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October 9, 1992

Mr. James Shafer  
Northern Division  
NAVFACENCOM 1821 J/S  
10 Industrial Highway; Mail Stop #82  
Lester, PA 19113-2090

Re: Naval Industrial Reserve Ordnance Plant  
Fridley, Minnesota  
Contract No. N62472-90-C-1024  
RMT Project No. 2313.28

Dear Jim:

Enclosed, for your use, are two copies of the final notes from Technical Review Committee Meeting #15 held at the Naval Industrial Reserve Ordnance Plant on September 2, 1992. Other copies of these notes have been distributed according to the attached Distribution List.

Sincerely,

A handwritten signature in cursive script that reads "Eric Gredell".

Eric Gredell, P.E.  
Project Manager

tfj

Attachment

**DISTRIBUTION LIST  
MEETING NOTES  
TRC MEETING #15**

Number of Copies

U.S. Army Corps of Engineers Omaha District Attn: Gene Liu 215 North 17th Street Omaha, NE 68102-4973	2
City of Fridley Department of Public Works Fridley Municipal Center Attn: Mark Winson 6431 University Avenue, N.E Fridley, MN 55432	1
Northern Division NAVFACENCOM 1821 J/S Attn: Jim Shafer 10 Industrial Highway; Mail Stop #82 Lester, PA 19113-2090	2
Dick Hanson NAVSEA Technical Representative Naval Industrial Reserve Ordnance Plant; Code 55 5001 East River Road Minneapolis, MN 55421-1406	1
Naval Sea Systems Command Attn: Steven Hoffman CSEA 654-C Washington, DC 20362-5101	1
Minnesota Pollution Control Agency Site Response Section Ground Water and Solid Waste Division Attn: Steven Giddings 520 Lafayette Road St. Paul, MN 55155	1
U.S. Environmental Protection Agency Region V Remedial & Enforcement Response Branch OH/MN Section, Unit 1 (HSRM-6J) Attn: Tom Bloom 77 W. Jackson Blvd. Chicago, IL 60604-3590	1

**DISTRIBUTION LIST  
MEETING NOTES  
TRC MEETING #15**

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FMC Corporation Attn: Doug Hildre 4800 East River Road Minneapolis, MN 55421	1
Metropolitan Waste Control Commission Attn: Leo H. Hermes, P.E./Michael Pliml, P.E. Mears Park Centre 230 East 5th Street St. Paul, MN 55101	1
Environmental Services Anoka County Courthouse Attn: Robert Hutchison, Director 325 East Main Street Anoka, MN 55303	1
Minnesota Department of Natural Resources Attn: Mr. Evan Drivas 500 Lafayette Road St. Paul, MN 55115	1
Minneapolis Water Works Attn: Mr. Adam Kramer 4300 Marshall Street NE Minneapolis, MN 55421	1
Defense Plant Representative Office FMC-Minneapolis Attn: Commander Daniel Hogan 4800 East River Road Minneapolis, MN 55421-5094	1
FMC Corporation Attn: Diane Maki 4800 East River Road Minneapolis, MN 55421	1
B&V Waste Science & Technology Corp. Attn: Margaret Casserty 230 West Monroe St.; Suite 2250 Chicago, IL 60606	1

**Minutes of Meeting  
Technical Review Committee Meeting #15  
September 2, 1992**

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

Technical Review Committee (TRC) meeting #15 was held at the Naval Industrial Reserve Ordnance Plant (NIROP) in Fridley, Minnesota, on September 2, 1992. A copy of the agenda distributed at the meeting and an attendance list are attached.

**A. Introductions**

1. Jim Shafer opened the meeting at approximately 1:00 p.m.
2. There were no comments on the notes for TRC meeting #14.
3. Ms. Dawn Duncanson of the MPCA was introduced to the TRC. She will be the MPCA's on-site inspector for operations and fieldwork related to groundwater remediation.

**B. Actions Since Last TRC Meeting**

1. Jim Shafer said that the groundwater extraction wells and pretreatment system began shakedown operations on August 18, 1992. However, a problem occurred with metal shields on overhead groundwater pipes in the plant. Due to the safety hazard, the extraction wells were shut down after only one to two days of operation.
2. Gene Liu said that the USACE is reviewing a potential problem with operation of extraction well AT-4. This well may not be producing an adequate flow rate. If a problem is found with AT-4, the other three wells would be returned to operation after the pipe hangars are repaired, even if more time is required to repair AT-4. He also said that the flow meters for the discharge from each extraction well at the Control House are not functioning properly. The meters will be replaced if the manufacturer cannot get them to function properly by September 4.  
  
