



# Minnesota Pollution Control Agency

June 12, 1997

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Scott A. Glass, Code 18610  
Commanding Officer  
Southern Division  
Naval Facilities Engineering Command  
P.O. Box 190010  
North Charleston, South Carolina 29419-9010

RE: Naval Industrial Reserve Ordnance Plant Superfund Site

Dear Mr. Glass:

This letter outlines a work plan strategy for amending the Operable Unit 3 (OU3) Remedial Investigation Work Plan for a Remedial Investigation in and near Anoka County Park as identified in the Minnesota Pollution Control Agency (MPCA) staff letter to the Navy, dated May 23, 1997. This work plan strategy is for the Naval Industrial Reserve Ordnance Plant (NIROP) Superfund Site and is being sent pursuant to the Federal Facility Agreement, dated March 27, 1991, between the MPCA, the U.S. Environmental Protection Agency (EPA), and the U.S. Navy (Navy).

The MPCA staff wants to use the partnering process to address issues raised in this letter. The staff believes that this work plan strategy should not delay start of the OU3 Remedial Investigation (RI) and is open to using the partnering process to define the scope and timing of the work described in this letter.

As the Navy is aware, the MPCA staff has previously requested information on the status of the storm sewers, including documentation on the sealing of the storm sewers in its response to the OU3 Site Evaluation Report. It is the MPCA staff's understanding that the Navy is still trying to document the current status of the storm sewers.

After the May 23, 1997, MPCA staff letter was mailed, the staff reviewed a set of NIROP aerial photographs in MPCA staff files in order to verify Mr. Harris' recollection regarding the storm sewer outfalls. These photographs were sent to John Betcher by Doug Hildre of United Defense LP during the second barrel removal several years ago and are copies of photographs in the facility files. Some of the photographs were numbered and dated. The following are examples of NIROP facility photographs in the MPCA staff files that show sewer lines, outfalls, and receiving ponds that are related to the MPCA staff letter of May 23, 1997: N2460, dated June 1, 1941; N02853, dated November 24, 1941; and N5821, September 26, 1943.

520 Lafayette Rd. N., St. Paul, MN 55155-4194; (612) 296-6300 (Voice); (612) 282-5332 (TTY)

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In the same folder with the above-cited photographs was a map, dated December 17, 1982, submitted by Ms. Jacqueline Francis of the Navy on February 7, 1983. Her name and address appear on an MPCA staff letter dated January 5, 1983 requesting that the Navy accelerate its investigation of disposal activities in the area around the NIROP and FMC Site (see enclosed copy). The map shows four areas marked "River Dump," FMC Site "South Site," "North Site" Disposal Trench, and "Waste Disposal Pits."

The above-cite map and photographs confirm Mr. Harris' recollection concerning the storm sewer outfalls. It is clear that the outfalls discharged on land and not in the Mississippi River. Given the estimated mass of trichloroethylene discharged into the storm sewers, this means that the storm sewers played a significant role in on land site waste disposal. Some of the photographs show the storm sewers outfalls discharging to gullies that flow into a pond in the adjacent wetland.

The RI in and near Anoka County Park shall include, at a minimum, the following:

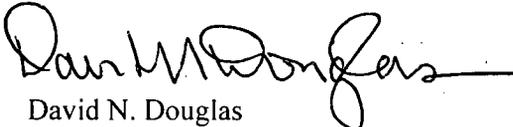
1. The Navy shall locate on a map of at least the same scale as the ground water maps from 1996 Annual Monitoring Report the following:
  - a. All past and present storm and sanitary sewers and their outfalls west of East River Road extending out to their point of discharge;
  - b. All past overland flow routes, e.g., ditches or gullies, from these sewers; and
  - c. All natural and manmade ponds that received discharges from these sewers.
2. The Navy shall show the relationship of items cited in 1a through 1c to ground water monitoring wells that are currently plotted on ground water maps from the 1996 Annual Ground Water Monitoring Report.
3. The Navy shall identify the dates of construction of all sewer and sewer outfalls identified in Item 1; their dates of operation; and, if removed, the dates of their demolition.
4. The Navy shall provide as built drawings of the construction and demolition of these sewer and their outfalls.
5. The Navy shall identify all sewers and outfalls identified in Item 1 that remain in place. For all such sewer and outfalls, the Navy shall determine the current condition of these sewers and outfalls.

