



Brown & Root Environmental

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C-49-05-7-122

May 16, 1997

Commanding Officer
Dept. of the Navy
SOUTHNAVFACENGCOM
ATTN: Scott E. Glass, P.E. (Code 1861)
P.O. Box 190010
North Charleston, SC 29419-9010

Reference: CLEAN Contract No. N62467-94-D-0088
Contract Task Order 0003

Subject: Naval Industrial Reserve Ordnance Plant, Fridley, Minnesota
Restoration Advisory Board Minutes - Meeting #8

Dear Scott:

Enclosed, for your use, are two copies of the minutes from the Restoration Advisory Board Meeting #8, held at the Naval Industrial Reserve Ordnance Plant, Fridley, Minnesota on February 12, 1997. These final minutes address review comments on draft minutes provided to Brown & Root Environmental by the Navy. Other copies of these minutes have been distributed according to the attached Distribution List.

Persons receiving copies of these meeting minutes are requested to note that the next Restoration Advisory Board meeting will be held at the **Naval Industrial Reserve Ordnance Plant, Fridley, Minnesota, on Thursday, May 22, 1997 at 10:00 am.**

Sincerely,

Mark T. Perry, P.E.
Task Order Manager

MTP/lar

Enclosures

c: John Flora, City of Fridley, Dept. Of Public Works
Kerry Morrow, NAVSEA
Stephen Hoffman, Naval Sea Systems Command
David Douglas, MPCA
Tom Bloom, USEPA - Region V
Doug Hildre, United Defense LP
Michael Flaherty, Metropolitan Council Environmental Services
Robert Hutchinson, Environmental Services, Anoka County Courthouse
Adam Kramer, Minneapolis Water Works
~~LTC Jan Frye, Defense Contract Management Office--Minneapolis~~
Joel Murphy, SOUTHDIV
Norwood Nelson, RAM member
Richard Harris, RAB member
Craig S. Gordan, RAB member
Scott Newman, Morrison Knudsen
Donna Kopeski, Galileo

**Minutes of Meeting
Restoration Advisory Board Meeting #8
February 12, 1997**

**Naval Industrial Reserve Ordnance Plant
Fridley, Minnesota**

Restoration Advisory Board (RAB) meeting #8 was held at the Naval Industrial Reserve Ordnance Plant (NIROP), Fridley, Minnesota, on Wednesday, February 12, 1997, at 10:00 a.m. A copy of the agenda distributed at the meeting and the attendance sheet are attached (Attachments 1 and 2, respectively). Each of the attendees affiliation is identified on the attendance sheet.

A. Introduction

1. Mr. Pat Mosites and RAB co-chair Mr. John Flora opened the meeting at 10:00 a.m. All meeting participants introduced themselves.

B. Minutes of RAB #7

1. Mr. John Flora had several editorial comments on the previous meeting minutes and asked whether the Minnesota Pollution Control Agency (MPCA) really made the statements identified in item F., part 1 (the groundwater recovery system is not having much of an impact on recharge to the bedrock aquifer).
2. Mr. Richard Harris noted that the date of Meeting #8 had been changed by the United States Navy (Navy) without notifying some of the RAB members. The Navy apologized for this oversight and stated that all RAB members would be informed of any future schedule changes.
3. Mr. Pat Mosites had issued some written comments prior to the meeting. They were as follows:
 - The trichloroethene (TCE) concentration in item C., part 6., should read 1.5 parts per million (ppm) rather than 5 parts per billion (ppb).
 - Who is the Mr. Burns noted in item C., part 9? Mr. Burns is the Fridley City Manager.
 - The last statement in the meeting minutes should provide the date, location, and time of the next RAB.

C. Actions Since Last Meeting

1. Operable Unit Number 1 - Status on Design of New Groundwater Treatment Facility. Regarding the groundwater treatment plant to be constructed at NIROP Fridley by the Navy for the treatment of groundwater collected from the existing groundwater containment system, the Navy stated that award for construction of the groundwater treatment plant at NIROP Fridley would be made by September 1, 1997, and that the plant would be operational by the spring or summer of 1998. The Navy stated that the plant would be constructed inside the main industrial plant building with air emissions piped outside. A RAB member asked whether a carbon polishing system was planned prior to discharge of air emissions. The Navy stated that air emission calculations show carbon polishing is not necessary. A RAB member suggested that there be a provision in the design for the addition of carbon filters at some later date, if needed.

