

United Defense

July 28, 1999
E9085/4.1.3

CERTIFIED MAIL
Return Receipt Requested

U.S. Environmental Protection Agency
Region V (SR-6J)
77 West Jackson Blvd.
Chicago, IL. 60604

Attention: Thomas Bloom
Remedial Manager

Subject: CERCLA 104(e) Request for Information
Naval Industrial Reserve Ordnance Plant Superfund Site

Reference:
(a) Letter from USEPA V dated 6/28/99 to D. L. Hildre (UDLP) and Commander (NAVSEASYSCOM)

Enclosure:
(1) One(1) Copy - Aerial Photograph (5/9/65)
(2) One (1) Copy - Memo No. E9006/4.1.16 dated 1/12/99 by D. Hildre
(3) One (1) Copy - Aerial Photograph (11/13/67)
(4) One (1) Copy - Foundry Corebutt Disposal File G3 - 1971
(5) One (1) Copy - Aerial Photograph (5/15/72)
(6) One (1) Copy - Aerial Photograph N040892 (7/6/73)

Pursuant to the CERCLA 104(e) Request for Information, reference a, efforts were made to collect information related to the "filling in" of areas that are now part of the Anoka County Parkland in the 1960's and 1970's. Upon review of company files, the only documented information of disposal in 1965 was an aerial photograph taken four days after a tornado crossed over the plant (see enclosure 1). The aerial photograph shows that considerable damage was caused by the tornado to the plant. The photograph also shows disturbance along the river bank. Although it can not be confirmed, the disturbance west of the plant is believed to be related to the storm sewers that enter the river at these points.

However, the disturbance southwest of the south parking lot is the area where some of the plant debris from the tornado was disposed. This is substantiated by an interview of a former employee who assisted in this disposal. Enclosure 2 is a memo describing my interview of this employee. There is also actual evidence of roofing membranes, concrete, conduit and other building debris currently sticking out of the river bank at this location confirming that this activity did take place.

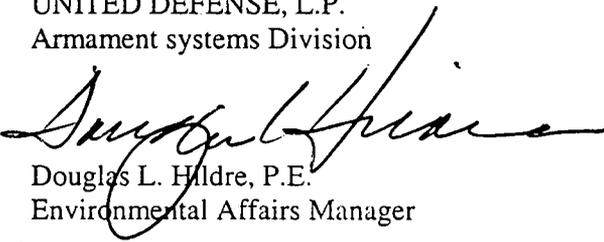
Another aerial photograph taken on November 13, 1967 (see enclosure 3) continues to show disturbance in the same general vicinity as the tornado debris disposal. Although it can not be verified by documents, it is believed that this disturbance is related to disposal of foundry sand and corebutts. There is presently, evidence of corebutts sticking out of the face of the river bank at this location.

With regard to disposal activities in the early 1970's, a file was found which documented the filling in of low areas on the river front property using foundry sand from the plant. Enclosure 4 is a copy of the file including construction drawings showing where the foundry sand disposal took place, photographs of the operation taken on May 22, 1972, internal memos on this subject and correspondence with the Minnesota Pollution Control Agency. Enclosure 5 and 6 are aerial photographs that illustrate the extent of the filling operations.

It is important to note that United Defense is not now or never was the owner or operator of the area referred to in the referenced letter. FMC Corporation sold the property in question to Anoka County in 1983 before United Defense came into existence as a limited partnership company.

Should you have any questions on this matter, please direct them to the undersigned at (612) 572-6938.

UNITED DEFENSE, L.P.
Armament systems Division



Douglas L. Hildre, P.E.
Environmental Affairs Manager

DLH:dlh
Encl.

