

**MINUTES OF TECHNICAL REVIEW COMMITTEE (TRC)
AND PUBLIC MEETING
AUGUST 11, 1994**

TO: NSB-NLON TRC Members

FROM: Barry Giroux and Paul Burgess
Atlantic Environmental Services, Inc.

DATE: September 2, 1994

RE: Technical Review Committee and Public Meeting - August 11, 1994
Installation Restoration Study
Naval Submarine Base - New London
Groton, Connecticut
Contract No. N62472-88-C1294
Atlantic Project No.: 1256-33-01

ATTENDEES:

The following people attended the meeting.

Matt Cochran	(Halliburton, NUS)
Susan Pezzullo	(Ledyard Resident)
Barry Giroux	(Atlantic Environmental Services, Inc.)
Erik Ness	(Atlantic Environmental Services, Inc.)
Richard Conant	(Subase NLON)
Suzanne Berkman	(Subase NLON)
Christine Williams	(U.S. EPA)
Andy Stackpole	(Subase NLON)
Mark Evans	(Northern Division Naval Facilities Engin. Command)
Simeon Hahn	(Northern Division Naval Facilities Engin. Command)
Charles Menzie	(Menzie-Cura & Associates, Inc.)
William Mansfield	(Subase NLON)
Leo Kay	(Community Relations Coordinator, U.S. EPA)
Ken Finkelstein, Ph.D.	(NOAA)

Suzanne Berkman opened the meeting and welcomed all attendees.

REVIEW OF MAY 17, 1994 TRC MINUTES

Ms. Berkman reviewed the major areas of discussion as outlined in the meeting minutes from the previous TRC meeting. The following items are a list of points made regarding the minutes of the May 17 meeting.

- She indicated that the Building 31 project was proceeding well, and that an update on this project would be given at the next TRC meeting.

- She stated that, at the previous meeting, a presentation regarding the transition of the TRC to a Restoration Advisory Board (RAB) was given. She explained that an update concerning the status of the changeover would be presented.
- She mentioned that an update of the Interim Remedial Action projects was given at the last TRC meeting, and that an update was scheduled for this meeting regarding those projects.
- She explained that a presentation on the Phase II Investigation was given at the last TRC meeting, and that an update on this project was also scheduled for today's agenda.
- She indicated that a presentation on Risk Assessment was given at the last TRC meeting and that an update on the Ecological Sampling was to be provided as part of today's discussions.

RAB PRESENTATION

Suzanne Berkman introduced Andy Stackpole, who gave a presentation regarding the status of the RAB. The following points were made during the presentation:

- Approximately 250 letters soliciting persons in the community interested in serving on the RAB have been sent out and approximately 10 to 15 responses have been received.
- The next step after the RAB members are established, is to get the members together to elect the RAB co-chairman to represent the community. This task should be completed by the end of September.
- By the next meeting, it is expected that transition from the TRC to the RAB should be complete.

INTERIM REMEDIAL ACTIONS PRESENTATION

Suzanne Berkman introduced Mark Evans, who gave a presentation on the status of the four IRA sites. Following are the major points made during the presentation:

Area A Landfill

- The draft final Focused Feasibility Study for Area A landfill, which incorporates all comments and responses to those comments on the draft report, will be submitted to the RAB for review by September 30.

Comment: Christine Williams questioned whether a copy of responses to comments could be sent out two weeks early so a meeting could be held with the regulators in order to facilitate the completion of the draft final report.

Response: Mark Evans indicated that this could be done.

DRMO and Spent Acid

- The DRMO and Spent Acid sites will not proceed as interim remedial actions, but rather will be handled like the Building 31 lead removal project, which was a time-critical removal action.
- The draft action memorandum, fact sheet, and public notice for the removal actions at the DRMO and Spent Acid sites is scheduled to be completed by mid September.
- The cleanup level for lead at the DRMO has been changed from 1,000 ppm to 500 ppm in response to comments made by CTDEP.

Comment: Christine Williams questioned how the 10 ppm cleanup level for PCBs equals an average cleanup level of <2 ppm.

Response: Barry Giroux explained that, by removing the hot spot areas of contamination to 10 ppm or lower, the data for all locations which contain a range of levels for PCBs in soil will have an average concentration of PCBs below 2 ppm. In response to further questions on this subject, it was indicated that a value of one half the detection limit would be assigned to all points where no contamination is detected.

- Construction for the DRMO site is planned for October, and construction for the Spent Acid site for next spring.

Area A Downstream/OBDA

- The interim remedial action for Area A Downstream/OBDA is on hold and will be completed as a final action at a future date. The Area A Downstream IRA target remediation level had been developed using human health-based risk values; however, concern regarding the ecological aspects of this site has prompted a more in-depth ecological study of the downstream area. A work plan will be developed which will allow this work to be performed by early next spring. This would allow for a draft feasibility study by November of next year.