2. Operable Unit Number 1 - Groundwater Containment. Regarding the status of contaminated groundwater containment at NIROP Fridley, the Navy stated that containment of groundwater contamination exists in the upper drift aquifer but there are some questions about the lower drift. The Navy has decided to assess the existing groundwater model based on some recent information gathered by the United States Geological Society (USGS) during a seismic survey at the site.

A RAB member asked why the October 1996 containment letter was issued by the EPA. The EPA stated that the letter was issued so the Navy could proceed with the treatment plant design. The regulatory agencies asked the Navy to take a modular design approach so that the flow from additional recovery wells, if needed, could be handled by the treatment plant. The EPA stated that there is no problem with the bedrock aquifer under the NIROP based on the information known to date.

A RAB member stated that contamination of the bedrock aquifer was the reason the site initially received a great deal of attention and asked how the aquifer got cleaned up. It was stated that the pumping from production wells located in the bedrock aquifer, which had been drawing contamination down into the bedrock aquifer, has been stopped; and contamination is being captured by the groundwater recovery system at levels above the bedrock aquifer.

3. Operable Unit Number 2 - North 40 Removal Action. Regarding the status of the report on the Navy's 1996 buried barrel removal action in the "North 40", the Navy stated that the report has been issued. The report concludes that there is no need for any additional drum removal activities in the "North 40." The Navy stated that the soil in the "North 40" would be addressed in the Operable Unit Number 3 (OU3) Remedial Investigation (RI).

4. Operable Unit Number 2 - Status of Feasibility Study. Regarding the status of the Feasibility Study (FS) for Operable Unit Number 2 (OU2), the EPA stated it is nearing completion (there are approximately 25 editorial comments must still be addressed by the Navy). The results of the OU2 FS will be factored into the OU3 FS.

5. Operable Unit Number 2 - Seismic Imaging Survey. Regarding the status of the Navy's 1996 seismic imaging survey, the Navy stated that it received the final report yesterday. The Navy had a copy at the RAB meeting for public review and stated that it would provide a copy to Mr. John Flora, RAB co-chair, for the public to look at. The Navy summarized the results of the seismic survey as follows:

- The seismic survey results near the building were inadequate because of noise.
- The first seismic survey line (line number 1) that was conducted confirmed the existence of a competent clay layer east of the building with a washout southwest of the building.
- Line 2 confirmed a competent clay layer to the northeast and northwest of the building with a washout in the middle (this supports the theory that contaminants have the washout pathway).
- The results give a better understanding of what is physically happening at the site and will assist future environmental investigations at the site (e.g., groundwater modeling, evaluation of groundwater containment, placement of monitoring wells and feasibility studies).
- The seismic survey provides a continuous line of geologic information that individual borings do not (this is more critical at this site because geology is so variable).
- The seismic survey confirms the geologic cross sections which were developed prior to the seismic survey with information provided from soil borings.

6. Operable Unit Number 3 - Status of RI/FS Work Plan. Regarding the status of OU3 RI/FS Work Plan, the Navy stated that it is nearing completion (Draft Final to be delivered February 28, 1997). Once the work plan is approved, the field work is expected to take approximately 6 months (this includes laboratory analysis, data validation, and database update). The RI Report would be drafted within 365 days from approval of the work plan, in accordance with the FFA (Federal Facility Agreement).

United Defense stated that a plan is being developed to compress operations in the southern half of the main industrial plant building at the NIROP (plant compression should be completed over the next one and one-half years). This requires relocating equipment and digging new foundations. United Defense is performing some preliminary sampling at the locations where soils are exposed. The analytical results are being provided to the Navy for potential use in the OU3 RI/FS. United Defense noted that the concrete thickness in one sampling location was 84 inches thick (the need to sample the soils beneath the concrete required the subcontracting of a concrete coring company).

7. Operable Unit Number 3 - Investigation Under UDLP Plant. Regarding the status of the investigation of the portion of the building owned by United Defense (this had been delaying approval of the OU3 RI/FS Work Plan), it was stated that the FFA parties (Navy, MPCA and EPA) have found a way to move forward by agreeing that the Navy property will be handled under the FFA and the United Defense property will be handled under the Resource Conservation and Recovery Act (RCRA). The parties are in the process of modifying the existing RCRA permit to reflect this agreement.
8. Groundwater Containment System - Maintenance and Monitoring Activities. United Defense provided a status of operations and maintenance for the groundwater extraction system (see Attachment 3). United Defense noted that it has seen a decrease in the AT-2 pumping rate and plans to redevelop the groundwater recovery well in the spring of 1997.
9. Land Use Determination. The EPA stated that a letter reporting that future land use at NIROP Fridley would be industrial has been drafted and reviewed by the City Manager of Fridley (Mr. Burns). The EPA must add a drawing reference to the letter and hopes to have it finalized by the next RAB meeting.

