**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

JUN 27 2000

DW-8J

Ms. Christine Freeman
Naval Surface Warfare Center
EPD, Code 095 B-3260
300 Highway 361
Crane, IN 47522-5001

Re: Draft Work Plan/QAPP/SAP
Comments Mine Fill A Battery Site
Cleanup - May 2000

Dear Ms. Freeman:

The United States Environmental Protection Agency (U.S. EPA) has reviewed the Draft Work Plan, Quality Assurance Project Plan (QAPP), and Sampling and Analysis Plan (SAP) for the Mine Fill A Battery Site Cleanup dated May 2000.

Attached you will find U.S. EPA's comments. Please revise the Work Plan, QAPP, and SAP to address these comments.

If you have any questions regarding this matter, please contact me at (312) 886-7890.

Sincerely,

Peter Ramanauskas
Environmental Engineer
Waste Management Branch
Corrective Action Section

Enclosure

Filename: MFA Battery NOD May 2000.wpd

cc: Core Team Members: Bill Gates, SOUTHDIV (w/ encls)
Doug Griffin, IDEM (w/ encls)

Project Team Members: Allen Debus, USEPA (w/ encls)

**Comments on The Mine Fill A Battery Site Cleanup**
**Draft Work Plan, Quality Assurance Project Plan, And Sampling And Analysis Plan**
**Dated May 2000**
**Naval Surface Warfare Center**
**Crane, Indiana**

## Work Plan Comments

*Comment 1:*

List of Acronyms, page iii: The definition for NSWC should read Naval *Surface* Warfare Center.

*Comment 2:*

Section 2.0, page 7: Under the Site Supervisor section, seventh bullet, delete "(check the name of the form?)"

*Comment 3:*

Section 3.3.3, page 11: The first sentence should be clarified to state that analytical constituents detected above RBSLs at both areas will be referred to as constituents of concern.

*Comment 4:*

Section 3.4, page 12: Clarify if it is intended to excavate all soils determined to be above RBSLs. Also, identify steps taken to control runoff from contaminated soils and containers should precipitation events occur.

*Comment 5:*

Section 3.8.2, page 14: Explain procedures for disposing of these decontamination fluids. See also SSHP comment 6.

## Site Safety and Health Plan Comments

*Comment 6:*

Section 5.2, page A-10: Explain procedures for disposal of decontamination fluids.

**Sampling and Analysis Plan Comments**

*Comment 7:*

Section 2.5, page B-6: Clarify if background samples will be analyzed for the full suite of Appendix IX constituents or only for COCs identified through pre-excavation sampling.

*Comment 8:*

Section 3.1, page B-7: In the fifth sentence of the second paragraph, note that VOC samples are not to be mixed in the stainless steel bowl.

*Comment 9:*

The Sampling and Analysis Plan should be fortified with step-by-step details concerning how each of the various sampling activities will be performed. This information would be best suited for a Standard Operating Procedure style of presentation. For instance, although the use of SW-846 method 5035 is mentioned, there is apparently no field procedure incorporated into this QAPP explaining how the field activity will be performed in the field.

*Comment 10:*

Section 1.5, page B-1: The DQO section suffers from a lack of decision level comparisons to analytical method reporting limits. Although there is brief discussion of data comparison, the use of this QAPP as a planning tool is undermined by absence of a table comparing the decision levels, forming the basis of project objectives, to Quanterra's proposed method reporting limits. Clearly defined project objectives and decision rules should be included here.

**Quality Assurance Project Plan Comments**

*Comment 11:*

How will this study address the potential for groundwater contamination from the battery and soil areas? Explanation should be included appropriate sections of the QAPP and Workplan.

*Comment 12:*

Section 5.0, page C-10: If Quanterra is now known as Severn Trent Labs, change names through the entire document.

*Comment 13:*

Section 12.1, page C-25: Referring to field instrumentation, if there will be VOC monitoring equipment used during excavation, it should be noted here. There are also two sections identified as 12.1 on this page (as well as in the Table of Contents) with a typo referring to Quanterra.

*Comment 14:*

Appendix C Title Page: The word "quality" is misspelled on this page.

*Comment 15:*

The QAPP has no title page for approving officials.

*Comment 16:*

Section 3.1, page C-3: refers to a section 2.0 of the SAP, when really this should refer to section 2.0 of the Workplan instead.