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6. The Navy shall provide a history of the filling of the wetland adjacent to the Mississippi River (see NIROP facility photograph N5829, dated September 23, 1943).
7. The Navy shall sample the areas around the sewers and sewer outfalls; pond areas; and overland flow routes, e.g., ditches, and gullies associated with the sewers identified in Item 1 for releases of hazardous substances.
8. The Navy may use the direct push sampling method planned for under the NIROP main building to conduct this investigation and the same parameter list, sampling methods, detection limits, etc., as those already identified for the OU3 RI.
9. The Navy shall provide information on the following areas: "River Dump," FMC Site "South Site," "North Site" Disposal Trench, and "Waste Disposal Pits" on the enclosed map submitted by Ms. Jacqueline Francis of the Navy on February 7, 1983.

If you have any questions regarding this letter, please contact me at (612) 296-7818.

Sincerely,



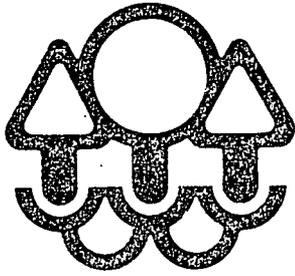
David N. Douglas  
Project Manager  
Response Unit I  
Site Response Section  
Ground Water and Solid Waste Division

DD:ch

Enclosures

cc: Joel Murphy, U.S. Navy  
Thomas Bloom, U.S. Environmental Protection Agency

Ayers



# Minnesota Pollution Control Agency

January 5, 1983

Ms. Jacqueline Francis  
Department of the Navy  
Naval Energy & Environmental  
Support Activity  
Port Hueneme, California 93043

Mr. D. Smith  
Northern Division  
Naval Facilities Engineering Command  
Philadelphia, Pennsylvania 19112

Dear Ms. Francis and Mr. Smith:

You are probably aware that a hazardous waste site on FMC property in Fridley, Minnesota has been named the #1 Superfund site in the nation. The U.S. Navy apparently also disposed of hazardous waste on its property a short distance to the north. Consequently, the U.S. Navy began an "Initial Assessment Survey" in October, 1982. I am writing this letter to request that the Navy speed up that survey and begin to do studies of soil and ground water contamination in the area, as well as to take remedial measures.

This will serve the purpose of coordinating and speeding up remedial action at both the Navy and FMC owned sites. The Minnesota Pollution Control Agency (MPCA) staff believes that by now the Navy should have adequate information, as a result of reviewing files and aerial photos, interviewing employees, etc., to clearly indicate the need for these activities.

It is the opinion of the MPCA staff that steps should be taken immediately by the U.S. Navy to determine the impact of the disposal site on the local ground water quality and to remedy it. A ground water study is important because both the city of Minneapolis' water supply and a Fridley municipal well are within one-half mile of the U.S. Navy's northern disposal site and FMC's southern disposal site and these public water supplies have been found to be contaminated. It is important to determine the impact of the northern site as well as the southern disposal site on area ground water quality in order that an effective overall remedial program can be implemented.

Phone: 612/297-3352

1935 West County Road B2, Roseville, Minnesota 55113-2785

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Ms. Francis and Mr. Smith

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Therefore, the MPCA is requesting that the U.S. Navy develop a study plan that would initially investigate the ground water flow and quality in the drift aquifer, as well as conduct split spoon sampling of soils at the site to identify the soil stratigraphy and the first bedrock unit encountered at both the east and west boundaries of the site. I suggest that you contact FMC for the purpose of coordinating your ground water study with theirs.