D. Community Relations Plan Update

1. The Navy reported that the Navy's Community Relations Plan for environmental restoration activities at NIROP Fridley was just finalized. Mr. Flora was provided with a copy. The plan provides guidelines on how the Navy should relate to the community.

E. Actions Scheduled/Due Dates

1. The Draft Final OU3 Work Plan is due February 28, 1997.
2. The permanent groundwater treatment plant final design plans and specifications are due May 29, 1997.
3. The 1996 Annual Ground Water Monitoring Report is due March 31, 1997.
4. The Site Management Plan is due February 13, 1997.

F. Other Issues/Comments

1. The second partnering meeting to discuss environmental restoration activities at NIROP Fridley is being held this week. Partnering is a way of doing business to more quickly and effectively reach consensus on various issues and facilitate site cleanup. It allows for the formal documentation of decisions and improved communication between all parties.
2. The settlement agreement was summarized. The agreement resulted from the Navy's lack of compliance with the FFA. The final settlement agreement includes the following:
 - Production of a Site Management Plan to better track deliverables.
 - Provision for an additional Navy Remedial Project Manager (RPM) to help with the Navy's environmental restoration workload at the NIROP.
 - Acceleration of the OU3 investigation by the Navy.
 - Payment of a penalty to the MPCA and EPA.

G. Next RAB Meeting

The next RAB meeting will be held Thursday, May 22, 1997, at 10:00 a.m. at NIROP Fridley.

NAVAL INDUSTRIAL RESERVE ORDNANCE PLANT FRIDLEY
RESTORATION ADVISORY BOARD MEETING #8
FEBRUARY 12, 1997, 10:00 AM
AGENDA

- 1. Introduction
- 2. Corrections to Minutes of RAB #7
- 3. Actions Since Last Meeting

NAVY

- a. Operable Unit #1 - Groundwater
 - Status on Design of New Treatment Facility
 - Ground Water Containment

- b. Operable Unit #2 - Soils Outside Plant
 - NORTH 40 Removal Action
 - Status of Feasibility Study
 - Seismic Imaging Survey

- c. Operable Unit #3 - Soils Under NIROP Plant
 - Status of RI/FS Work Plan
 - Investigation under UDLP Plant

UNITED DEFENSE

- Maintenance and Monitoring Activities

EPA

- Land Use Determination

- 4. Community Relations Plan Update
 - a. CRP Revision Status
- 5. Actions Scheduled/Due Dates
 - a. OU#3 Work Plan Draft Final: Due February 28, 1997
 - b. Permanent Plant Final Design Plans and Specifications: Due May 29, 1997
 - c. 1996 Annual Ground Water Monitoring Report: Due March 31, 1997
 - d. Site Management Plan: Due February 13, 1997
- 6. Other Issues/Comments
 - a. Partnering
 - b. Settlement Agreement

RESTORATION ADVISORY BOARD MEETING #8

February 12, 1997

NAVAL INDUSTRIAL RESERVE ORDNANCE PLANT, FRIDLEY

LIST OF ATTENDEES

NAME	ORGANIZATION	EMAIL ADDRESS	SIGN-IN
TOM BLOOM	USEPA REGION 5	Bloom.Thomas@EPA.gov.us	Thomas Bloom
JOHN FLORA	CITY OF FRIDLEY		
ROBERT HUTCHINSON	COUNTY OF ANOKA		
EVAN DRIVAS	RESTORATION ADVISORY BOARD MEETING #8		
JOHN BETCHER	MPCA		
DAVE DOUGLAS	MPCA		
GARY EDDY	MPCA		
FRED JENNESS	MPCA		
MARK FERREY	MPCA		
PAUL ESTUESTA	MPCA		
MICHEAL FLAHERTY	MCWS		
ADAM KRAMER	MINNEAPOLIS WATER WKS		
SCOTT GLASS	SOUTHNAVFACENGCOM		Scott A Glass
JOEL MURPHY	SOUTHNAVFACENGCOM	jgmurphy@efdsouth.navy.mil	Joel Murphy
JIM FERRO	SOUTHNAVFACENGCOM	JFERRO@EFD SOUTH.NAVFAC.NAVY.MIL	Jim Ferro
RICHARD HARRIS	FRIDLEY RESIDENT		Richard Harris
NORWOOD NELSON	AREA CHAMBER		Norwood Nelson
KERRY MORROW	NAVSEA		
MICHAEL JENNESS	MPCA		
PAUL ESTUESTA	MPCA		

