

## MINUTES OF JUNE 14, 1994 MEETING

**TO:** Attendees

**FROM:** Barry Giroux  
Project Manager (Atlantic Environmental Services, Inc.)

**DATE:** June 22, 1994

**RE:** Installation Restoration Study  
Naval Submarine Base - New London  
Groton, Connecticut  
N62472-88-C-1294  
Atlantic Project No.: 1256-14-05

### ATTENDEES:

The following people attended the meeting.

|                    |                                |
|--------------------|--------------------------------|
| Barry Giroux       | (Atlantic)                     |
| Paul Burgess       | (Atlantic)                     |
| Mark Evans         | (Northern Division)            |
| Richard Conant     | (Submarine Base Environmental) |
| Christine Williams | (EPA)                          |

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The purpose of these minutes is to document the discussion items and agreements regarding the resolution of EPA-written comments dated May 27, 1994; these comments were generated by EPA from review of the Focused Feasibility Studies for the DRMO and Spent Acid sites.

Prior to discussing each EPA comment, Christine Williams had two general comments regarding the status of the Phase I RI Risk Assessment and results of the Navy's evaluation of revising the target cleanup level for lead at the DRMO from 1,000 to 500 ppm, as suggested by CTDEP. Mark Evans indicated that the Navy will soon respond in writing to EPA and CTDEP regarding the target remediation level for lead.

The issue regarding the status of the risk assessment is based upon comments from the EPA regarding the Phase I RI report contained in a letter dated October 16, 1992. The Navy's response to this comment is contained in a letter prepared by Atlantic and dated December 14, 1992. It was agreed at that time (December 1992) to implement a Phase II Remedial Investigation (RI); therefore, certain revisions to the Phase I RI, specifically the Risk Assessment, served no purpose because these revisions were more appropriate for inclusion in

the Phase II RI report, which would utilize the results of subsequent (Phase II) field investigation. The Navy's December 14, 1992 response, along with previous responses to EPA comments, are enclosed for your review. Pertinent sections of the responses to comments relating to Risk Assessment are highlighted. It should be noted that the risk memorandums and target remediation levels take into account the EPA comments on the Phase I RI report and the results of a supplemental field investigation conducted by Atlantic in the fall of 1993, and are presented in Section 2.0 of the Focused Feasibility Studies.

#### **Cover Letter Paragraphs 2 through 4**

Based on these comments, the remedial action for the soils operable unit (OU) at the DRMO will be an interim action due to the possibility that additional soil removal may be necessary regarding future remedial actions for the groundwater OU at this site. In addition, another alternative, which provides for hot spot removal and utilizes a bituminous concrete cap, will be evaluated.

#### **Cover Letter Paragraph 5**

The Navy is developing a stormwater pollution prevention plan for this site pursuant to Section 22a-430b of the Connecticut General Statutes. This plan will be designed to prevent any future contamination of this area.

#### **Cover Letter Paragraphs 6 and 7**

Although not the original intent of the document, in agreement with the Navy and at the request of the EPA, the documents will be revised to be "stand-alone" documents by including pertinent summary information from previous reports. In addition, specific revisions, in response to EPA comments, will be made and discussed herein. The detailed narrative regarding the evaluation of process options will remain as an appendix; however, additional and clearer references to this appendix will be provided, as appropriate, in the body of the report.

### **GENERAL COMMENTS ON ALL FOUR FFSs**

#### **SECTION 1.0**

The FFSs will be revised to address these comments by preparation of a stand-alone document, as described in the previous response to the comment in Paragraphs 6 and 7 of the cover letter and as necessary to address the specific comments. Any clarifications or discussions regarding specific comments presented as follows.

**Comment 1.0:** The informational flow of the narrative will be from general to site-specific whenever logical.

**Comment 2.0:** To address the relationship between the Subbase and the community, the following will be provided in the FFS: demographic information from the Phase I RI; general information regarding civilian residents who work for the Navy; and community relations activities.

**Comments 3.0 - 4.0:** No specific clarifications necessary; information will be provided.

**Comment 5.0:** Descriptive detailed site histories will be provided only for the sites which are the subject of the FFSs.

