SUMMARY MEETING MINUTES
TECHNICAL REVIEW COMMITTEE MEETING

Date of Meeting: February 18, 1992

Project: Installation Restoration (IR) Program
Indian Head Division
Naval Surface Warfare Center,
Indian Head, MD 20640-5035

Meeting Participants:

Ms. Sherry McCahill*	Mr. Shawn Jorgensen*
Mr. Paul Berkman*	Mr. Milton Marder*
Ms. Suzanne Berkman	Mr. George Maurer**
Mr. Jeff Bossart*	Mr. Kenneth Morin*
Mr. Ed Carlson*	Mr. Mark Schoppet*
Ms. Jennifer Dean*	Ms. Susan Smith
Mr. Stephen Elder**	Mr. Terry Smith
Mr. Bob Foley**	Ms. Susan Weber*
Mr. Vincent Hungerford*	

* Member
** New Member

Technical Review Committee Members Not in Attendance:

Mr. Larry Abell	Mr. Jim Story
Dr. Gerald Schuster	Capt. E. P. Nicholson

Major Issues Discussed/Accomplished:

1. Meeting Introduction

Mr. Ken Morin conducted the meeting introduction. Because of the number of new Technical Review Committee (TRC) members, we introduced ourselves to one another again.

2. Contractor Change

Mr. Morin discussed the fact that our current contractor, ABB Environmental Services, for the Site 8, Building 766 removal action, may no longer be working with us. The reason being that the Economic Recovery Act states that federal agencies cannot contract with other federal agencies for work that non-government contractors can do. This means that the contract that the Chesapeake Division, Naval Facility Engineering Command, has with the Department of Energy (DOE) must be terminated. The DOE had subcontracted Martin Marietta, who subcontracted ABB Environmental, to perform the work required at Site 8.

ENCLOSURE(2)

In addition, Paul Berkman added that since rates have already been established, modifications to the contract are easier to make with a Comprehensive Long-term Environmental Action Navy (CLEAN) contract, and the time required to award the contract is also reduced.

Mr. Morin then stated that CHESDIV will be using either the Southern Division, Naval Facility Engineering Command (SOUTHDIV) or the Northern Division, Naval Facility Engineering Command, (NORTHDIV) CLEAN contract for continued work at Site 8. SOUTHDIV has a CLEAN contract with both ABB Environmental and Ensafe/Allen & Hoshall. NORTHDIV has a CLEAN contract with Halliburton NUS Environmental Corporation. Therefore, any one of the three contractors will continue the work that was begun by ABB Environmental. Hopefully, the contract for the removal action will be awarded by the end of fiscal year (September 30) 1992.

3. Facility Name Change

Sherry McCahill mentioned that as a result of the Navy reorganization, the Naval Ordnance Station's name and address has been changed to the following:

Indian Head Division
Naval Surface Warfare Center
101 Strauss Avenue
Indian Head, MD
20640-5035

Sherry also stated that the type of work performed at the facility will not change.

4. Engineering Evaluation and Cost Analysis (EECA) Review

Mr. Terry Smith of ABB gave a quick overview of the EECA and addressed the comments made by the Maryland Department of the Environment (MDE). These comments and responses are enclosed in Attachment A.

Mr. Ken Morin and Terry Smith then addressed other questions and concerns that TRC members had concerning the EECA. These questions and responses are enclosed in Attachment B.

As a result of some of the comments from TRC members during the meeting, other information must be incorporated into the EECA. These comments, and ABB's responses stating their locations in the EECA are enclosed in Attachment C.

5. Additional Information

Milton Marder of the MDE passed on a few words of wisdom that he learned through past experiences concerning TRC meetings. While trying to decide whether we should still hold the May 18, 1992, TRC meeting, Mr. Marder suggested that we have the meeting as

scheduled. He pointed out that we don't necessarily have to review a document to have a meeting. We can discuss where we are on the cleanup program and where we are going. In addition, Mr. Marder stressed that what we are planning to do at Site 8 is a removal action not a remedial action. He also clarified the difference between the two. For example, if you have a leaking drum on a site which contains unknown product and you remove the drum, you reduce the risk through a removal action. However, if you then excavate the soil that the drum was sitting on to an acceptable limit, you remove the contamination through a remedial action.

6. Future Schedule

A schedule was drawn up at the meeting to ensure everyone had an opportunity to comment on the draft EECA. The schedule is as follows:

March 3 - TRC members send additional comments to Navy
March 10 - All comments forwarded to ABB by Navy
April 3 - Draft final document from ABB to Navy
May 4 - Reminder of meeting, including Meeting Minutes, Draft Final EECA and Draft Agenda
May 18 - Next TRC meeting, 1:30, Bldg. 20, MIC Room

Attachment A

Indian Head Naval Surface Warfare Center

Formerly the Naval Ordnance Station (NOS)

Engineering Evaluation and Cost Analysis (EECA)

Site 8 - Nitroglycerin Plant Office

Responses to State of Maryland Comments

General Comments

Comment 1

1. Page 9, Figure 2-1:

   Sampling Point SD-15 is missing.