Comment: Christine Williams questioned when the Work Plan would be completed.

Response: Mark Evans indicated that it should be completed by November of this year.

Comment: Matt Cochran indicated that he would like to have a meeting to scope the work plan with the regulators using a scoping matrix to streamline the process.

Response: Christine Williams indicated that it appeared to be a good idea, and she would later confirm whether such an approach is acceptable to EPA.

Comment: Leo Kay questioned the status of the community relations plan concerning the fact sheets.

Response: Mark Evans indicated that the Navy was planning on distributing one fact sheet which gives a summary of the IR program next week.

Comment: Leo Kay questioned whether he could see a draft of it before it goes out to the public.

Response: Mark Evans indicated that would be no problem.

Comment: Leo Kay asked what is the time scale for the DRMO and Spent Acid removal actions fact sheet.

Response: Barry Giroux indicated that the Action memorandum and the Fact Sheet will come together as one package, which is due to the Navy as a draft by the end of August. When they get released is dependent on how long it is required to review and revise them.

Comment: Christine William questioned when would the draft be available under the FFA for the regulators to review it.

Response: Barry Giroux indicated that by the third week of September and that, hopefully, the fact sheet can be released first.

Comment: Leo Kay questioned how the RAB meetings would be advertised.

Response: Andy Stackpole indicated it would likely be through a mailing and possibly the Fact Sheet, which summarizes the status of the IR program.

Comment: Leo Kay indicated that he thought that the letter regarding the RAB sent out to the public was too technical and hard to follow. He felt that, in mailings to the public, the Navy might want to tone down the use of acronyms and in-depth technical discussions.

Comment: A question was asked if there was going to be a cap placed over the DRMO site, given the changes in the project status.

Response: Mark Evans indicated that a cap is still planned for the site.

- Mark Evans also indicated that the remedial action contractor will be developing a work plan for the DRMO and the Navy will make the work plan available for the public to review. Copies will be sent to the CTDEP and the U.S. EPA, as well as to the public repositories. Any other persons who require a copy should request one from him.

There were no more questions regarding this presentation.

PHASE II ROUND 1 GROUNDWATER SAMPLING RESULTS

Matt Cochran gave an overview of the first round of groundwater results which were performed as part of the Phase II Remedial Investigation. The Draft Phase II report, which will discuss the data, is due to the Navy at the end of November. A handout was provided which presented maps indicating organic compounds and their concentrations at each site. Inorganic concentrations were not included on the maps; however, the tables at the back of the handout provided all of the analytical results. Key points made during the discussion are as follows:

- **CBU Drum Storage Area.** Very low concentration of volatiles were detected in groundwater.
- **OBDANE.** There were no volatile or semivolatile compounds detected in groundwater.
- **Rubble Fill at Bunker A86.** Groundwater contained very low concentration of VOCs, which do not appear to be of concern.
- **Torpedo Shops.** ARARs for bis-2 ethyl hexyl phthalate were exceeded at two locations; however, it is suspected that they may be due to laboratory contaminants as bis-2 ethyl hexyl phthalate is a plasticizer, which is a recognized lab contaminant. The remaining levels of compounds detected in groundwater at this site do not appear to be of major concern.
- **Goss Cove Landfill.** Groundwater contains a number of compounds which were detected above ARARs and TBCs. It was noted that monitoring wells 8MW8S and 8MW8D were intended to be upgradient background monitoring wells for the site; however, elevated levels of perchloroethylene were detected, as well as several other compounds which indicate a possible upgradient source of contamination.
- **Spent Acid Storage and Disposal Area.** Groundwater contained very low levels of VOCs and SVOCs; however, elevated lead was detected in an unfiltered sample of groundwater collected from 15MW3S. It was noted that this same sample, when filtered, contained no lead above the detection limit.
- **Area A Landfill.** Groundwater was not found to contain a large number of compounds which exceed ARARs or TBCs.
- **Area A Wetland.** Groundwater was found to contain only low concentrations of VOC and SVOC compounds in groundwater.
- **Weapons Center.** Groundwater contained only very low levels of VOC and SVOC compounds.
- **Area A Downstream/OBDA.** Groundwater was found to contain several compounds above ARARs and/or TBCs only at a few locations. Of major concern at this site is

the detection of high concentrations of vinyl chloride in monitoring well 2DMW29S at a concentration of 130 ppm. It was proposed that the EPA split samples with Halliburton NUS during a third round of sampling at this well. Christine Williams agreed with this idea.

- **DRMO.** Very slight exceedances of ARAR/TBCs were observed in groundwater from monitoring well 6MW2D at this site. Very low levels of VOCs and SVOCs were detected at four of the other locations. It was noted that the background wells 6MW6D and 6MW6S are actually located adjacent to Barb road and are incorrectly located on the figure.

