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Reference: CLEAN Contract No. N62467-94-D-0888  
Contract Task Order No. 0003

Subject: Naval Industrial Reserve Ordnance Plant, Fridley, Minnesota  
OU3 Remedial Investigation, Feasibility Study, Proposed Plan,  
and Record of Decision  
April 9, 1996 Meeting Minutes

As directed by the Navy, per reference contract, attached are minutes from the April 9, 1996 meeting to discuss the OU3 RI/FS Work Plan data acquisition strategy.

Please contact me at (412) 921-8195 or Mark Perry at (412) 921-7217 if you have any questions or comments.

Very truly yours,

A handwritten signature in cursive that reads "Mark T. Perry for".

Kevin F. Donnelly, P.E.  
Task Order Manager

KFD/lar

Enclosures

Distribution

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File

# MEETING MINUTES

Naval Industrial Reserve Ordnance (NIROP) Plant  
Fridley, MN  
Operable Unit 3 (OU3)  
Remedial Investigation/Feasibility Study (RI/FS) Work Plan

## Meeting Topic

Data Acquisition Strategy

## Meeting Date and Time

April 9, 1996 from 8:00 am to 5:00 pm

## Meeting Location

Minnesota Pollution Control Agency (MPCA) Office, St. Paul, Minnesota

## Meeting Attendees

Scott Glass	Southern Division Naval Facilities Engineering Command (SOUTHNAVFACENGCOM)
David Cabiness	SOUTHNAVFACENGCOM)
Mike Maughon	SOUTHNAVFACENGCOM
Thomas Bloom	United States Environmental Protection Agency (U.S. EPA) Region V
Dave Douglas	MPCA
Luke Charpentier	MPCA
Mark Ferrey	MPCA
Paul Estuesta	MPCA
Dean Neptune	Neptune & Company
Tom Johnston	Neptune & Company
Kevin Donnelly	Brown & Root Environmental (B&R Environmental)
Mark Perry	B&R Environmental
Tom Jordan	B&R Environmental
Bert Hubbard	B&R Environmental

## Discussion Summary

1. The United States Department of the Navy (Navy) requested the meeting to:
  - present the data acquisition strategy that will evolve into the OU3 RI/FS Work Plan;
  - listen to U.S. EPA and MPCA concerns and provide clarifications;
  - avoid major "redos" of the Work Plan by obtaining U.S. EPA and MPCA acceptance of the data acquisition strategy prior to completion of the RI/FS Work Plan; and
  - welcome other reviewers such as U.S. EPA headquarters.

2. During the morning, the Navy presented its data acquisition strategy for meeting the OU3 RI/FS objectives as outlined in Attachment A of the FFA (see attached slides). The Navy discussed their assumptions and the site conceptual model for OU3. Based on the site conceptual model and assumptions, two decision statements were identified. The Navy reasoned that by looking forward and identifying the questions that the RI/FS is trying to answer and identifying the potential actions which might result from the answers (i.e., RI results), a more focused data acquisition strategy is possible and the probability of successfully meeting the objectives outlined in the FFA are increased. The Navy outlined a strategy for collecting soil and ground water samples under the NIROP. Sample locations include locations biased to dry wells and 7 groups of "Areas of Concern" identified in the Site Evaluation Report. In addition, several samples were selected in areas not suspected to be contaminated to provide information on spatial variability of contaminants. The Navy also proposed to installed 6 nests of ground water monitoring wells. The Navy expects that the spatial distribution of the sampling points will allow for characterization of the horizontal and vertical magnitude and extent of contaminants. The Navy indicated that additional samples might be collected if adequate spatial correlation of data was not attained. A summary of the proposed data acquisition plan is presented below.

- 46 soil sample locations
  - 2 discrete soil samples (0-2 ft. and 10-12 ft.)
  - analysis for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, cyanide (CN), and polychlorinated biphenys (PCBs)
- 46 shallow groundwater samples
  - same locations as soil sample points
  - same analyses
- 6 intermediate/deep groundwater wells
  - continuous core technique for stratigraphy characterization
  - monitoring for signs of dense non-aqueous phase liquid (DNAPL)
  - delineate vertical/horizontal contamination
- Seismic imaging results on building perimeter stratigraphy characterization incorporated.

3. The afternoon was an open discussion of U.S. EPA and MPCA concerns. The concerns along with Navy responses are summarized below:

- Concern: There were questions regarding the ability of the proposed drilling method (Rotasonic) to work under site conditions (i.e., heaving sands).

Response: The Navy stated the method would work well under site conditions and had the added benefit of providing a continuous core which would be used to monitor for the presence of DNAPL. The Navy will provide literature describing the Rotasonic drilling technique.

- Concern: The U.S. EPA is going to Fridley on April 10, 1996 to solicit public opinion on reasonable future land use scenarios. The Navy's data acquisition strategy assumes an industrial land use scenario. If the public believes the residential land use scenario should be evaluated, how will the Navy's data acquisition strategy be impacted?