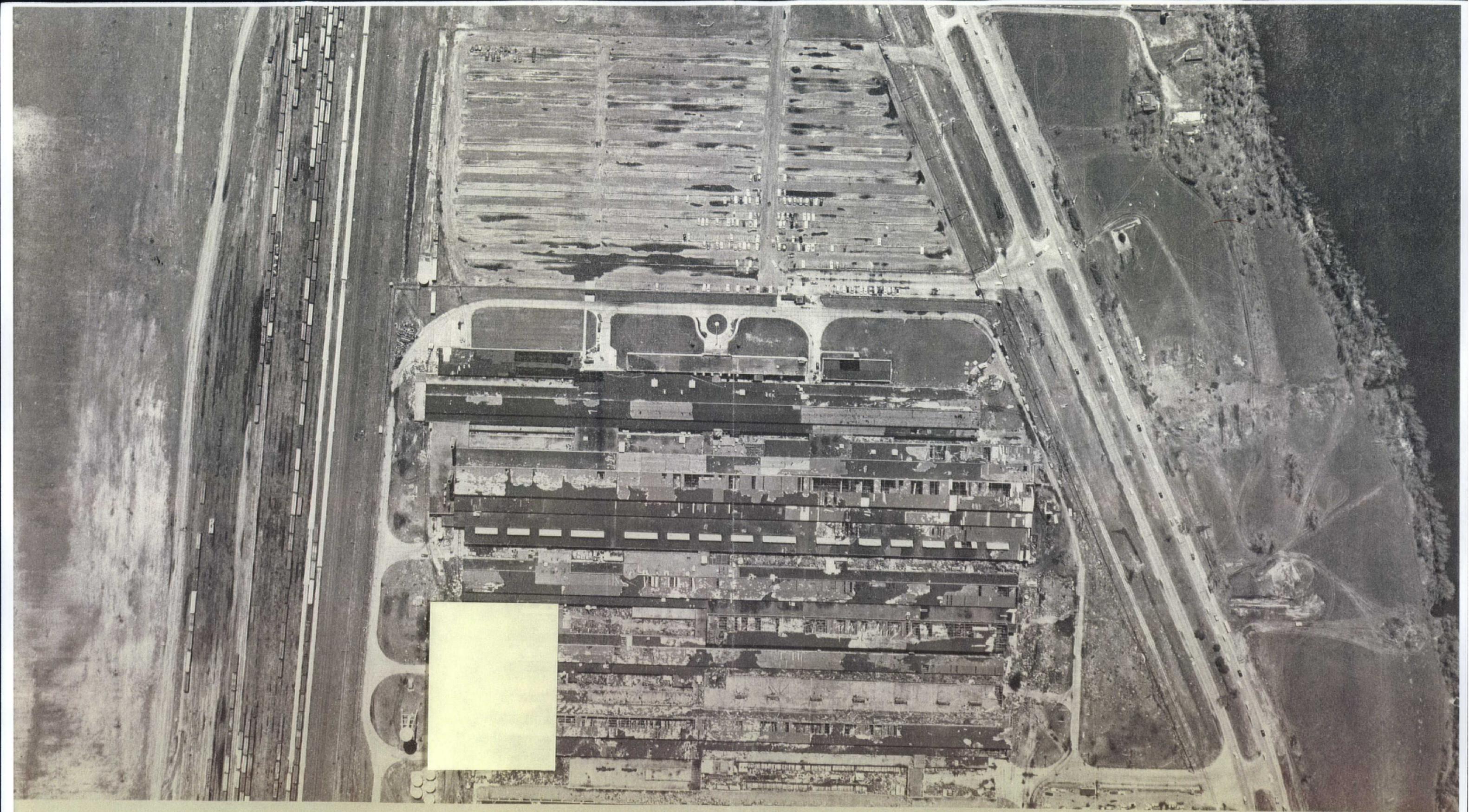
CC: D. Douglas, MPCA
J. R. Sanders, SouthDivNAVFACENGCOM
W. W. Warren
K. Morrow, NAVSEA Tech Rep, Mpls. (w/o encl.)



CHICAGO AERIAL SURVEY

MINNEAPOLIS, MINN. FRANKLIN PARK, ILL.
DATE FLOWN - MAY 9, 1965 APPROX SCALE 1" = 200'





United Defense LP

Armament Systems Division

Interoffice • Minneapolis

To: File 4.1.16

Date: January 12, 1999

From: D. Hildre 

cc: W. Warren

Subject: Anoka County Parkland

Pursuant to the letter from Tom Bloom, EPA Region V dated October 7, 1998 requesting assistance from United Defense to gather information on filling operations on the Anoka County Parkland, I contacted Don Whippler (218) 575-3025 today. Don is a former employee who started at the plant in 1957 and retired approximately two years ago. Don was classified as a millwright who was one of the employees responsible for disposal of waste. Don currently resides on Fish Trap Lake, in northern Minnesota.

According to Don, there used to be a dump straight across from the entrance to the plant where foundry sand and core butts was disposed. He also mentioned that construction waste such as concrete, conduit, and building materials were disposed near the large culvert adjacent to the Water Works property. This type of waste material was disposed there even after the tornado cleanup. (This confirms the Anoka Co. aerial photo taken May 9, 1965, which shows disturbance along the river bank just four days after the tornado and is supported by the visual evidence of this type of waste sticking out of the river bank.)

I asked him if there was ever any disposal of drummed waste and mentioned the fact that there were a couple of drums sticking out of the river bank. He said he was almost positive that they never dumped any drummed waste there because they used the south end of the plant property for that. He did say that if there were drums over along the river, they probably contained foundry sand or corebutts. (Based on my observations of these drums, I believe he is correct – metal turnings were also present.)