Response

According to project historical data a sample identified as SD-15 was not collected. The sampling tour ended at the manhole with sample SD-14. There was a surface soil sample collected and identified SS-15. Samples SS-15 was collected southeast of staff gauge SW-09.

Comment 2

2. Page 10, Table 2-1:

   The accompanying Figure (FIGURE 3 from the 1985 NEESA Study) is needed to show the locations of these samples.

Response

Figure 3 has been added to accompany Table 2-1 and will appear as Figure 2-1a in the new text.

General Comments

Comment 3

3. Page 11, Table 2-2:

Column labels are not aligned.

Response

Table 2-2 was reconfigured with new columns and text. Columns will be aligned in the revised text.

Comment 4

4. Page 16, Table 2-4:

It is not clear how the mean concentration between Station 24 + 60 and 20 + 00 is 4.8 when the range of concentrations is between 3.4 and 4.1.

Response

The correct mean concentration between Station's 24 + 60 and 20 + 00 is 3.8 mg/kg and will appear in the revised text.

Comment 5

5. Page 20, First Paragraph

The term "Level E Data" needs to be defined.

Response

The HAZWRAP definition of Level E data has been added to the first paragraph and will appear in the revised text.

Comment 6

6. Page 43, Section 4:

The risk to fish and wildlife need to be evaluated.

Response

Section 4 has been modified to include an additional subsection addressing, Baseline Risks, Aquatic Ecosystems, Terrestrial Ecosystems, and Future Potential Risks to the Environment and will appear in the revised text.

General Comments

Comment 7

7. Page 46, Section 5.0:

It is not clear how these target levels were determined. If EPA data was used, to determine these levels, it must either be presented or adequately referenced.

Response

Section 5.0 and 7.0 have been modified to reflect EPA recommended clean-up levels from several other mercury contaminated sites. The reason these cleanup-target levels were adopted is based on similar contamination uncertainties found at the Dayton, NV site, 1) the chemical form of mercury varies at the site, 2) potential exposure via inhalation, ingestion of dust particles, and organics are potentially contaminated with mercury.

Other EPA studies, also added to Appendix B, present similar soil and water clean-up levels. The levels which will be adopted from these studies are: Soil - 25 ppm, Water - 2 ppb, Sediments - 25 ppm.

Comment 8

8. Page 50, Table 5-2:

The Ambient Surface Water Quality Criteria for mercury in freshwater are 2.4 mg/l (Acute) and 0.012mg/l (Chronic). These are ARAR's and must be included here.

Response

Table 5-2 has been expanded to include ASWQC, freshwater (Acute) and (Chronic) levels for mercury.

Comment 9

9. Page 60, First Line:

This sentence needs clarification.

Response

The first line and paragraph has been rewritten to clarify the effects of excavation and degree of mercury clean-up obtained using excavation as a clean-up method.

General Comments

Comment 10

10. Page 66, Section 7.0:

See Comment 7.

Response

See Response 7.

Comment 11

11. Page 116, Second Paragraph:

The term "hexqualent" should be "hexavalent".

Response

Spelling correction has been made and will appear in the revised text.

Attachment B

TRC Member Questions and Responses

1. **Question** (Vince Hungerford): What the probability is that the interim cleanup will be a permanent action?

Answer (Terry Smith): A Biomonitoring Study needs to be done above and below the system to get background data. Therefore, it will depend on how effective the removal action is in reducing contamination of the system.

2. **Question** (George Maurer): How long will the actual cleanup take?

Answer (Terry Smith): Approximately 800 cubic yards of contaminated soil will be removed, requiring 2 to 3 months.

3. **Question** (Susan Weber): The EECA states that a change in mercury levels has not occurred in the five years since sampling was done by CH_2M Hill, suggesting that either the mercury is fixed in place or there is still a source. How do we know that a source is not still present?

Answer (Ken): All building sources have been removed. For example, the drains, where the mercury was initially released, were physically rerouted and mercury traps were placed on the drains.

(Terry Smith): In addition, mercury could be in the cracks of the manhole and could be released in small, steady amounts, which would be considered a source. Also, any area in the streambed containing a high concentration of mercury (hot spot) would be considered a source, since the mercury in a hot spot could be easily transported downstream.

NOTE: Definition of source will included in the EECA.

4. **Question** (Susan Weber): Concerning the target cleanup level of 25 ppm, shouldn't the level of mercury in sediment safe to public health be the same as that for fish (1 ppm)?

Answer (Terry Smith): This is an interim removal action that does not address the pond. Twenty-five ppm was obtained from EPA documents as a worst case scenario, such a building a day-care center on the site.

(Ken): Again, a Biomonitoring Study is needed.

5. **Question** (Vince Hungerford): Wasn't a removal action done at this site before?