The proposed ground water study plan should be submitted to me by January 31, 1983 for review prior to implementation. Based upon the results from the initial phase of the investigation a determination can be made if additional phases of ground water study are warranted.

Furthermore, the MPCA would like to review with you the data so far obtained in the Navy's "Initial Assessment Survey" for the purpose of discussing remedial measures that may now be taken, i.e. excavation of drummed waste. Please propose a date for such a meeting at the MPCA to occur prior to January 31, 1983.

In closing, the MPCA looks forward to meeting with you and receiving the U.S. Navy's proposed plans. If you should have any questions, please contact me at 612/297-3352.

Sincerely,



Michael Kanner, Head  
Site Response Unit  
Regulatory Compliance Section  
Solid and Hazardous Waste Division

MK:cj

cc: Earl R. Wigand, FMC Corporation, Fridley  
Neil Elphick, FMC Corporation, Philadelphia  
Douglas Hildre, FMC Corporation, Minneapolis  
Judy Longfield, FMC Corporation, Philadelphia  
John Flora, Director of Public Works, Fridley  
Dave Harmon, Anoka County Solid Waste Office, Anoka  
James Hayek, Director of Water Works, Minneapolis  
Gary Englund, Minnesota Department of Health, St. Paul  
Robert Lines, Minneapolis Department of Inspections, Mi  
Michele Mielke, Special Assistant Attorney General  
Michael E. McGuire, O'Connor and Hannan, Minneapolis  
Norman Niedergang, On-Scene Coordinator, U.S. EPA, Chicago

bcc: Jay Heffern, MPCA  
Lisa Thorvig, MPCA  
Michael Ayers, MPCA  
Jim Bestick, MPCA  
Bob Karls, MPCA  
Michael Convery, MN Dept. of Health

STATISTICAL DATA PROPERTY FLOOR SPACE BY BUILDING

SECTION	INDUSTRY	MANUFACTURING	OFFICE	RESEARCH	LABORATORY	OTHER	
105	0.320	134,217	10,900	15,160	20,262	143,964	
110		220,938	6,616	204	13,436	2,488	
			2,700	4,800	47,069	103,350	
	43,386	77,941	91,492	15,495	7,133	114,820	
1,300		202,844	43,380	5,135	312	152,959	
			131	131	131	60	
			21,423	250,701	10,241	7,380	197,943
			5,372				5,372
					23,828	23,828	8,345
					92	92	374
							331
							480
							7,844
							20,797
							17,173
							13,435
							187
							27,458
							17,306
							8,953
							53,016
1,016							1,427,345
1,349	29,475	26,057	1,129,451	147,715	80,313	1,942,345	
1,208		43,201	27,941	6,700	49,357	282,794	
14,597	29,475	27,321	1,217,352	154,415	129,470	1,763,271	

LAND

a. FMC River Front Property	59.82
b. FMC Inland Property	450.12
c. Total FMC Land	109.95
d. Government Land	82.41
e. Total Land	192.34

FMC River Front Property

11	8.71
12	5.31
13	16.6
14	11.34
15	1.13
16	6.54
17	6.57
18	6.90
19	1.64
<b>Total</b>	<b>59.82 Acres</b>