**Comments 6.0 - 7.0:** No specific clarifications necessary.

### **SECTIONS 2.0, 3.0, and 4.0**

As with Section 1.0, making the FFSs stand-alone documents will address the majority of the concerns raised in the commentary on these sections. Specific discussions/clarifications are presented as follows:

**Comment 8.0:** No specific clarifications necessary.

**Comment 9.0:** All methodology descriptions will be included as an appendix. These descriptions will summarize the methodologies and will not include detailed field operating procedures.

**Comment 10.0:** No specific clarifications are necessary; the text will provide better referencing.

**Comment 11.0:** The conceptual models to be provided will be similar to Figures 3-2, 3-4, and 4-3 in EPA "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (EPA/540/G-89/004).

**Comment 12.0:** When ARAR or TBC values are referred to specifically, the TBC values and sources will be provided.

**Comment 13.0:** The text will be clarified regarding usage of the term ARAR.

**Comment 14.0:** In addition to supplying a summary of the Phase I RI risk assessment, it will be made clear why a residential scenario is not used for establishing target remediation levels.

**Comment 15.0:** This comment only refers to Step 1 of the evaluation process.

**Comment 16.0:** To address this comment, Table 3-5 "General Response Actions" will be expanded to provide or explanation of how a particular technology meets the remedial action objectives.

**Comment 17.0:** The quoted terms will be defined. As this is a screening, a detailed narrative is not required; however, the screening comments will be reviewed to ensure they are complete.

**Comment 18.0:** Clearer references will be provided to the appendix containing the evaluation of process options.

**Comment 19.0:** The screening comments will be reviewed and more detailed justifications will be provided where required.

**Comment 20.0:** All references to the Navy SOW will be deleted.

**Comment 21.0:** When references to the NCP are made, it will be clarified when the NCP is being quoted versus when it is being paraphrased.

**Comment 22.0:** A table will be provided or Table 4-1 will be expanded to indicate which NCP criteria each alternative meets.

**Comment 23.0:** Cost and effectiveness are two separate criteria. Clearer references will be provided to the cost estimates which detail quantities and unit costs for each alternative and the appendix which contains the basis for unit costs. In addition, the volume of waste treated or removed will be specified.

**Comment 24.0:** Since there is no specific guidance from EPA regarding numerical or quantitative weightings to use, the justifications in the screening section will be expanded to better explain the basis for retaining or not retaining an alternative.

**Comment 25.0:** This comment will be moved to the cost section.

**Comment 26.0:** The cost evaluation will be revised to include the wording in this comment.

**Comment 27.0:** This change will be made.

**Comments 28.0 and 29.0:** The EPA will provide Atlantic with recommended wording to use in this section. The FFS will not be revised to evaluate state and community concerns. These concerns will be addressed in the Record of Decision (ROD).

## **SPECIFIC COMMENTS**

### **DRMO**

**Comment 1:** We agree. These concerns are addressed in the Phase II RI Work Plan.

**Comment 2:** When the FFSs are made stand-alone, all information that is available will be provided.

**Comment 3:** The predicted risk levels for DDT in the Phase I RI will be provided and the text will state that these levels are within the EPA's acceptable risk range.

**Comment 4:** Since this will be an interim action, this comment is moot; however, it was clarified that target cleanup levels for soils, based on pollutant mobility, will only be required by EPA if groundwater results indicate a risk or exceed ARAR levels.

**Comment 5:** The typographical error will be corrected.

**Comment 6:** A reference to the NCP will be added.

**Comment 7:** No clarification necessary.

**Comment 8:** The comment is moot since the FFS will now be for an interim action for remediation of the soils OU.

**Comment 9:** Hydrologic information will be included in the stand-alone report, and an additional alternative, as suggested, will be added to the FFS.

Enclosed is information which Atlantic feels demonstrates that freeze/thaw is not a concern regarding the integrity of the bentonite cap layer (GeoServices, Inc., November 11, 1988 and R.M. Koerner, December 14-15, 1993). EPA indicated that they have information indicating the opposite, and they will be providing this information to the Navy.