*Comment 17:*

Section 3.2, page C-3: This section should mention which of the laboratory personnel take responsibility for performing internal data validation and who performs internal QA audits.

*Comment 18:*

Section 4.5, page C-8:, "completeness", should be specified as > 90% for each area.

*Comment 19:*

Section 4.6, page C-8: VOCs trip blanks are intended for aqueous samples (e.g. groundwater). While they will not be relevant to soil samples, they may be of utility for QC purposes if aqueous equipment rinse blanks are collected. This section of the QAPP should reflect this understanding. Also, field temperature blanks should be included as part of the QC program for this project.

*Comment 20:*

Section 4.6, page C-8: The third paragraph contains some confusing statements. For instance, it is stated that MS/MSD samples are designated/collected for VOCs analyses only, when they should also be collected for the Appendix IX analyses as well. While the purpose of collecting an MS sample is briefly explained, it isn't explained why the MSD sample is needed. Is it intended to only collect MSD samples for organic analyses, and use sample replicates or field duplicate data from the MS samples for metals analyses?

*Comment 21:*

Section 4.6, page C-9: Table 1.0 remains confusing. It would clarify matters if the Table could be revised such that the number of samples to be collected is presented in terms of each parameter group, per area. The way this reads, it could be (mis?)interpreted that 11 samples will be taken for analysis of total metals, and that 11 samples of TCLP metals will be collected, and also 11 samples will be taken to measure reactivity, then 11 samples will be taken for analysis of Appendix IX, etc. Specificity will clarify the meaning of the pre-excavation sampling table.

*Comment 22:*

Section 5.0, page C-10: There is a bit of discussion concerning the soil area, and a table plus discussion devoted to summarizing the analysis to be performed for the Battery Area. However, there should be balance in presentation. A table indicating which test methods will be used to report the soil area test parameters should appear in the QAPP as well. (This tabulated information should appear in section 8.0 - Analytical Procedures.) Also, there are some parameters listed on p. C-10 (i.e. sulfide, cyanide) that do not appear in Table 1.0. Somewhere it should be indicated whether the "TCLP metals" group will be reported as metals determined in a leached TC extract.

*Comment 23:*

Section 7.0, page C-13: contains some elaboration on laboratory calibration for metals analyses, but remains silent on the other methods which will be performed. As opposed to summarizing these procedures, the QAPP writer is instead encouraged to itemize the specific sections from each of the relevant proposed SOPs addressing calibration so that the sections can be readily found & checked. Tabular presentation is preferred.

*Comment 24:*

Section 10.1.1, page C-18: What project objective might the field GC be used to satisfy? What decision criteria will be applied to its use? Unless this instrument will definitely be used, it is recommended to delete this reference to its speculative use.

*Comment 25:*

Section 10.2.2, page C-18: requires further clarification. First, the CLP National Functional guidelines are not directly to RCRA SW-846 methods, and in some cases even will not be addressed to any degree (i.e. explosives testing methods). Also, the QAPP writer is referred to the Region 5 QA Policy document (April 1998), for definite distinctions between the meanings of laboratory data validation and data assessment. (I think the terms may have been used interchangeably here.) Does Quanterra know they are supposed to perform a method detection limit study in support of this project? Will they really need to? Furthermore, it is not explained who will be performing independent data validation. (This person should also be identified in section 2 of the QAPP.) Also, who will perform the data review mentioned near the bottom of

the page.

*Comment 26:*

Section 10.2.2., page C-20: The definitions for the "B" and "J" qualifiers seem identical, which should be explained or corrected. Also, for the "E" phrase, "... greater that calibration curve..." contains a typo, and the phrase itself should be clarified to mean beyond the upper range of the calibration curve, instead.

*Comment 27:*

Section 10.3.2, page C-22: Insert "surrogates" into the last bullet, and include chromatograms, specifically, in the 3rd bullet from end.

*Comment 28:*

Section 13, page C-26: This section of the QAPP is silent on the subject of Data Assessment. The QAPP writer is referred to the Region 5 1998 QA Policy, (and also page C-19 of the QAPP & comment 25 above).

*Comment 29:*

Section 14.3, page C-30: The "Project Manager" is mentioned twice. Is this person the "Toltest Project Manager" as mentioned in section 2 of the Workplan? When, or under what circumstances would U.S. EPA be notified of any need for corrective action?