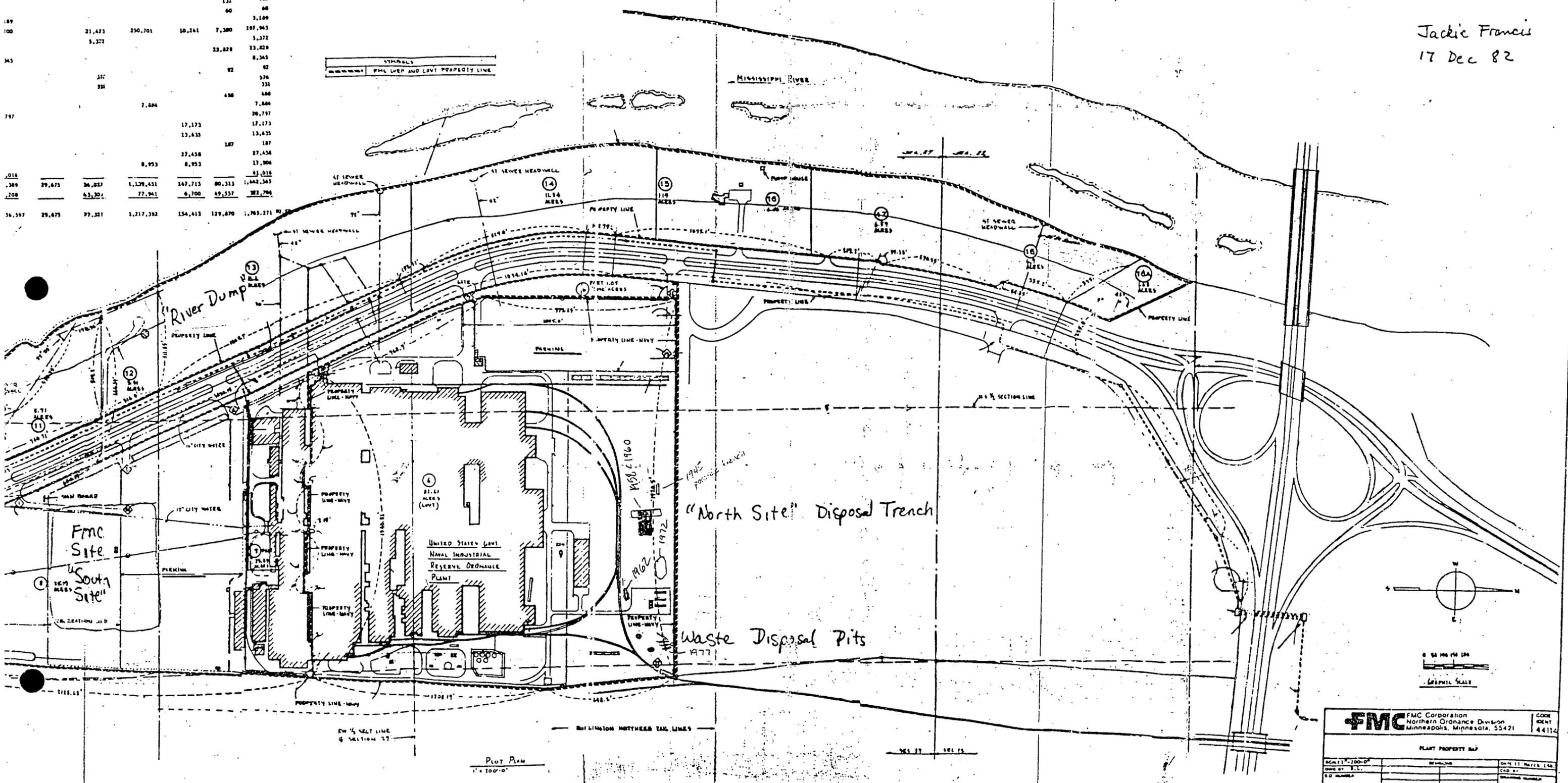
LAND BY PARCELS

FMC Inland Property	6	1.05
	7	23.89
	8	25.19
<b>Total</b>	<b>30.13 Acres</b>	
Gov't Inland Property	10	71.61 Acres

Rec'd from Navy by  
MPCA 2/7/83

NIROP Minneapolis Minnesota  
Approximate locations of  
Disposal Sites

Jackie Francis  
17 Dec 82



SYMBOLS  
FMC RIVER AND GOVT PROPERTY LINE

PLANT PROPERTY MAP

<b>FMC</b> FMC Corporation Northern Ordnance Division Minneapolis, Minnesota 55421		CODE IDENT 44114
PLANT PROPERTY MAP		
SCALE: 1" = 100'-0"	DATE: 11/19/82	BY: J.F.
NO. 11	NO. 12	NO. 13