He said that the extraction wells are scheduled to re-start for further shakedown on September 14. The tentative date for beginning the formal startup period is October 1; the startup period will begin earlier if possible.
3. Eric Gredell described observations reported by the RMT technician who made water level measurements at all monitoring wells on August 14 and 18, 1992. The technician reported visual signs of possible floating product in well 8-l. John Betcher said that if the material seen was from floating fuel oil at the well location, the floating product could move rapidly toward well AT-3A. He said that this could cause operational problems at the pretreatment system or safety hazards, if free product was present at sufficiently high concentrations entering well AT-3A. The Navy will develop a plan for

addressing the possible presence of floating product at well 8-I, and will consult with the USEPA and MPCA before implementing the plan.

4. The following permit status was presented:

a. Groundwater Appropriation Permit:

The final permit has been issued by the Minnesota DNR.

b. MWCC Permit:

The draft permit has been issued by the MWCC. It was uncertain whether the draft permit would automatically become the final permit if the Navy had no comments on the draft. Jim Shafer said that the permit should have been addressed to NAVSEA, not NAVFACENGCOM, because the permit is issued to NAVSEA. He said that all billings related to the MWCC permit and discharge of groundwater to the sanitary sewer should be sent to Dick Hanson, the NAVSEA Technical Representative.

c. NPDES Permit:

The MPCA will contact FMC to obtain information on the expected flow rate for discharge to the river. A date has not been scheduled for the MPCA to issue the draft permit for public notice. Adam Kramer requested to be notified directly at the time the public notice period begins. Steven Giddings will relay this request to the MPCA staff who are responsible for processing the permit.

5. Linda Hicken said that RMT completed the two-month fieldwork effort for the soil remedial investigation (RI) at the end of July. The soil samples are currently being analyzed at the RMT Laboratories. Some analysis results have been completed, and are currently undergoing quality assurance review by an independent data validation specialist under a subcontract to RMT. Laboratory analysis of the remaining samples is continuing.

Tom Koch presented a synopsis of the soil RI fieldwork. This included slides of the drum removal action and overhead slides showing preliminarily identified areas of contamination based on the portable gas chromatograph results.

6. Doug Hildre gave a summary of the removal action managed by FMC for the buried drums which were discovered during the soil RI fieldwork. The drums were shipped to ENSCO, a licensed hazardous waste facility in Eldorado, Arkansas, on August 27, 1992. Some debris from screening of soil excavated during the drum removal remains on-site. FMC is evaluating options for disposal of the debris. One option is co-disposal of the debris at the Anoka County Landfill in a lined cell. A composite sample of the debris was prepared and rinsed with water. The rinsate was tested and found to contain 20 mg/L total cyanide; no other constituents of concern were detected. If the Anoka County Landfill will not accept the debris, it would probably be disposed at a RCRA-permitted facility.

Information describing the drum removal action was prepared by FMC. A copy has been sent to the information repository for the NIROP Superfund action located at the Anoka County Library. A draft public notice regarding the removal action was sent to

the USEPA and MPCA by FMC. After addressing comments from the USEPA and MPCA, FMC sent the public notice to the Fridley Focus for publication. The scheduled publication date was August 25, 1992; however, it was not known if the notice has been published. Dick Hanson will send a copy of the published notice to Jim Shafer for the Administrative Record.

7. Doug Hildre said that FMC has installed piping and equipment to use untreated groundwater from the discharge of wells AT-1A and AT-4 as a non-contact cooling water supply to a plant air compressor. After use for cooling, the flow from both wells is combined into a single pipe for transport to the Control House. Due to this piping arrangement, it would not be possible to obtain separate flow rate readings or samples for the discharges from AT-1A and AT-4. For this reason, the untreated groundwater will not be used as an in-plant cooling water supply during the initial 90 days of operation of the groundwater extraction system.