Comment: Ken Finkelstein questioned whether sediment data in the Thames River indicated that lead levels were elevated adjacent to the DRMO site.

Response: Charlie Menzie indicated that all of the Thames River sediment data had not been completely reviewed at this time.

- **Lower Base.** Groundwater sample results indicate the presence of a variety of compounds at very low levels. Several SVOC were detected slightly above ARARs at four locations.

Comment: Sue Pezzullo questioned whether any further testing was being performed to determine whether plasticizers are a contaminant concern at any of the sites (i.e., bis-2 ethyl hexyl phthalate).

Response: Matt Cochran indicated that the compound is not of concern at this time as it is likely a lab contaminant; however, if the levels reported above ARARs were to "drive the risk" then further consideration would be given to the source of the compound.

There were no further questions on this presentation.

ECOLOGICAL SAMPLING PROJECT UPDATE

Suzanne Berkman introduced Charlie Menzie, who gave a presentation on the Ecological Sampling of the Thames River which included the sampling of mussels, oysters, and clams. A handout containing the analytical results for these materials was provided. The major points of the presentation are as follows:

Introduction

- Two sampling techniques were used at the site. They include: (1) deploying mussels in cages in the Thames River for one month and sampling the deployed (caged mussels and (2) sampling native mussels, clams, and oysters.
- Lead, DDT, VOCs, and PCBs were the compounds of concern for the ecological study due to their presence at other sites on the Subase.

Deployed River Mussel Samples

- PCBs were below detection levels in deployed mussels.
- Pesticides were found at comparable levels in deployed and nondeployed mussels.
- VOCs were slightly elevated in mussels placed adjacent to the Goss Cove area.
- PAHs were found to be slightly elevated in the deployed mussels.
- Metals concentrations essentially showed no difference between deployed and nondeployed mussels, at most, differences of a factor of 2 or 3.

Comment: Ken Finkelstein questioned how long was the duration of exposure for the caged mussels.

Response: Charlie Menzie said that the caged mussels were in place for 30 days.

Comment: Ken Finkelstein questioned whether Charlie Menzie thought that 30 days was long enough as NOAA's mussel watch program uses 90 days.

Response: Charlie Menzie indicated that, in addition to the caged mussels, there were also the indigenous mussels, clams, and oysters, which were sampled. However, it is possible that if the caged mussels were left in place for a longer period of time they may have accumulated higher concentrations.

- The mussels selected for the caged study were collected from Great Bay, New Hampshire. They were selected due to their absence of PCBs, and low levels of DDT. They also contained levels of metals comparable to mussels from other locations which were considered.
- At the Goss Cove there appears to be a greater number of contaminants present in caged mussels than appear in caged mussels from other locations. This information is consistent with the comparable levels of contaminants in groundwater at the Goss Cove compared to groundwater contaminants at the Lower Base and the DRMO, for example.
- There is one complicating factor at the Goss Cove site, which is the large stormwater outfall that empties into the Thames adjacent to the Nautilus museum.

Native Mussel and Clam Samples

- For native mussels and clams, there were no PCBs detected.
- Low concentrations of pesticides were detected in native mussels and clams but were comparable to levels found at other reference locations.
- SVOCs in native mussels and clams were also observed at very low levels.
- Metals in the native mussels and clams were observed at levels comparable to NOAA mussel watch data.

- For boron, the mussels near the base contained higher levels than mussels collected from upstream.

Comment: Ken Finkelstein questioned whether the mussels from New Hampshire were Blue Mussels.

Response: Charlie Menzie indicated that they were Ribbed Mussels (*Modiolus demissus*)

Comment: Ken Finklestein questioned what type of mussels were found to be native to the Thames River.

Response: Charlie indicated that they were the Blue Mussels (*Mytilus edulis*).

Native Oyster Samples

- For the native Oysters, there were no PCB detections.
- The pesticide Heptachlor was detected at very low levels.
- No SVOCs were detected except for bis-2 ethyl hexyl phthalate.
- There were elevated levels of all metals; however, there is some question as to why this is. Therefore, the data are being reviewed to ensure there was no laboratory error.

Comment: Ken Finkelstein questioned whether there were any effects data collected (i.e., differences in size and weight, etc.)

Response: Charlie indicated that this was not done.

There were no more questions regarding this presentation.

NOTE:

Handouts which are referenced herein were provided during the presentations; however, due to the volume of the handouts, they are not appended to these minutes. TRC members may obtain a copy of any of these materials by contacting Mark Evans, NORDIV Project Manager, at (215) 595-0567.

Suzanne Berkman indicated that the next meeting will be tentatively scheduled for November 9 at 1:00 pm. The following agenda items are proposed:

- The status of the DRMO
- The status of the Building 31 Project.
- The Status of the Phase II Investigation
- The Thames River sediment analytical results