



DEPARTMENT OF THE NAVY

ENGINEERING FIELD ACTIVITY, NORTHEAST
NAVAL FACILITIES ENGINEERING COMMAND
10 INDUSTRIAL HIGHWAY
MAIL STOP, #82
LESTER, PA 19113-2090

IN REPLY REFER TO

5090
Code EV23\ME
January 13, 2003

Ms. Kymberlee Keckler
U.S. Environmental Protection Agency, Region I
1 Congress Street
Suite 1100 (HBT)
Boston, MA 02114-2023

Dear Ms. Keckler:

SUBJECT: RESPONSES TO EPA COMMENTS OF AUGUST 26, 2002 FOR THE
FINAL SOIL AND SEDIMENT REMEDIAL ACTION REPORT AT
OPERABLE UNIT 7 - AREA A WEAPONS CENTER, NAVAL
SUBMARINE BASE NEW LONDON, GROTON, CT

Please find attached the responses to your comments on the
Final Soil and Sediment Remedial Action Report at the Area A
Weapons Center, Naval Submarine Base New London, Groton, CT.

If you wish to discuss this issue further, please contact me
at (610) 595-0567 extension 162.

Sincerely,

A handwritten signature in cursive script that reads "Mark Evans".

MARK EVANS
Remedial Project Manager
By direction of the
Commanding Officer

Enclosure: Responses to subject report

Copy to: Mr. Dick Conant, NSB-NLON
Mr. Rick Woodworth, FWENC - Langehorne, PA

ATTACHMENT

RESPONSE TO EPA COMMENTS DATED AUGUST 26, 2002 FINAL REMEDIAL ACTION REPORT FOR THE SOIL AND SEDIMENT REMOVAL AT OPERABLE UNIT 7 – AREA A WEAPONS CENTER (SITE 20) NAVAL SUBMARINE BASE - NEW LONDON

Environmental Protection Agency (EPA) General Comments:

EPA Comment #1:

The ROD states on Page 1 of Part 1 that the selected remedy will include "Offsite asphalt batching of excavated media, or disposal in offsite landfill if asphalt batching is not available in the State of Connecticut at the time of excavation." Page 9 of Part 2 states "Asphalt batching is the preferred disposal option. However, if the necessary Connecticut permits cannot be secured, then transport to an out-of-state disposal facility will be pursued." There is no indication in the RA Report that recycling of excavated material could not be performed. The Final Work Plan listed four potential asphalt batching facilities including Phoenix Environmental in Waterbury, Connecticut; however, according to the Final RA Report, none of these facilities were apparently contacted at the time the work was conducted and none of excavated material was recycled. Nowhere in the ROD does it state that offsite disposal should be selected if it is cheaper than asphalt batching. On the contrary, the ROD expressed a clear preference for asphalt batching if available, and the National Contingency Plan also expresses this preference for treatment. The decision not to use asphalt batching needs to be better justified and incorporated into the RA Report. EPA remains concerned that the intent of the ROD has been violated and believes that a ROD amendment is required.

Response #1:

FWENC did investigate sources for asphalt batching in the New England area for management of contaminated soil and sediment. There were two facilities in Connecticut at the time of the project. One facility (Phoenix Environmental) located in Waterbury, CT was not a FWENC approved disposal facility. The other facility located in Groton, CT (Tilcon) would not accept any soils for its asphalt recycling process. One facility located in Stoughton, Massachusetts (Aggregate Industries), would only accept soils where the petroleum contamination was from a virgin source. Since soils from Groton could not meet this criterion, they were not acceptable at Aggregate Recycling.

Since asphalt batching was not a viable option, FWENC investigated other recycling/reuse options and determined that the contaminated soils were acceptable for reuse as daily and intermediate cover at the BFI Landfill in Fall River, MA. In Massachusetts, contaminated soils can be reused as daily and intermediate cover material at lined landfills if they do not exceed the contaminant levels listed in Table 1 of the Massachusetts DEP Policy # COMM-97-001, "Reuse and Disposal of Contaminated Soils at Massachusetts Landfills". Since the contaminated and overburden soils met the Table #1 contaminant level criteria in the policy, they were accepted by the BFI Fall River facility for beneficial reuse as cover material. By choosing reuse as soil cover over disposal, FWENC and the Navy did follow EPA's preference for recycling over disposal.

FWENC performs a regulatory compliance review on all companies providing waste disposal, recycling or transportation services prior to use in accordance with FWENC Environmental Safety & Quality (ESQ) Procedure 1-4. The facility or transporter is required to provide copies of

environmental permits and licenses and contact names of regulatory agency personnel who inspect or oversee the facility's operations and permits. Using this information, FWENC performs a regulatory compliance review, which is comprised of researching EPA and state agency Internet databases and contacting EPA and state agencies. FWENC will determine the facility's current and historic compliance status including the status of any violations or enforcement actions, spill or release history, groundwater monitoring status and whether the facility is listed on the EPA NPL or on any state Superfund or contaminated sites list. Facilities listed on the NPL or state's sites lists are not used unless FWENC can determine that current operations or disposal areas are not the cause of the listing. The CERCLA Off-Site Policy status is verified for all facilities that will be receiving CERCLA wastes. This review is performed by a FWENC Regulatory Compliance Specialist and is approved and by a FWENC ESQ Manager or Supervisor.