**C. Actions for Next Quarter**

1. It was agreed that the formal startup period for the groundwater extraction system would begin when shakedown of the majority of the system had been completed. If significant problems are discovered with AT-4, the startup period would proceed with the other three wells while AT-4 is repaired. The Navy will contact the USEPA and MPCA if RMT determines that the extraction system hydraulic capture effectiveness cannot be sufficiently evaluated during the initial 90-day startup period without operation of AT-4.
2. After the date for beginning the formal startup period for the groundwater extraction system has been determined, a schedule with dates for all monitoring events required during the 90-day startup period will be sent to the USEPA and MPCA.
3. The Remedial Action Workplan-Revision 2 is expected to be issued during the week of September 7.
4. It was agreed that the Operation and Maintenance Plan for the groundwater extraction system would not be issued again until the portion of the plan containing all of the maintenance details was available.
5. Linda Hicken gave the following preliminary schedule for key dates during completion of the RI Report for the soil operable unit:

5-22-93	Draft RI Report with Baseline Risk Assessment submitted to the USEPA and MPCA
6-21-93	Review comments on the draft RI Report received from the USEPA and MPCA
8-5-93	Draft-final RI Report submitted to the USEPA and MPCA
9-4-93	USEPA and MPCA approval of the final RI Report

6. Linda Hicken raised the issue of how the risk assessment would address the groundwater, surface water, and surface sediment migration pathways. It was agreed

that a telephone conference call among the MPCA, the USEPA, the Navy, and RMT would be necessary to resolve these issues. The conference call was tentatively scheduled for 10-5-92 at 9:00 a.m. CDT, with 10-6-92 as an alternate date. RMT will prepare and distribute materials to be used as a basis for discussion in advance of the conference call. John Betcher said that the MPCA does not currently have a toxicologist to assign to this project. The MPCA will defer authority to the USEPA's toxicologist if the MPCA's vacant position is not filled before the conference call on October 5 or 6. Gary Eddy said that the MPCA may not request toxicological assistance from the Minnesota Department of Health (MDH) if the USEPA toxicologist takes the lead in providing oversight of the risk assessment. Gary will confirm MDH's role before the conference call.

7. Jim Shafer said that the Determination Document for groundwater will include recommendations for upgrading the extraction system, if this is found to be necessary.
8. Steven Giddings noted that the MPCA Site Response Section has developed a model for determining soil cleanup levels. This model is being applied to sites as a MPCA policy, and will not be promulgated as an ARAR. The model has been used at other sites in the feasibility study phase of work as opposed to the risk assessment. Tom Bloom said that Region V does not have a similar model to determine soil cleanup levels, and the USEPA would likely defer this matter to the state. Steven Giddings will send a copy of this model to the Navy and RMT.

D. RCRA Status

Darlene Weber said that a Remedial Action Workplan for the former Hazardous Waste Storage Area (HWSA) "C" was sent to the MPCA by FMC on July 6, 1992. After receiving review comments from the MPCA, FMC submitted responses to the comments. The proposed remedial action includes installation of four soil vapor extraction (SVE) wells, with quarterly sampling for performance monitoring. Specific soil cleanup levels have not been defined. The SVE system will operate for two years, then an evaluation of the overall effectiveness will be performed. The SVE system is expected to reduce contaminant concentrations in affected soil to below detectable levels within two years.

The schedule for implementing the remedial action is as follows:

10-5-92	Construction bids received by FMC
11-10-92	Construction contract award
12-3-92	Start construction
2-17-93	Complete construction

The construction contract for the SVE system at HWSA "C" will also include the soil stockpiles in the north 40. However, landfarming of soil will not be done until April 1993 at the earliest. Work on the Category 2 and Category 4 soil can be done over the coming winter. Category 4 soil will be taken to a permitted incinerator facility.

E. Community Relations

1. Review comments on the draft news release and fact sheet for startup of the groundwater extraction system were received from the MPCA by the Navy and RMT.
2. It has not been determined whether some type of public relations activity will be held at the NIROP related to the groundwater extraction system startup.

F. General Topics

1. Jim Shafer reminded the TRC that management of soil remediation will be transferred from the Northern Division to the Southern Division of NAVFAC at the conclusion of the RI phase. Management of groundwater remediation will also be transferred to the Southern Division at the conclusion of the remedial design phase; construction of the groundwater treatment facility will be managed by Southern Division.
2. The next TRC meeting is scheduled for **Thursday, December 3, 1992, at 1:00 p.m.** in the Defense Plant Representative Office at the NIROP Fridley.

