DRAFT MEETING MINUTES
JUNE 29, 1995
NSB-NLON, PHASE II RI
8:00 am - 3:00 pm

ATTENDEES	AFFILIATION	PHONE NUMBER
Kymberlee Keckler	EPA	617-573-5777
Patti Lynne Tyler	EPA	617-860-4342
Dale Weiss	TRC	508-656-3560
Laura Lefebvre	TRC	508-656-3517
Mark Lewis	CTDEP	203-424-3768
Andrew Stackpole	NSB-NLON	203-449-5191
Mark Evans	NORTHDIV	610-595-0567 (EXT 162)
Jeff Dale	NORTHDIV	610-595-0567 (EXT 120)
Diana McPherson	NORTHDIV	610-595-0567 (EXT 174)
Matt Cochran	HNUS-Pittsburgh	412-921-8418
Corey Rich	HNUS-Pittsburgh	412-921-8244
Kathy Trapp	HNUS-Aiken	803-649-7963
E. Jon Jackson	HNUS-Aiken	803-649-7963

OVERVIEW OF DISCUSSION

I. APPROACH AND SCHEDULE FOR PHASE II RI

CTDEP COMMENTS ON THE PHASE II RI

- CTDEP comments on the Phase II RI were received by the NAVY on June 23, 1995. Corrections to the comments were received by the NAVY on June 28, 1995. In addition, a letter dated June 26, 1995 from the CTDEP asking for an extension on the comment period was received by the NAVY on June 28, 1995. CTDEP comments were received approximately 53 days after the original deadline (i.e., 60 day comment period).

- CTDEP comments cover mainly the same issues as the EPA comments. HNUS and

the NAVY will prepare a response to comment letter.

APPROACH TO COMPLETION OF THE PHASE II RI

- A complete Draft Final Phase II RI will be submitted in the Fall of 1995.

- Additional data needs, as indicated in the EPA comments, will be addressed during a Phase III investigation, an FS or remedial construction activities, such as the cap on the Area A Landfill. The results of the Draft Final Phase II RI will dictate the subsequent action at each site.

- The format of the Draft Final RI report was discussed (i.e., should subsections for ecological risk assessment be included within each site's section of the report or should a stand alone volume for the ecological risk assessment be prepared). Arguments for and against both methods were presented. Further discussion on this topic is needed. A meeting is proposed to discuss ecological issues in the near future and this topic can be revisited during the meeting. It is assumed that subsections for human health risk assessment will be presented in each sites's section in the same manner as the Draft Phase II RI report.

SITE MANAGEMENT PLAN (SMP)

- HNUS will prepare the initial SMP with support and input from the NAVY, EPA and CTDEP. A meeting will be held in Pittsburgh to scope out the SMP.

- The scope of the SMP will be prepared prior to submission of the Draft Final Phase II RI. Recommendations for sites (i.e., FS, Phase III RI, or No Action), which are summarized in the SMP, will be made after the details of the Draft Final Phase II RI are available. Therefore, the initial SMP will not be submitted until after the Draft Final Phase II RI is submitted.

- Grouping of sites into Operable Units (OUs) was briefly discussed as an option for optimizing remedial activities.

- The NAVY will make any revisions to the initial Site Management Plan. HNUS will provide copies of the electronic files to the NAVY.

- Potential criteria for ranking of sites in the SMP include results of the human health and ecological risk assessments, NAVY funding/site ranking information, and contaminant migration potential.

2. ECOLOGICAL RISK ASSESSMENT

- The NAVY and HNUS informed the EPA and CTDEP that K. Trapp was leaving HNUS. K.Trapp indicated that she would like to remain a part of the project since she has been an integral part of the ecological field studies and the planning of the ecological risk assessment. The NAVY and HNUS will make every effort to subcontract her through her new company, Sciences International, Inc., so that she can remain on the project.

- HNUS provided an outline and overview of the approach to the ecological risk assessment. Figure 3-1 of the Phase II RI Work Plan was used as an overhead.

- EPA indicated that soil screening may be appropriate for certain sites. Existing soil data can be used for the screening. EPA indicated that based on the screening results, additional data may need to be collected. EPA will identify the sites and the appropriate screening criteria with in 1 week of the meeting date. Terrestrial screening will be part of this screening task.

- EPA indicated that it may be difficult to identify problem species for each site. Further discussions will likely be necessary on this issue.

- The evaluation of the Area A watershed and its subsequent discharge and impact on the Thames River was discussed. It is likely that the Thames River will be evaluated independently. Further discussions will likely be necessary on this issue.