EPA Comment #2:

The quality assurance/quality control field samples specified in the Work Plan for this remedial action were not collected according to the text in Section 5.1 and confirmed by a review of the chains-of-custody.

Response #2:

Although field QC samples were not collected, FWENC did perform a data validation on the results and found them to be acceptable.

EPA Comment #3:

The as-built drawing of the restored drainage swale, which was required by the Work Plan, could not be provided because the restored drainage swale was not surveyed as part of the remedial action as required.

Response #3:

The "As Built" language referenced in the Work Plan simply meant FWENC would provide survey information on confirmatory samples taken, not to provide final contours, etc. of the swale. At this time, the Navy does not feel a final survey detailing the existing contours would be beneficial.

Environmental Protection Agency (EPA) Specific Comments:

EPA Comment #4:

Section 3.3, Page 3-3

The summary of the ROD presented in this section is incomplete and therefore misleading. Page 25 of Part 2 the ROD states "Excavated soil will either be disposed at an offsite, licensed disposal facility or treated using thermoplastic stabilization/solidification (*i.e.*, asphalt batching), depending on the actual volume that is excavated (*i.e.*, cost-effectiveness) and the results of waste characterization samples (*i.e.*, determination that the material can be accepted by an asphalt batching facility). Asphalt batching is the preferred disposal option." The actual volume of material excavated was 202 cubic yards which is almost exactly the volume estimated in the ROD (199 cubic yards), and therefore there was no significant change in the volume estimate to justify a change in the cost- effectiveness determination and a change in the preferred remedy. Nowhere in the ROD does it state that offsite disposal will be selected if it is cheaper than asphalt batching. Please revise the discussion in this section to correctly present the ROD requirements.

Response #4:

See FWENC Response #1.

EPA Comment #5:

Section 3.3.1, Page 3-3

I assume, but the text does not state, that each composite waste characterization sample of contaminated soil was comprised of one sub-sample from each of the roll-off containers included in that sample group. It is also not clear from reviewing the chains-of-custody whether a field composite was made or whether the laboratory made the composite from discrete samples. This is speculated because, for WC-2, seven sample containers were shipped - two for VOC analysis and five for PAH and arsenic analysis. (There were five roll-offs sampled for WC-2.) However, for WC-1, which was comprised of samples from seven roll-offs, four VOC containers and two sample containers for PAHs and arsenic were shipped. Please edit the text of the RA Report to clarify how the composites were taken. Also, please edit the text to explain in more detail how sampling was conducted to collect samples for TCLP volatile organics. What protocol was followed? Based on the number of VOC sample containers listed on the manifests, it appears that these were also composite samples, which is generally not acceptable for VOC samples and unlikely when using 40-ml vials. Please clarify.

Response #5:

Waste characterization samples WC-1 and WC-2 were collected using the following procedure:

1. Contaminated soil was collected from each roll-off using a disposable plastic scoop;
2. A field composite was created from the collected soil;
3. Samples, including VOC's were then collected from the composited material; and,
4. Samples were placed in a cooler with ice and delivered to a courier from the lab.

According to the original COC:

- WC-1 was sampled on October 12, 2001 (from seven (7) roll-offs) and analyzed for TCL VOC's, PCB's, RCRA 8 Metals, Hydrocarbon Fingerprint, Corrosivity, Reactivity and Ignitability. There were four (4) VOA vials and two (2) 8-oz. glass jars sent to the lab. No SVOC's were analyzed (unless added later) and Arsenic was part of the RCRA 8 Metals.
- WC-2 was sampled on October 23, 2001 (from five (5) roll-offs) and analyzed for TCL VOC's, PCB's, RCRA 8 Metals, Hydrocarbon Fingerprint, Corrosivity, Reactivity and Ignitability. There were a total of seven (7) containers sent to the lab but it does not specify how many of each type were sent. There would have been more 8-oz. glass jars for this sample since SVOC's were added to the list.
- VOC's were collected using a soil syringe to acquire the correct amount (FWENC believes it was 10 grams) of soil for each vial. If there were more vials for WC-1 then it was probably a lab QC check.