We agree that the cap proposed does not match the cap described in RCRA guidance; however, it does comply with RCRA regulations. ARARs do not include guidance. The Navy will have additional discussions with the EPA regarding this issue. Regarding DRMO, this point will be moot if the alternative consisting of an asphalt cap is selected as an interim cap for the DRMO.

**Comment 10:** The revisions described will be made.

**Comment 11:** All references to liability will be removed from the FFS.

**Comment 12:** Accessible soil will be defined in the glossary and references to contaminant mobility as a remedial action objective will be deleted.

**Comment 13:** These changes will be made.

**Comment 14:** The suggested clarification wording changes will be made. The option of implementation in conjunction with remedial action at other sites will be deleted from the FFS.

**Comment 15:** These changes will be made.

**Comment 16:** These changes will be made. This is an interim action to be implemented as soon as possible. Therefore, undeveloped innovative technologies are not appropriate.

**Comment 17:** The alternative described will be developed and evaluated.

## SPENT ACID

Comment Paragraph 1: See DRMO, Comment 16.

Comment Paragraph 2: The FFSs will now be stand-alone documents and include this information.

Comment Paragraph 3: The ultimate remediation depth and the fact that confirmation samples will be collected from the excavation bottom and sidewalls will be clarified.

Comment Paragraph 4: There is no correlation. This will be discussed in the FFS.

Comment Paragraph 5: See Spent Acid, Comment Paragraph 3.

Comment Paragraph 6: Appendix references will be corrected.

Comment Paragraph 7: As discussed, the initial excavation is based on existing data which does include more than one sample below a depth of two feet; however, it will be made clear that the excavation bottom will be sampled and that the excavation will continue until the target cleanup standard or the elevation of groundwater is reached.

Comment Paragraph 8: Since this FFS will now be for an interim action, the point is moot.

Comment Paragraph 9: Currently, there are no formal procedures to maintain the existing pavement; however, risks at this site have been qualitatively predicted to be low. The risks qualitatively estimated for this site will briefly be explained again in this section.

Comment Paragraph 10: Due to the age of these tanks, which were last used prior to 1970, the Underground Storage Tank regulations are relevant and appropriate.

Comment 11: This explanation is provided in a previous section; however, it will be explained again in this section to allow an easier understanding of the evaluation of alternatives.

## AREA A LANDFILL

Comments 1 through 20: These comments were also discussed. A supplement to the meeting minutes will be prepared regarding these discussions as a separate document.

It was agreed that responses by the Navy to EPA's comments on the work plans would not be necessary and that the work plan comments will be used as a departure point on which to view the FFS comments as suggested by the EPA.

Further comments from the EPA will be submitted to the Navy as soon as possible and probably early next week (i.e., the week starting on June 19, 1994).

A proposed schedule to complete these projects, which was developed with EPA, is as follows:

**PROPOSED SCHEDULE**

| <b>Project</b>                              | <b>Scheduled Completion Date</b> |
|---|----------------------------------|
| Fact Sheet (describing status of all sites) | June 30, 1994                    |
| Revised Proposed Plan and FFSs to Navy/EPA  | July 8, 1994                     |
| EPA Comments on Proposed Plan and FFSs      | July 22, 1994                    |
| Public Notice                               | August 1, 1994                   |
| TRC Meeting                                 | August 11, 1994                  |
| End of Public Comment Period                | September 1, 1994                |
| Draft ROD                                   | September 30, 1994               |

**DRAFT**  
**SUPPLEMENT TO THE**  
**MINUTES OF JUNE 15, 1994 MEETING**

**TO:** Attendees

**FROM:** Barry Giroux  
Project Manager (Atlantic Environmental Services, Inc.)

**DATE:** August 10, 1994

**RE:** Installation Restoration Study  
Naval Submarine Base - New London  
Groton, Connecticut  
N62472-88-C-1294  
Atlantic Project No.: 1256-14-05

**ATTENDEES:**

The following people attended the meeting.