TECHNICAL REVIEW COMMITTEE (TRC) MEETING #15  
2 SEPTEMBER 1992  
NIROP FRIDLEY, MINNESOTA

EXPECTED (See attached sign-in  
LIST OF ATTENDEES: sheet for actual list  
of attendees)

<u>NAME</u>	<u>ORGANIZATION</u>
James Shafer	NORTHDIVNAVFAC
John Betcher	MPCA
Steve Giddings	MPCA
Fred Jenness	MPCA
Gary Eddy	MPCA
Dawn Duncanson	MPCA
Doug Hildre	FMC/NSD
Darlene Weber	FMC/NSD
Scott Erickson	City of Fridley
Robert Hutchinson	County of Anoka
Keith Lura	DPRO FMC Minneapolis
John Dresch	DPRO FMC Minneapolis
Sue Oetterer	DPRO FMC Minneapolis
Richard Hanson	NAVSEA
Kerry Morrow	NAVSEA
Eric Gredell	RMT, Inc.
Linda Hicken	RMT, Inc.
Tom Koch	RMT, Inc.
Adam Kramer	Minneapolis Water Works
Mike Pliml	MWCC
Thomas Bloom	USEPA
Margaret Casserly	Black and Veatch
Evan Drivas	DNR
Eugene Liu	COE
Janet Ehresmann	COE
Sam Bass	COE
Mark Koenig	COE

## AGENDA

### 1. INTRODUCTION

### 2. ACTIONS SINCE LAST TRC MEETING

#### \* PHASE I GROUND WATER EXTRACTION SYSTEM

- SYSTEM START UP
- MWCC SAMPLING/REPORTING
- RAMP SAMPLING/REPORTING
- OPERATION & MAINTENANCE - RESPONSIBILITIES

#### \* STATUS OF PERMITS

- NPDES
- MWCC
- GROUNDWATER APPROPRIATIONS

#### \* STATUS OF PHASE I OUTSTANDING DOCUMENTS

- PHASE I REMEDIAL ACTION WORK PLAN
- PHASE I OPERATION & MAINTENANCE PLAN

#### \* STATUS OF SOILS RI FIELD ACTIVITIES

- REMOVAL ACTION
  - a. SUMMARY OF EVENTS
  - b. DISPOSAL OF SOIL & DEBRIS
  - c. PUBLIC NOTIFICATION
- SUMMARY FINDINGS IN OTHER AREAS

#### \* PHASE II DESIGN - PROPOSED SCHEDULE

### 3. ACTIONS SCHEDULED FOR NEXT QUARTER

#### \* SOILS OPERABLE UNIT

- RI REPORT & RISK ASSESSMENT

#### \* PHASE I DETERMINATION DOCUMENT

#### \* AREA C RCRA SITE

#### \* COMMUNITY RELATIONS

- FACT SHEET/PRESS RELEASE

### 4. OTHER ISSUES/COMMENTS

### 5. NEXT TRC MEETING

TECHNICAL REVIEW COMMITTEE (TRC) MEETING #15

2 SEPTEMBER 1992

NIROP FRIDLEY, MINNESOTA

LIST OF ATTENDEES:

<u>NAME</u>	<u>ORGANIZATION</u>	
James Shafer	NORHDIVNAVFAC	<i>James Shafer</i>
John Betcher	MPCA	<del><i>[Signature]</i></del>
Steve Giddings	MPCA	<i>Steve Giddings</i>
Fred Jenness	MPCA	
Gary Eddy	MPCA	<i>Gary Z. Eddy</i>
Dawn Duncanson	MPCA	<i>Dawn Duncanson</i>
Doug Hildre	FMC/NSD	<i>Doug Hildre</i>
Darlene Weber	FMC/NSD	
Scott Erickson	City of Fridley	<i>Scott Erickson</i>
Robert Hutchinson	County of Anoka	
Keith Lura	DPRO FMC Minneapolis	<i>Keith Lura</i>
John Dresch	DPRO FMC Minneapolis	<i>John Dresch</i>
Sue Oetterer	DPRO FMC Minneapolis	<i>Donald R. Cheeley for Sue Oetterer</i>
Richard Hanson	NAVSEA	<i>Richard Hanson</i>
Kerry Morrow	NAVSEA	<i>Kerry Morrow</i>
Eric Gredell	RMT, Inc.	<i>Eric Gredell</i>
Linda Hicken	RMT, Inc.	<i>Linda E. Hicken</i>
Tom Koch	RMT, Inc.	<i>Thomas E. Koch</i>
Adam Kramer	Minneapolis Water Works	<i>Adam Kramer</i>
Mike Pliml	MWCC	
Thomas Bloom	USEPA	<i>Thomas Bloom</i>
Margaret Casserly	Black and Veatch	<i>M. Casserly</i>
Evan Drivas	DNR	
Eugene Liu	COE	<i>Eugene Liu</i>
Janet Ehresmann	COE	
Sam Bass	COE	
Lt. Rick Bushore	DPRO FMC	
Mark Koenig	COE	