I asked him why they used the river front for dumping construction debris when other disposal was done south of the plant. His reason was so the south land did not fill up as fast.

I asked him who else may have been involved in disposal on the Anoka Co. Parkland, Don mentioned Lyle Petersen, current millwright, Stu Packer (former supervisor who now lives in Aiken, MN), Art Swanson (deceased) and Ronald Schmidt (who now lives near Crosby, MN).

I plan to provide this information to T. Bloom, EPA in the form of a letter.

DLH:dlh

E9006/4.1.16





FMC CORPORATION

NORTHERN ORDNANCE DIVISION

COLUMBIA HEIGHTS POST OFFICE, MINNEAPOLIS, MINNESOTA 55421 • TELEPHONE: (612) 560-9201

19 October 1971

RECEIVED

OCT 20 1971

PLANT ENG.

Mr. Larry Johnson
Division of Solid Waste
Minnesota Pollution Control Agency
Board of Health Building
Oak & Delaware Streets S. E.
Minneapolis, Minnesota 55440

QMC
10/20-71
(43)

Re: Disposition of Foundry Core
Material at FMC Corporation

FMC Corporation owns approximately 60 acres of land which fronts on the east side of the Mississippi River just south of Highway 694 in Fridley, Minnesota. A permit has been secured from the City of Fridley and the Corps of Engineers to place approximately 750,000 cubic yards of common earth fill on this property. This filling operation commenced about 11 October 1971 and will be completed in two years.

During the time the filling operation is continuing FMC Corporation plans to mix its foundry core butts with the fill. We estimate that approximately 7,450 tons of sand per year containing binder at 1% by weight will be disposed of in this manner.

On 17 September 1971, Mr. Tom Collins and the undersigned discussed this matter with Mr. Seaborn in your office. Subsequently, in Mr. Seaborn's absence, Mr. Collins talked to you on the telephone concerning this.

During the time the filling operation is going on, FMC Corporation will be exploring methods of recycling the sand for continuous use. If a satisfactory recycling method is not found the core butts will be disposed of by hauling to a licensed dump after the filling operation on the river front property is completed.

In accordance with your suggestion FMC Corporation has attempted to determine the chemical composition of the core sand binder. The binder is a proprietary item and a chemical analysis is not available.

Mr. Larry Johnson, PCA
19 October 1971
Page Two

Informal information we have received indicates the following approximate characteristics for the binder:

50% Isocyanates
48% Phenolic Polyol Resin
2% Amines (Catalyst)

If FMC Corporation mixes with the common earth approximately 7,450 tons per year of foundry core butts (14,900,000 pounds), containing 99% sand and 1% binder by weight, the following approximate weights of the above binder contents will be present:

74,500 pounds Isocyanates
71,520 pounds Phenolic Polyol Resin
2,980 Amines

If the land fill consists of 750,000 cubic yards of common earth and if FMC Corporation mixes its foundry core butts with the fill, the following percentages will prevail:

(1) Total fill	2,025,000,000 pounds
(2) Core butts	29,800,000 pounds
(3) Isocyanates	149,000 pounds
(4) Phenolic Polyol Resin	143,040 pounds
(5) Amines	5,967 pounds
(6) Isocyanates % of Total	0.00725%
(7) Phenolic Polyol Resin % of Total	0.00696%
(8) Amines % of Total	0.00029%

If the filling operation takes less than two years to complete, as we think the case may be, the amount of binder mixed with the fill will be even less than set forth above.

Since minimal amounts, if any, of any objectionable substance is involved, FMC Corporation requests your advice that the proposed

Mr. Larry Johnson, PCA
19 October 1971
Page Three

method for temporary disposal of foundry core butts does not require
a permit from your office for solid waste disposal.

Very truly yours,

Wheeler Smith
Attorney & Assistant Secretary

WS:cs

Cmg
ERW
TWC ✓
JDK

DATE:

15 October 1971

FROM:

Plant Engineering

TO:

Wheeler Smith

NORTHERN ORDNANCE DIVISION



Columbia Heights P.O.
Minneapolis, Minnesota 55421

INTEROFFICE CORRESPONDENCE

M7824-G3

SUBJECT:

Disposal of Foundry Core Butts

Reference:

- (a) Plant Engineering memo M7757-G3 dated 29 September 1971
- (b) Plant Engineering memo M7790-G3 dated 8 October 1971.

1. Reference (a) set forth our economic analysis of the subject matter. Reference (b) advised of the need to correct the cost study based on actual test data. This memo corrects the cost data.