PAT MOSITES

REICC MNPLS

Pat Mosites

DOUGLAS HILDRE

UNITED DEFENSE

Douglas Hildre

TIM RUDA

UNITED DEFENSE

Tim Ruda

DONNA KOPESKI

GALILEO

Donna Kopeski

Mark Perry

BROWN & ROOT ENVIRONMENTAL

Mark T. Perry

Red Anderson

NAUSEA

Scott Newman

Morrison Knudsen

scott_newman@mk.com

PAT MOSITES

REICC MNPLS

DOUGLAS HILDRE

UNITED DEFENSE

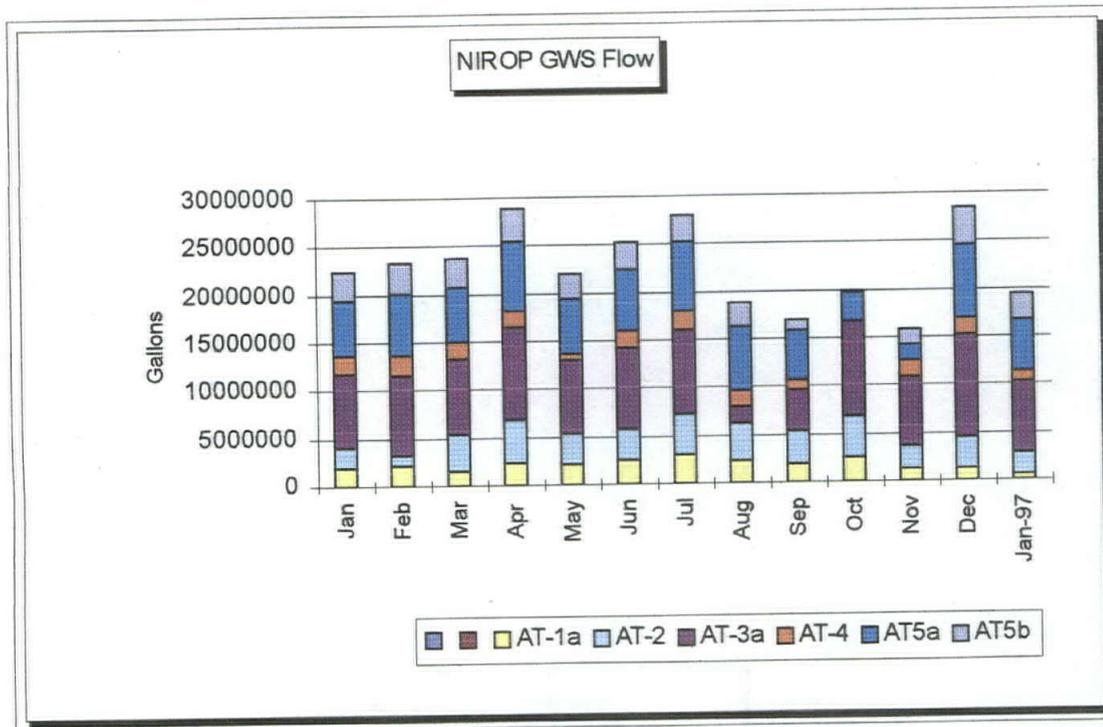
TIM RUDA

UNITED DEFENSE

DONNA KOPESKI

GALILEO

NIROP Maintenance Activities 23 October 1996 to 12 February 1997.



- New wet end of pump installed in well AT5b on October 31. All drop pipe changed to PVC all fittings changed to stainless steel.
- Electrical junction box problems repaired in wells AT5a, AT5b on (11/15 to 11/22).
- Groundwater removed 1996 4th qtr. 64 million gallons (yr. total 273 mg; Jan 97 19.4 mg.)
- Monthly monitoring of Combined discharge occurred per schedule.
- Extraction wells sampled November 14, 1996.
- Water level measurements conducted December 5, 1996
- Resampling of 14 monitoring wells Feb. 3-5 ,1997 (due to prior field contamination with acetone).

Extraction Well flowrates:

<u>AT1a</u>	<u>AT2</u>	<u>AT3A</u>	<u>AT4</u>	<u>AT5A</u>	<u>AT5B</u>
53 to 16	77 to 52	193	23 to 46	137 to 140	62 to 72

Total flowrate approximately 318 to 534 gpm

Planned Activities

- Water level readings 23 April, 1997.
- Extraction well and Monitoring wells sampling 23 April, 1997.