Response: The risk assessment for a residential land use is based on a smaller exposure area than the risk assessment for an industrial land use. Therefore, if the RI results show a high degree of variability between sampling sites, which were assumed to be similar, then additional samples might be required to complete the risk assessment for a residential land use.

Comment: The U.S. EPA and MPCA may request that the Navy calculate remediation costs for the residential land use scenario. This will not be pursued unless the public determines that the residential land use scenario is a reasonable future land use.

- Concern: There are no plans to investigate potential sources from the United Defense portion of the building. The MPCA stated it would not consider the OU3 RI complete until that area is investigated. MPCA has asked the Navy to include the United Defense property in their OU3 RI/FS and is waiting for an answer.

Response: This issue has gone up the Navy chain-of-command. The additional investigation would not change the current approach, however, the current approach would provide insight into the potential for sources under the United Defense property. The Navy expects to have an indication of what their response will be by April 19, 1996.

- Concern: There appears to be inconsistencies between the Federal Facilities Agreement (FFA) objectives and the data acquisition strategy decision statements. The decision statements indicate that remedial actions (pump and treat for groundwater and institutional controls for soils) are already selected.

Response: The decision statements were not intended to indicate a remedy is already selected. Remedial actions are not selected although a short list of the most feasible and practical remedies is identified. The Navy will reword the decision statements to clarify this misperception. The Navy believes that the process of collecting data to support the decision statements will ensure that the objectives of the FFA are adequately addressed. The Work Plan will clearly show how the decision statements and sampling rationale/design meets the required RI/FS objectives outlined in the FFA.

- Concern: The site may eventually be headed for a deed restriction. All assumptions used to develop the data acquisition strategy should be carried forward to the deed restriction so there is a record that the U.S. EPA and MPCA agreed with the assumptions.

Response: Agree.

- Concern: Contrary to the Navy's conceptual model, the latest round of groundwater monitoring data indicates that there is some groundwater flowing west of the North 40 rather than to the southwest. How does this impact the sampling strategy?

Response: There is no impact because groundwater sampling points are currently proposed in the northwestern corner of the building.

- Concern: The evaluation of remedial technologies is a complicated issue and all assumptions should be fully documented.

Response: Agree.

- Concern: A guideline should be developed to: 1) identify what level of field change to the sampling plan requires approval from all project participants and 2) identify what level of authority the approval should come from.

Response: Agree.

#### Discussion Outcomes

1. Navy will revise the data acquisition strategy decision statements to meet U.S. EPA/MPCA concerns. The Navy will fax the revised decision statements to the U.S. EPA/MPCA.
2. Navy will propose criteria for changes in the data acquisition plan which require different levels of approval and documentation. Navy will present this in a letter to the U.S. EPA/MPCA.
3. All project participants agreed to communicate concerns to others as soon as they arise so that they can be addressed immediately.
4. The Navy will include language in the Work Plan stating that the Work Plan meets the objectives of the FFA.
5. The Navy and MPCA will review past correspondence from the U.S. EPA and MPCA to make sure all previously noted concerns which relate to the Work Plan are addressed. The MPCA will issue a letter to the Navy summarizing any outstanding issues within seven working days.
6. The Work Plan submittal date will be extended from April 22 to May 6, 1996. The Navy will prepare a brief letter to the U.S. EPA and MPCA which documents the extension.
7. The Navy Work Plan will meet the FFA content and format requirements as discussed during the February 20, 1996 telecon with U.S. EPA and MPCA. (e.g., The Work Plan will explain how the soils investigation and the hydrologic investigation outlined in the FFA will be conducted.) The Navy will submit an expanded outline to the U.S. EPA/MPCA prior to submission of the Work Plan.
8. The Navy will review the OU2 risk assessment and identify any different assumptions, along with the justification for those changes, which will be proposed for the OU3 risk assessment. The OU3 risk assessment assumptions will be presented to the U.S. EPA/MPCA.
9. The Navy, U.S. EPA, and MPCA made tentative plans to meet the afternoon of April 25 prior to the Restoration Advisory Board (RAB) meeting to discuss risk assessment assumptions and fate and transport modeling. The Navy will provide information on these topics for U.S. EPA/MPCA review prior to the meeting. The U.S. EPA may not be able to attend this pre-RAB meeting. If the U.S. EPA cannot attend, then the MPCA will represent the U.S. EPA. Final scheduling for any meeting along with a meeting agenda will be forwarded by the Navy.
10. The Quality Assurance Project Plan (QAPP) will address the MPCA, QAPP review checklist provided by MPCA during the meeting.
11. The Navy expects to provide the U.S. EPA/MPCA with some indication of the Navy's position on investigating the United Defense portion of the building by April 19. If the Navy decides to

investigate the United Defense portion of the building, then the Work Plan will be modified to include that area.

12. The Navy will provide the U.S. EPA and MPCA with information on Rotosonic drilling.