EPA Comment #6:

Section 5.1, Pages 5-1

Please expand the discussion in this section to provide the ramifications of not collecting the field quality control samples required by the work plan. Field quality control samples are used to assess the adequacy of the sample collection techniques and the sample handling procedures. Without the required quality control samples it is difficult to properly assess the sampling protocol. This calls into question the results of the sampling effort. Reliable data are required in particular for the confirmation samples, which are intended to demonstrate that the remedial action objectives have been met and that the site risks are acceptable for the intended site use. Because the field quality control samples are not available to document the appropriateness of the field sampling protocol, the RA Report should be edited to add credibility to the sampling data by including detailed descriptions of the sampling procedures used. Include the following information as a minimum:

- Sample collection methods including personnel, equipment and decontamination procedures used, and whether disposable or reusable collection equipment was used.
- Description of sample containers, container preparation methods, and amount of sample collected relative to the size of the container (i.e., % full).

- Description of how samples were handled immediately after collection.
- Copies of all pertinent field notes made related to sample collection.

Response #6:

All samples were collected by the Project QC/Engineer. All samples, except VOC's, were collected using disposable plastic scoops and soil was placed directly into 8-oz. glass containers. VOC's were collected using a disposable plastic soil syringe and soil was placed directly into VOA vials. No decontamination of equipment was required.

Sample containers were provided by the lab and certified to be clean. All sample containers, except VOA vials, were filled to between 95% and 100% capacity. VOA vials received a pre-determined amount of soil added to a vial that already contained a preservative.

All samples were placed in a cooler with ice immediately after collection.

FWENC will include the Quality Control (QC) field logbook notes in the final document.

EPA Comment #7:

Section 8.0, Pages 8-1

This section does not provide an adequate assessment and discussion of the ROD cost estimate compared to the actual RA costs. Please edit the text to provide a discussion of the reasons the actual cost significantly exceeded the estimated cost. If work was performed that was not included in the cost estimate, that additional work needs to be identified together with the associated costs so that the reasons for the cost differential can be properly identified. Once the scope of work for the estimate and the actual costs have been reconciled, the actual costs can be properly compared to the ROD estimate and the percent difference calculated. In table note 1, the actual escalation based on the cost index information is 2.5% (rounded to 3%) not 1.03% as this note states. Please correct.

Response #7:

The escalation rate has been changed to 2.5%. Also, the ROD estimate included excavation, disposal and sampling activities only. FWENC's cost includes development of the Work Plan, Health and Safety Plan and Closure Report associated with this scope. Costs also included are home office management, field construction oversight, equipment fuel, surveying, mailing, copying, computer time and fee.

EPA Comment #8:

Section 10.0, Page 10-2

In accordance with the report guidance, please add EPA's contractor, Gannett Fleming, Inc. to Table 10-1 using the following information:

Jennifer Stump, Project Manager
Gannett Fleming, Inc.
207 Senate Avenue
Camp Hill, PA 17011
Phone: (717) 763-7212

Response #8:

The comment has been noted and the appropriate text has been added to the Revised Final Remedial Action Report.

EPA Comment #9:

Appendix A

Please add a cost table, similar to Table 1, to this appendix for the ROD estimate. This will facilitate the comparison of the ROD and actual costs.

Response #9:

Table 2 has been added to Appendix A to include the ROD estimate for Alternative 3b:

TABLE 2 ROD ESTIMATED COSTS		
TASK	COST	QUANTITY
Excavation, Disposal, Sampling & Site Restoration	\$81,200	199 cubic yards

EPA Comment #10:

Appendix F

Edit WCSD3 to show a line (109 feet long), rather than a point, to depict the Figure 3 multiple sampling locations along the drainage ditch. What is the significance of the survey data provided on this figure? The points shown are not the center of the excavations based on a review of the survey data in Figure 6. Please explain, and consider deleting, the survey data from this figure as it appears to have no relevance.

Response #10:

Figure 3 has been revised to locate WCSD3 as a line rather than a point. Also, the survey data shown on this Figure was provided by Tetra Tech NUS to FWENC, such that we could locate the actual locations sampled, in order to perform our excavations. The survey data in Figure 6 is confirmatory sample locations performed by our surveyor (Compass Engineering).

EPA Comment #11:

Appendix F

After the line "Available Use: Residential," please delete "Dibenz (a, h)anthracene: Figure 5 Not Applicable" and insert "Controls to Ensure Restricted Use: Not Applicable." Edit Note (a) to delete references to Connecticut Remediation Standard Regulations because they are not pertinent for sediment.

Response #11:

Dibenz(a,h)anthracene has been detected and the phrase "controls to ensure restricted use" inserted. Note (a) has been deleted from the Figure.

EPA Comment #12:

Appendix A

Please add a note to the figure indicating that the locations of features depicted are Figure 7 only approximate and not based on survey data, if correct. Also, please correct obviously incorrect features (without completely redrawing the base map) such as the two outfalls east of TB5, which do not exist (but apparently join and continue to TB5). In lieu of editing the figure to add the storm water drains, add a note on the drawing that indicates sample location TB5 was selected because it is the outfall location for storm water collected in the southwestern bunker area.

Response #12:

The two (2) outfalls shown on Figure 7 have been removed. Also, the requested note has been added to the Figure.