- EPA and HNUS agreed that it will be difficult to link ecological impacts to specific sources in the Lower Subase. Further discussions will likely be necessary on the evaluation of the Lower Subase in the ecological risk assessment.

- The ecological risk memo prepared by Menzie-Cura & Associates will be used as a starting point for the ecological risk assessment in Area A. This memo will be provided to HNUS by the NAVY.

- The NAVY informed HNUS and EPA that there were unresolved comments on the ecological risk memo from Menzie-Cura & Associates. The NAVY will identify these outstanding comments within 2 weeks of the meeting date and resolve them.

- It was agreed that assessment endpoints (i.e., aquatic species, terrestrial species, etc.) must be established and agreed upon by the EPA, CTDEP, NAVY and HNUS prior to preparing the ecological risk assessment. To aid in selecting assessment endpoints a conceptual model/problem formulation for each site will be developed. Also, the scope of work for the ecological risk assessment will be prepared and agreed upon. HNUS will perform this task and it is tentatively scheduled to be completed at the end of August 1995.

3. HUMAN HEALTH AND RISK ASSESSMENT ISSUES

- In response to comments from the EPA and TRC, HNUS will include the appropriate Residential Land Use Scenarios in the Draft Final Phase II RI. It is HNUS's intention that the maximum groundwater and soil concentrations detected for each compound will be used in the RME Residential Exposure Scenario. It is also their intention that the Central Tendency scenario will use the UCLs. However, further review and evaluation of data by HNUS is needed due to the following issues: (1) applicable regulations for risk assessment are to be provided by EPA (2nd bullet); (2) Exposure scenarios are to be developed by Halliburton NUS and reviewed by EPA (4th bullet); and (3) Phase I data may have been validated differently than Phase II data.

- The EPA will investigate new regulations/guidance which propose using more realistic exposure scenarios in risk assessments. These new regulations will hopefully be used to determine the exposure scenarios to be evaluated in the Draft Final Phase II RI risk assessment.

- The NAVY indicated that a very complete discussion must be included in the risk assessment section which documents the hypothetical nature of the scenario so that the public is not mislead by the information. As part of the discussion, Industrial and Residential Landuse Scenarios shall also be compared. In addition, a discussion of the future intended use of NSB-NLON (i.e., industrial) should also be included in the RI.

- HNUS will prepare a detailed list of input parameters and scenarios for the risk assessment and submit the list to the EPA, CTDEP, and NAVY for review and comment. The NAVY also indicated that the scenarios may be discussed at a future RAB meeting to give the public an opportunity to comment on them.

- BRAC LAW will not be discussed in the Phase II RI. Future Landuse Scenarios will be discussed in the report.

- The CTDEP's classification of the groundwater at NSB-NLON was discussed. CTDEP provided HNUS with a map of the regional groundwater classification. The map showed that many industrialized areas along the Thames River are classified as GB. Based on the current classification of the groundwater at NSB-NLON, GA or GA/GB, the NAVY would be required to meet more stringent criteria for the entire base than other industrialized areas along the Thames River.

- CTDEP indicated, as was discussed at the June 1, 1995 meeting, that reclassification of the groundwater is possible but not guaranteed and the process may take up to one year. CTDEP indicated that it is possible to communicate with the CTDEP groundwater classification people. Mark Lewis will talk to these people about groundwater standards and the possibility and procedures of getting a variance for groundwater.

- The EPA indicated that under CERCLA they can issue a waiver that permits the NAVY to meet less stringent groundwater criteria. The waiver would be part of the ROD.

- Based on the current and future landuse at the base and the limited potential for groundwater flow from the base to public wells it is likely that the NAVY will ask the EPA for the waiver.

- HNUS discussed the use of the Phase I and II data in the risk assessment. Phase II

groundwater data was the only groundwater data used since it was the most current. TRC indicated that the maximum detection of either Phase should be used to perform the risk calculations. However, further review and evaluation of data by HNUS is needed due to the following issues: (1) applicable regulations for risk assessment are to be provided by EPA (2nd bullet); (2) Exposure scenarios are to be developed by Halliburton NUS and reviewed by EPA (4th bullet); and (3) Phase I data may have been validated differently than Phase II data.

- Database and tables to be included in the Draft Final Phase II RI were discussed. The NAVY and HNUS agreed to provide the following: a more extensive database which will include Phase I and Phase II data; tables summarizing detections in the Nature and Extent sections; tables summarizing the COC selection process in an Appendix; and in-text tables summarizing COCs and exposure concentrations.

