



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

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NSWC CRANE
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REPLY TO THE ATTENTION OF:

September 13, 2000

DW-8J

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

Re: U.S. EPA Comments on Draft
Interim Measures Report Removal
And Bioremediation of Mine Fill A
Material

Dear Ms. Freeman:

The United States Environmental Protection Agency (U.S. EPA) has reviewed the Draft Interim Measures Report Removal and Bioremediation of Mine Fill A (MFA) Material dated June 2000.

Comments on the document are provided as an attachment to this letter. Please revise the document to address these comments.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Peter Ramanaukas".

Peter Ramanaukas
Environmental Engineer
WMB, Corrective Action Section

Enclosure

FAUSER\PRAMANAU\Crane\MFA\MFA IMR Comments.wpd

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

Project Team Members: Allen Debus, U.S. EPA (w/ encls)

**COMMENTS ON THE DRAFT INTERIM MEASURES REPORT
REMOVAL AND BIOREMEDIATION OF MINE FILL A MATERIAL
DATED JUNE 2000
NAVAL SURFACE WARFARE CENTER
CRANE, INDIANA**

Comment 1:

In the second paragraph of Section 2.1, in addition to the explanation of the reactivity characteristic, note if tests were done on the soils to determine other hazardous waste characteristics (i.e., corrosivity, flammability, and toxicity).

Comment 2:

In Sections 3.1.2. and 3.1.3., reference is made to totals/arsenic results not exceeding "20 times the TCLP limit". This should be clarified to state that the totals results multiplied by an estimation factor of 20 did not exceed the TCLP regulatory limit. If the TCLP limit is exceeded, the material is classified as possessing the hazardous waste characteristic of toxicity. As it is currently written, it would appear that the multiplication factor of 20 is improperly being applied to the TCLP regulatory limit.

Comment 3:

In Section 5.1, please provide a brief description of the hydroseeding process and why it was unsuccessful at the permanent storage areas near Buildings 154 and 157.

Comment 4:

Generally, throughout Section 6.0, the Navy cites results for soil VOCs which were undetectable, or negligible compared to soil screening levels. Efforts were made in early 1998 to incorporate the concepts of Norm Niedergang's Directive for Change (December 1997) memorandum for using Method 5035 for reporting soil VOCs data. Accordingly, the approved QAPP contains references to use of EnCore samplers for performing proper VOCs sample collection, and the field SOP was modified to include the use of EnCore samplers.

However, the Southwest Laboratory seems not to have been updated to include Method 5035. Section 8.8 of this SOP, written for analysis of soils, describes the Method 5030 technique, which is the one that Method 5035 effectively replaced in June of 1997. The Southwest SOP is dated July 23, 1997. We would like to verify that Southwest Laboratories have analyzed their EnCore samples appropriately even though the SOP does not reflect this. Please document how the soil VOC data has, and is, being generated by Southwest Laboratories.

Comment 5:

Metals results were frequently imprecise. The Navy is referred to the 1996 memorandum by Dave Payne on the improvement of soil samples intended for metals analysis by sample particle reduction and homogenization prior to sample digestion (Appendix Q of the Region 5 Model QAPP).

Comment 6:

While numerous paragraphs throughout Section 6.0 indicate that there were cases where QC acceptance ranges were exceeded for certain analyses, there is very little indication as to how far out of range the off spec QC data actually was. Please provide further definition of the ranges for off spec data.

Comment 7:

Please submit the following data sets for EPA review:

1. Initial characterization samples MFA1CS503, MFA1CS519, MFA1CS570, and MFA1CS574FD for explosives compounds (8330 analysis). Include sample collection documentation sheets/holding time information, extraction logs, continuing calibration results, raw data and chromatograms including confirmatory column data, and all supporting sample QC data (including field duplicates) for respective sample data groups.
2. Initial characterization samples MFAICS588, MFAICS589, and MFAICS590 for metals analysis (including mercury). Data should be provided for all analytes and all supporting QC sample data (including field duplicate data) for the respective metals.
3. For Post-Excavation Samples MFAPES274, MFAPES276, and MFAPES278, submit data packages as outlined in item #1 above for the explosives parameters.
4. For Windrow #13, submit sample data constituting the "Day Last" determination (i.e., all the individual cross-sections that were analyzed) for the explosives determination. Level of QC documentation should be at the level of item #1 above.
5. Submit the sample data package for BIO-S-061 "Day Last" [Day 8] (i.e., all the individual cross-sections that were analyzed) for the explosives determination. Level of QC documentation should be at the level of item #1 above.
6. Select 3 of the 7 Windrow Monitoring samples reported as estimated values as described in the third paragraph of page 6-10, Section 6.2.5.2. Submit the explosives data packages as outlined in item #1 above.

Comment 8:

In Sections 6.2.4.1. and 6.2.5.2., it is mentioned that noted temperature blank exceedances (i.e., exceeding 4 degrees C) should not impact results. However, this may not be the true, especially in the case of Method 8330 nitroaromatic or volatile aromatic compounds. In these cases, it would be of interest to know what the overall holding time was from time of sample collection to time of analysis (or extraction). Perhaps some of this data could be flagged as "low bias" as well.

Comment 9:

In Section 6.2.4.2, it is stated that only one rinsate blank was collected for the field samples. The Navy must follow the rinsate blank collection frequency noted in the approved QAPP Section 4.6.2.

Comment 10:

On page 6-11, the third paragraph mentions that surrogate recoveries were low in cases where high TNT concentrations were found. These results are attributed to a matrix effect. However, if the samples had to be diluted, what is the possibility of this being an effect of dilution?

Comment 11:

Please provide a brief description of the rationale for Initial Characterization Sampling around buildings 151 and 160 as these areas are not included in the Soil Excavation Plan for Mine Fill A (FSOP Appendix E1) dated 02/09/1998.

Comment 12:

Please provide figures in Appendix J showing final disposition of Windrows 9, 11, 13, 14, 24, and 36. Also provide a figure showing location of the staging area containing Windrows 92, 93, 98, 101, and 102.

Comment 13:

Figure J1 (Page 1 of 4) shows that Grid #40 has been backfilled with windrow #97. However, as noted on Figure G1 and in Table 3-2, Grid #40 is still awaiting excavation along with 16 other grids. Please clarify this. Note that the remaining grids (23, 24, 26, 29, 33, 34, 35, 36, 38, 40, 131, 132, 133, 135, 171, 172, 173) may be excavated and processed at the Navy's discretion.