified. The CLP requires a 5 point calibration curve for volatiles and semi-volatiles analysis. Standards must be traceable to EPA standards.
9. Page 16-3. The matrix spiking (referred to as internal spike in the QAPP) compounds and levels should be defined. Also, how will the spike data be used?
10. As is stated in the DHS comments (Section 19, 3-4), the statistical analysis should stop after calculation of the RPD and percent recovery.
11. The basis for the control charts is incorrect. The use of this approach is unacceptable and must be reevaluated. Please contact us so that we can discuss this matter further.

12. Page 19-5. The compounds of interest to be used to calculate the matrix spike sample percent recovery should be indicated.
13. Table 1, Precision. The source of the values footnoted with (1) should be cited.
14. Table 1. RPD values are given for asbestos, anions/cations, cyanide and radioactivity. The source or an explanation of how these values were determined should be established.
15. Table 1-2. The RPD and RPR limits given in these tables are higher than the limits used in the CLP. Please cite of these values and refer to the SW 849, August 1987, for the current CLP inorganic an organic QC limits.

SY-

MBOL

P-3-2	P-3-2					SURNAME
Toil	BMK					DATE
4-27-88	4-27-88					U.S. EPA

CONCURRENCES

OFFICIAL FILE COPY

MAR 22 1988

Commander, Western Division
Naval Facilities Engineering Command
Attn: Mr. Alex E. Dong Code 1146
P.O. Box 727
San Bruno, CA 94066-0720

"Original Signed By:
Kent Kitchingman"

Dear Mr. Dong:

Recently, the Navy submitted the proposed Quality Assurance/Quality Control (QA/QC) requirements for the analytical program supporting the RI/FS at Naval Station, Treasure Island, Hunter's Point Annex, for evaluation by EPA. We have reviewed the document, and request additional information be provided. In addition, we have the following comments regarding the contents of the document.

The EPA will require that the Navy designate, prior to sampling, those groups or types of samples which will require data validation. In addition to designating groups of samples, the rationale for selecting samples which will require data validation as well as rationale for those samples which will not require data validation must be provided.

The Attachment describes in more detail additional QA/QC requirements and modifications which should be incorporated into the QA program. The parameters of interest, which were not stated in the letter, should be stated along with the analytical method(s) to be used for each parameter. For the purpose of reviewing the proposed analytical program, we assumed the parameters of interest to be Volatile Organics and Base/Neutral & Acid Compounds analyzed by GC/MS. Additional parameters or matrices (i.e. metals and pesticides, air) will require specific QA/QC requirements and should be included.

"CIF-type Deliverables" must be clearly defined as to the type and quantity of documentation required from the laboratory. It must also be clear what documentation the laboratory will maintain and the length of storage. The Navy should be responsible for making certain that the laboratory has a thorough understanding of these requirements.

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If you have any questions regarding this information, please
call me at 415/974-0924.

Sincerely,

Kent M. Kitchingman
Quality Assurance Officer

Attachment

cc: Steve Farley, Harding Lawson Associates

bc: Morgan (T-4-6)
Bankert (P-3-2)

ATTACHMENT

RECOMMENDED QA/QC for ANALYTICAL PROGRAM U.S. NAVY, HUNTER'S POINT ANNEX

Additional Laboratory Deliverables

Analytical Results-reported in CLP Form I format or include all Form I information.

Instrument/Method Detection Limits

Laboratory will describe how limits were determined.

Sample Quantitation Limits

QA Summary

Incorporate CLP acceptance criteria in summary, if possible. CLP Format Forms are included for reference, however the laboratory should meet these acceptance criteria for:

GC/MS Tuning BFB (VOA); DFTPP (Semi-Volatiles)
Blank Summary
Matrix Spike/Matrix Spike Duplicate
Surrogate Recoveries - all samples, including blanks, QC samples.

Identification and semi-quantitation of 10 largest non-target compound peaks for each fraction of organics analyzed by GC/MS. These compounds are to be reported as Tentatively Identified Compounds (TIC's). Provide the total number of TIC's for each sample.

Recommended Requirements

Initial Calibration RRF's; %RSD for each compound
Continuing Calibration RRF's; %D for each compound
Raw Data for all analyses
Quantitation reports for all analyses
Mass Spectra for each Reported Compound
Raw, enhanced and compound standard
For TIC's (Tentatively Identified Compounds)
Spectra for the 3 best matches resulting from an NBS library search, along with the spectra

Internal Lab QC

GC/MS Tuning - every 12 hours or each day prior to the analysis of any samples; whichever is more frequent.

Initial Calibration - a 5 point calibration curve which meets CLP criteria.

Continuing Calibration - every 12 hours or each day prior to analysis of any samples; whichever is more frequent. The continuing calibration should meet CLP requirements.

Lab Blanks - 1 every 12 hours or each day prior to sample analysis; whichever is more frequent. Additional blank analyses may be required to demonstrate that the system is free from contamination after highly contaminated samples have been analyzed.

Matrix Spike/Matrix Spike Duplicate (H₂O and Soil)

These QC samples will be designated by project manager and adequate sample must be taken in the field to perform the additional analyses. Samples selected for QC should have expected ranges of concentration of 10-100 ppb, if possible. The designated QC samples are an attempt to avoid having the QC work done on the "field blanks".

Spiking compounds and levels should follow the CLP protocol or be designated in the QC document.

One MS/MSD per 20 samples of the same matrix and similar concentration, OR

One per week of the same matrix and similar concentration.

Surrogates

Surrogates will be added to all samples blanks and QC samples for Volatiles and Semi-Volatiles analysis. The samples should meet CLP acceptance criteria for surrogates or be reanalyzed once.

External QC Requirements

A Trip Blank for volatiles analysis will be included daily for each shipment of samples and analyzed once a week or every 10 samples, whichever is more frequent.

Field Blanks and Equipment Blanks will be collected and analyzed once a week or every 20 water samples analyzed for CLP target compounds (TCL's) whichever is more frequent.

Blind Duplicates for soil and water samples will be required for one in every 10 samples. The method used for collecting the duplicates should be defined.

Blind Spikes prepared by the QC laboratory will be submitted one for every 20 samples collected. The spiking compounds and the levels should be defined.

It is recommended that all of these external QC samples be submitted as blind samples to the laboratory.