- Any analytical data from the Phase I RI which is from composite samples will be marked as such in the complete database and will not be used in the Phase II RI risk assessment. In addition, any sample which is from an area were an interim remedial action has been performed (i.e., DRMO and Spent Acid Storage Area) and the region where the sample was taken has been removed, will be marked in the complete database and not used in the Phase II RI risk assessment.

4. HYDROGEOLOGIC INVESTIGATIONS

GROUNDWATER FLOW DIRECTIONS ALONG ROUTE 12

- Groundwater flow directions along Route 12 were discussed. HNUS presented new shallow overburden and bedrock potentiometric surface maps for the two comprehensive rounds of water level measurements taken in March and August of 1994 by HNUS.

- Additional wells will be installed in this area in support of the Area A Landfill Cap design or other investigations. This information could be used to determine flow directions in this area.

- Private wells exist on the east side of Route 12. HNUS will attempt to collect a single round of water level measurements in these wells to determine the groundwater flow direction across Route 12.

- As a last resort wells will be installed along Route 12 for the sole purpose of determining the groundwater flow direction.

- It was agreed that slug test information is not critical for completion of the Draft Final Phase II RI. Additional slug tests will be conducted during subsequent field efforts.

MANGANESE CONCENTRATIONS IN GROUNDWATER

- HNUS presented 4 maps showing isoconcentration maps of total and dissolved concentrations of manganese in overburden and bedrock wells.

- Typically each map showed 4 to 5 regions in Area A and Area A Downstream Watercourses which had manganese concentrations which exceeded 5 mg/L (CTDEP level).

- HNUS will look into plotting isoconcentration maps for Iron and pH levels in the groundwater to determine if there is any correlation to the manganese groundwater concentrations. Correlations may indicate that the high levels of manganese in the groundwater may be related to leachate from the Area A landfill.

- HNUS will look into getting concentrations of manganese from South Eastern Connecticut Water Authority public groundwater wells. This information can be used to determine background concentrations of manganese in groundwater.

- CTDEP will look into getting manganese concentrations in groundwater for areas near NSB-NLON.

DNAPL (PCE) AT GOSS COVE

- The high levels of PCE detected in 8MW8D were discussed. Based on EPA guidelines the concentrations of PCE are at levels which indicate that this is a DNAPL problem.

- A map was shown of the Goss Cove area with PCE concentrations plotted on it.

- It was agreed that wells will be installed in this area to determine the extent of the contamination. The scope of the investigation will be determined at a later date (after the submittal of the Draft Final Phase II RI).

6. ACTION ITEMS

- CTDEP comments on the Phase II RI were received by the NAVY on June 23, 1995. Corrections to the comments were received by the NAVY on June 28, 1995. A draft response to comment letter will be prepared and submitted to CTDEP for review within 45 days of receipt of the comments.

- The NAVY and HNUS will make every effort to subcontract Kathy Trapp through her new company, Sciences International, Inc., so that she can remain on the project.

- EPA will identify the sites and the appropriate soil screening criteria for the ecological risk assessment within 1 week of the meeting date.

- The NAVY will identify unresolved comments on the ecological risk memo from Menzie-Cura & Associates within 2 weeks of the meeting date and resolve them.

- A conceptual model/problem formulation for each site and assessment endpoints will be developed by HNUS as part of the ecological risk assessment and submitted for EPA, CTDEP and NAVY approval by the end of August 1995.

- The EPA will investigate new regulations/guidance which propose using more realistic exposure scenarios in human health risk assessments.

- HNUS will prepare a detailed list of input parameters and scenarios for the risk assessment and submit the list to the EPA, CTDEP, and NAVY for review and comment.

- HNUS will attempt to collect a single round of water level measurements in the private

wells along Route 12 to determine the groundwater flow direction.

- HNUS will plot isoconcentrations for Iron and pH groundwater levels to determine if there is any correlation to the manganese concentrations in groundwater.

- HNUS attempt to get groundwater concentrations of manganese from South Eastern Connecticut Water Authority public groundwater wells.

- CTDEP will look into getting manganese concentrations in groundwater for areas near NSB-NLON and will provide the information to the NAVY or HNUS.

- CTDEP will look into groundwater standards and variances and will provide the information to the NAVY or HNUS.

- HNUS will submit a final response to comment letter to the EPA on July 14, 1995.

- HNUS will submit photo logs of the Downstream and Thames River sampling rounds to the NAVY.