Answer (Ken): In 1986, sewer work was done and several hundred drums of mercury contaminated soil was removed.

6. **Question** (Bob Foley): Originally, the cleanup level was going to be between 10 and 20 ppm, now it's at 25 ppm. Is there a reason for this change?

Answer (Terry): Yes. The documentation has been revised and will include data from another similar site in Nevada.

7. **Question** (Susan): Where exactly are you going to clean?

Answer (Terry): From 24+60 to 16+00, which is approximately 40 feet down from the manhole exit to the building. This is shown in the EECA.

8. **Question** (George): Is the mercury carried from the hot spots, such as cracks in concrete, etc. downstream?

Answer (Terry): Yes.

9. **Question** (George): Has the pond trapped mercury?

Answer (Terry): Not much study has been done on this. However, in the past three years, a beaver dam (which has never been totally removed) has been present. Therefore, the sediment of the pond, which has not been disturbed much, should trap mercury before reaching the Mattawoman Creek.

10. **Question** (Susan): At the last meeting, Ken mentioned that the Land Ban was not addressed in the EECA. It's still not included?

Answer (Terry): Land Ban issues will be addressed in the design documents, rather than in the EECA.

(Ken): We can't dispose of mercury contaminated soil/sediment without treatment. Therefore, this section needs to be beefed up.

NOTE: More information on this will be included in the EECA.

11. Question (Vince): Is the soil/sediment a hazardous waste?

Answer (Terry): Yes, by definition.

(Ken): Most likely, by characteristic.

(Terry): TCLP (Toxicity Characteristic Leaching Procedure) testing will determine whether it's a hazardous waste or not. If it is, it will be shipped to Model City, New York for disposal. There are also four other facilities that will accept this waste.

12. Question (Susan): The EECA states "based on recent activity at Site 8", what "recent activity" do you mean?

Answer (Terry): Activities included identifying the source, site visits, removal action planning, and meetings conducted by the Project Team.

13. Question (Susan): What about mercury vapors in the dust generated from the removal?

Answer (Terry): We won't know until cleanup begins. During cleanup we can monitor the air.

(Ken): The contractor performing the removal action must incorporate this possible problem into the work plan.

14. Question (Susan): Will wetlands be disturbed?

Answer (Terry): Only the edge of the pond will be affected from this removal action.

15. Question (Susan): The EECA suggests that only 3 months are required to receive the proper permits for the removal action. Isn't this a little optimistic?

Answer (Ken): We can award the contract for the removal action and wait until the permits are received before beginning.

16. Question (Bob Foley): Why isn't a long term monitoring study addressed?

Answer (Terry): Biomonitoring will be conducted before and after the removal action. In addition, confirmation sampling will be performed.

(Ken): Long term monitoring is not required. The target cleanup levels in the area of excavation will be reached before removal stops.

17. Question (Bob Foley): What if the mercury is in the groundwater?

Answer (Milton Marder): This is an interim removal action. Therefore, additional information or work may be required.

18. Question (George Maurer): There is a potential for mercury to be transported from the pond into Mattawoman Creek. Can we reduce this possibility?

Answer (Terry): We could redesign the outflow to keep the sediments from flowing into the Creek. A structure, such as a weir, could be constructed to ensure that sediments do not flow out of the pond given a certain size storm.

19. Question (Susan): The plant uptake and harvest option seems to be a better alternative than excavation at this site. Is there a reason why it was not chosen?

Answer (Terry): The large flow of water in the stream makes the planting and harvesting option unfeasible. The majority of the mercury would be contained in the roots of the plant. Therefore, planting and harvesting (including the roots) on a regular basis would extensively damage the streambed.

20. Question (Susan): Why was it decided to stop at the pond? Why not include the pond in the cleanup?

Answer (Terry): The location chosen to stop excavation was based on the description and boundary of the wetlands that would cause the least amount of damage to the wetlands.

Attachment C

Responses to TRC Meeting

General Comments

Comment 1

1. Acronyms.

Response

Acronyms are included following the Table of Contents.

Comment 2

2. Explain "the source". Explain why it is not included.

Response

Section 2.3 has included a description of "the source" of mercury which is the subject of the removal project.

Comment 3

3. Address Land Ban Act - on site treatment prior to shipment.

Response

Section 5.1, Regulatory Requirements subdivision on Land Disposal Constraints, mentions details of soil treatment before shipping and the Land Ban Act.

Comment 4

4. Under "Removal Alternatives" it states "Based on recent activities associated with Site 8, the no-action and long-term monitoring scenario has been eliminated". Please explain why these alternatives were eliminated and what activities are they basing this on?

Response

Section 6.0, second paragraph was added to address the federal and state requirements as being the reason no-action was eliminated, as well as why long-term monitoring was eliminated.

General Comments

Comment 5

5. Permits, length of time?

Response

Permits are addressed in Section 9.0 of the Cost Analysis. It has generally taken nine months to a year to implement most of the technologies. Four to seven months for permits is an approximate figure.