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| Barry Giroux       | (Atlantic)                     |
| Paul Burgess       | (Atlantic)                     |
| Mark Evans         | (Northern Division)            |
| Richard Conant     | (Submarine Base Environmental) |
| Christine Williams | (EPA)                          |

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The purpose of these minutes is to document the discussion items and agreements regarding the resolution of EPA-written comments dated May 27, 1994, regarding the Focused Feasibility Study (FFS) for the Area A Landfill. These minutes are a supplement to previous minutes which document discussion items and agreements regarding the resolution EPA-written comments regarding the FFSs for the DRMO and Spent Acid sites and general comments regarding all of the FFSs.

**Area A Landfill Specific Comments**

**Comment 1:** The Navy is presently exploring the option of moving the toe of the landfill slope to avoid any filling of wetlands. If this option is not selected, further discussions with EPA regarding the scope of the wetlands quality assessment and mitigation methods will be required.

**Comment 2:** The Navy proposes to sample the edge of the wetland along the toe of the existing landfill slope to determine whether there is an exposure route for PCBs to ecological receptors. If ecological receptors are potentially at risk, an appropriate target cleanup level for these receptors will be developed.

- Comment 3:** As stated above in response to Comment 1, moving the limits of the landfill cover out of the wetlands is being evaluated. It should be noted that even if this is done, removal of contaminated materials from the wetland may still be required, along with restoration of these removal areas.
- Comment 4:** The revised FFS will contain data (copy enclosed) documenting the extent of contaminated landfill materials which is presently contained in the design analysis for the Area A Landfill Cap.
- Comment 5:** The Navy agrees to perform additional sampling at the wetland/landfill boundary.
- Comment 6:** This issue could not be resolved during the meeting. Further discussion will be required regarding the RCRA cap issue.
- Comment 7:** The revision suggested by this comment will be made.
- Comment 8:** The text will be clarified to further explain the rationale for the two target cleanup levels for PCBs. There is a 10 ppm standard for surficial soils (0 to 1 foot) and a 50 ppm standard for subsurface soils (1 to 8 feet).
- Comment 9:** The statement regarding concurrence from other agencies will be deleted.
- Comment 10:** We agree that water quality criteria (WQC) are relevant. In this section, we are just making the statement that some of the numeric WQC may not be appropriate for the habitats of concern. We will provide further explanation of this statement and provide a reference to the EPA Guidance that is the basis of the statement.
- Comment 11:** Appendix F is subsection 4.11.1 from the Phase I RI. No pages are missing. Subsection 4.11.1 begins and ends in the middle of a page. The text on the other half of these pages is not relevant or complete.
- Comments 12-14:** Appendix F is subsection 4.11.1 from the Phase I RI. Table references are references to tables in the Phase I RI--not in the FFS. Subsection 4.11.2 presents data for the Area A Wetland and was not included in Appendix F other than by this section starting at the end of subsection 4.11.1. The revised FFS will include a summary of the analytical data from Area A Wetland.
- Comment 15:** The purpose of the interceptor trench is solely to collect shallow groundwater. The FFS will be revised to include a summary of information from the Phase I RI regarding groundwater flow and quality.
- Comment 16:** A conceptual model will be prepared to clarify the statement made. The capping of the landfill is an interim action. The Navy intends to address the issue of groundwater flowing through landfill contents as part of the evaluation of the groundwater operable unit at this site.

**Comment 17:** Atlantic provided the EPA with the information used to determine that frost will not adversely impact the bentonite liner with the first section of minutes for this meeting. This information consists of studies performed by a manufacturer (Claymax) and statements made in a paper by Dr. Koerner.

**Comment 18:** As stated in response to previous comments, further discussions are required with EPA regarding the RCRA cap issue.

The cap will include a drainage layer and the issue of stresses has been evaluated in the design analysis for the cap. Based on this analysis, the cap will not be adversely effected by settlement or proposed loads for this area.

**Comment 19:** Figure 5-1 will be revised to make it clear that a cap is not proposed for OBDA.

**Comment 20:** As stated, Figure 5-1 will be clarified to indicate a cap is not proposed for OBDA. Further detail will be added to the cap detail to ensure that the cap detail and text are consistent.