



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
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JAN 26 2000

REPLY TO THE ATTENTION OF:

DW-8J

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

Re: Work Plan/QAPP/SAP Comments
Mine Fill A Battery Site Cleanup

Dear Ms. Freeman:

The United States Environmental Protection Agency (U.S. EPA) has reviewed the Work Plan, Quality Assurance Project Plan (QAPP), and Sampling and Analysis Plan (SAP) for the Mine Fill A Battery Site Cleanup dated November 1999.

Attached you will find U.S. EPA's comments. Please revise the Work Plan, QAPP, and SAP to address these comments. In the course of revising the documents, the writers should refer to the U.S. EPA Region 5 QAPP Policy dated April 1998. This guidance is available on the World Wide Web at <http://www.epa.gov/region5/rcraca/qapp.htm>.

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

Regards,

Peter Ramanauskas
Environmental Engineer
Waste Management Branch
Corrective Action Section

Enclosure

Filename: MFA Battery NOD.wpd

cc: Core Team Members: Bill Gates, SOUTHDIV (w/ encls)
Tom Brent, NSWG (w/o encls)
Phil Keith, NSWG (w/o encls)
Doug Johnson, CAAA (w/o encls)
E.P. Johns, SOUTHDIV (w/o 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 November 1999
Naval Surface Warfare Center
Crane, Indiana

Work Plan Comments

Comment 1:

Section 1.1, page 2: The site description section should include a specific description of the battery dump site area itself in addition to the general Naval Surface Warfare Center (NSWC) overview. Historical information about the site should be provided. Other descriptive information includes, but is not limited to: detailed descriptions of how/when the batteries were dumped, what types of batteries are known/suspected to be present at the site, potential contaminants from the batteries, estimated quantities of waste at the site, the potential for these wastes to be discovered as listed or characteristic. This section should also include a detailed discussion of the soil pile area relating all currently known information.

Comment 2:

Section 1.2, page 2: Insert an explanation of Figure 2 including descriptions of the soil pile and battery disposal areas (i.e., pertinent background information, size of disposal areas, etc...).

Comment 3:

Section 1.3, page 2: Add information and discussion about surface water drainage patterns in the area (including maps), underlying groundwater aquifers, and site soil types.

Comment 4:

Section 2.0.: Include an Organizational Chart showing the relationships between all involved agencies and personnel.

Comment 5:

Section 3.0: This section should include a description of the Scope of Work of this Interim Measure.

Comment 6:

Section 3.1, page 6: Add notification information describing types of notifications and who is to be notified in each instance (e.g., clearing, trenching, emergencies, etc...)

Comment 7:

Section 3.2, page 6: What is the source of and rationale behind the cleanup levels in Figure 4? This should be explained in detail here. What is the rationale for choosing these constituents (see also Comment 27)? Since there is apparently no historical information regarding contamination at this site, the characterization sampling should include the full 40 CFR Part 264 Appendix IX constituent list with appropriate DQO detection limits so that confident decisions may be made to eliminate constituents that meet screening levels. Samples should also be tested to determine if they exhibit hazardous waste characteristics. Individual chemical constituents may be eliminated from further consideration by comparison of each site-specific constituent concentration to a pre-determined risk-based screening level. Risk-based screening of chemical constituents in soil may be conducted using the "generic" soil screening levels (SSLs) listed in Appendix D of the Region 5 Model QAPP.

The sampling plan proposed is in need of refinement. The design of the sampling plan should address the rationale behind the sampling type chosen. Composite samples cannot be used for VOC analysis (see also Comment 18). Because the nature and extent of contamination at these areas is relatively unknown, the sampling should be done using systematic grid sampling with discrete (grab) samples to provide greater indication of locally contaminated zones and hot spots. This includes the soil pile. Provide explanation of how the vertical and horizontal extent of contamination will be determined. The sampling plan should address surface and subsurface sampling and identify the sampling intervals and depths. The rationale for the number and location of background samples should be discussed. Background soil samples must be from areas of similar soil type as found in the areas of the screening samples. They should be taken in natural, undisturbed soil of the same soil horizon and depth of the screening samples. How will the sampling spots be marked and found in the field?

Update all figures to reflect changes made to the sampling approach.

Comment 8:

Section 3.4, page 7: It should be stated what types of samples will be taken here. Provide an explanation of the rationale behind the sampling number, type, and locations. How will these sample locations be marked and found in the field? Wall samples should be added to the soil pile area if that area is shown to require excavation through pre-excavation sampling and contamination delineation. Provide an explanation of the approach taken if confirmation sampling reveals additional contamination in the floor and/or wall samples.

Comment 9:

Section 3.6, page 8: Will there be any clean top soil added prior to seeding?

Comment 10:

Section 3.8, page 8: Any wastes generated as a result of remediation operations should be managed according to a prepared Waste Management Plan.

Comment 11:

Section 4.0, page 9: Include compliance with 40 CFR Part 261 for waste characterization and Part 262 Subparts B and C for waste accumulation, packaging, labeling, marking, placarding, and manifesting.

Comment 12:

The Work Plan should include a detailed description of decontamination activities above and beyond what is found in Section 5.2 of the Site Safety and Health Plan (SSHP). There should be discussion of equipment decontamination procedures, contamination minimization, personnel decontamination, sampling equipment decontamination, etc.

The Work Plan should also include a "References" section identifying all reference documents used in the preparation of the Work Plan, QAPP, SAP, etc.

Site Safety and Health Plan Comments

Comment 13:

Section 4.1 & 4.2, page A-8: Add an example of a Daily Safety Log and a Machinery and Equipment inspection log as attachments to the SSHP.

Comment 14:

Section 5.3, page A-11: As this is a wooded area, are there any insect, animal, or plant hazards expected on the site?

Comment 15:

Section 5.4, page A-16: Verify the Regional USEPA Emergency phone number (the 910 area code is in North Carolina). Note that the Regional Chemical Accident Response National Response Team phone number (contact Richard Karl) is (312) 353-9295.

Comment 16:

The SSHP should include a discussion of the required training for field personnel as well as a sample of field personnel training documentation signature sheets.

Sampling and Analysis Plan Comments

Comment 17:

Section 1.6, page B-2: Note that in terms of content, submitted data packages should correspond to CLP level IV, applied to the reporting of all proposed RCRA parameters. The "clean closure" objective should be translated into the interim measure objective which is of concern. Will interim measures be accomplished by administering clean closure? If so, this should be clearly stated. The purpose of "demonstrating compliance" doesn't read like an interim measure sort of objective.

Comment 18:

Section 1.7, pages B-2 to B-3: It should be noted that soil samples intended for VOCs analyses should NOT be composited. What depths will samples be taken from during the preexcavation phase of sampling? What levels of respective contaminants will trigger the need for excavating in soil and grid spaces? What is the source and rationale for selected cleanup levels?

Comment 19:

Section 1.8, page B-3: Is TCLP data only intended for use in characterizing soil for disposal? Is TCLP data to be compared to "excavation" trigger levels to base field decisions, and later, to "cleanup levels"? Note that for VOCs, the sample collection and analysis procedure should conform to SW-846, method 5035. How much soil will be excavated if the preexcavation levels are triggered through analyses?

Comment 20:

Table 1.0, page B-4: There should be a set of decision rules or a decision "tree" added that explains what the objective happens to be for collecting certain parameters for analysis down to a particular level. Or, this information could be added to the 4th column of the table.

Comment 21:

Section 2.1, page B-5: The SSHP is incorrectly referenced throughout this section as being found in Appendix B of the Work Plan. Also, the SSHP should include a description of the required training as shown in this section (see SSHP Comment 16).

Comment 22:

Section 3.7, page B-9 and Section 4.0, page B-12: These sections incorrectly reference Appendix D of the Battery Site Work Plan.

Quality Assurance Project Plan Comments

Comment 23:

Section 3.2, page C-3: It should be explained who will perform independent data validation of laboratory data. (If this exists in another section of the QAPP, or work plan, then this specific section could be referenced.)

Comment 24:

Section 3.2.2., page C-4: The specific QA responsibilities of the field team members should be presented more adequately. Also, The address(es) to which samples will be shipped should be stated in this section.

Comment 25:

Table 1.0, page C-8: Which specific TCLP and "totals" parameters will be reported for each phase of this project? Note that there are only two explosives on the TCLP list, and it is unclear if these will be reported using the 8270 SVOC test analysis or the 8330 explosives analysis for 2,4 DNT. There is no TC criterion for other explosives compounds. The explanation of parameters mentioned in this table is rather confusing. The QAPP writers should ponder what can be done to clarify the table. Also, what is meant by the term, "pre-excavation/disposal"? Do they mean, "pre-excavation & pre-disposal"?

Comment 26:

Section 5.0, page C-9: Note that the TCLP explosives are listed here. How does this relate to table 1.0, and to the analyses that will be performed? Is the total analysis meant only for pre-excavation data? What sort of field observations will be performed? Certainly it would be appropriate to conduct immunoassay tests for explosives and XRF for metals, if the objective can be defined.

Comment 27:

Section 5.0, page C-9: What is the source of cleanup levels alluded to in this section, and what is the rationale for the target compound list shown in the workplan, figure 4.0? (See also Comment 7).

Comment 28:

Section 8.0, page C-13: Note that many of Quanterra's methods are post-1990 methods.

Comment 29:

Section 9.2, page C-14: Insert the term, "VOCs" before the word samples, in the paragraph devoted to Trip blanks. Also, it should be noted that MS/MSD samples are intended for organic analyses. What are the acceptance criteria for the internal QC checks mentioned in this section?

Comment 30:

Section 10.2.2., page C-18: What qualification flags will be used to qualify data in the Interim measures report?

Comment 31:

Section 10.3.2., page C-19: There should be discussion of any corrective action that was taken included in the Case Narrative. For the chemistry data package, the raw data should be made immediately available to U.S. Navy Crane, in case it is required for review by the U.S. EPA.

Comment 32:

Section 11.0: The QAPP writers should provide any relevant information concerning Quanterra's status with respect to Agency environmental audits, including any Performance evaluation data they may have reported.