2. Cost Estimates

(a) Present method:

- | | |
|---|--------------|
| (1) Truck operator time 1518 hours per year @ \$4.42 per hour plus 31% PAC | \$ 8,790 |
| (2) Truck Owning cost (2 - 1952 dump trucks) | None |
| (3) Truck Operating Cost (Gas, Oil, License, Etc.) | 450 |
| (4) Truck Maintenance Cost | 1,800 |
| (5) Front End Loader for dump covering, 200 hours per year, operator cost @ \$4.42 per hour plus 31% PAC | 1,158 |
| (6) Front end loader owning cost (200 hours out of 2000 hours) | 167 |
| (7) Front end loader operating cost | 250 |
| (8) Front end loader maintenance cost | 600 |
| (9) Snow plowing at dump, extracting stuck trucks, starting stalled trucks, hauling trucks back to shop for repair and the like | <u>3,500</u> |

DATE: 8 Oct ber 1971

FROM: Plant Engineering

TO: Wheeler Smith

SUBJECT: Disposal of Foundry Core Butts

NORTHERN ORDNANCE DIVISION



Columbia Heights P. O.
 Minneapolis, Minnesota 55421

INTEROFFICE CORRESPONDENCE

M7790-G3

Reference:

- (a) Plant Engineering memo M7757-G3 dated 29 September 1971

1. By reference (a) we set forth a relative cost evaluation of the subject matter. This memo records that the data provided may require some refinement as a direct result of actual test procedures.

2. One of our concerns with this problem has been actual subcontract trips required. Subcontract costs are more directly related to number of loads than it is to quantity of waste hauled. The number of loads is a direct function of the size of the container. However, the physical problem of spotting a maximum size container under our refuse hopper appeared to be a problem. We were also concerned with the legal over the road weight of the load as well as the weight that could be picked up by the truck. The only way to find the answer to these questions was to actually make a test haul.

3. On the 5th. and 6th. of October we had Waste Control test run our foundry waste hauling problem. They hauled all refuse for a 48 hour period. The first container spotted was 20 c.y. capacity. When filled the container was substantially overloaded; it could not be picked up by the truck and had to be partially unloaded. When weighed it exceeded legal limits for weight on the roads to be traveled. Accordingly, the first load was dumped on our river front property. We next tried a 15 c.y. container. We were able to pick up the loaded container and it weighed approximately 10 tons which is

Wheeler Smith
8 October 1971
M7790-G3
Page Two

acceptable. The test was continued using 15 c.y. containers and we averaged two (2) loads per day. This rate of hauling is significantly less than is shown in reference (a) and may affect the economic evaluation.

4. We will defer further action on this matter pending your review of the matter and the issuance of new instructions.

T.W. Collins, Plant Engineer

TWC:jh

cc: C.M. Underwood

DATE: 29 September 1971

FROM: Plant Engineering

TO: Wheeler Smith

SUBJECT: Disposal of Foundry Core Butts

NORTHERN ORDNANCE DIVISION



Columbia Heights P.O.
Minneapolis, Minnesota 55421

INTEROFFICE CORRESPONDENCE

M7757-G3

1. This memo is provided in accordance with the verbal request of C.M. Underwood made on 21 September 1971. The purpose of the memo is to provide a cost comparison between self hauling and subcontract hauling of foundry core butts.
2. Alternative Methods:
 - (a) Continue to dispose of core butts the same as at present; change methods when the river front property filling is complete. This procedure will require a permit from the Minnesota Pollution Control Agency or a waiver of the requirement for a permit.

While investigating the subject matter, the undersigned spoke to Mr. Larry Johnson, Solid Waste Division of the Pollution Control Agency (378-1320), regarding the nearest location of a State approved land fill dump; Mr. D. Seaborn was not available. When the matter was fully explained, Mr. Johnson questioned our need for a permit. He advised that if we would direct a letter to his attention and set forth the constituents of our waste he would review the matter with Mr. Seaborn. In particular he wanted a definition of the composition of the binder used in the core butts.

We have attempted to determine the chemical composition of the core sand binder. We understand that it is a proprietary product and a chemical analysis is not available. The binder is mixed with sand for core making at the rate of 1% by weight

Wheeler Smith
29 September 1971
M7757-G3
Page Two

and informal* information indicates the following approximate characteristics:

50% Isocyanates
48% Phenolic Polyol Resin
2% Armines (Catalyst)

* Doctor Schafer, Ashland Chemical Co. (216-961-4690)

If we dispose of 7450 tons per year of foundry core butts (14,900,000 pounds) containing 1% binder, the following approximate weights of the above will be present:

74,500 pounds Isocyanates
71,520 pounds Phenolic Polyol Resin
2,980 Amines

If the land fill consists of 750,000 cubic yards of material and if we mix our waste foundry core butts with the fill, the following percentages will prevail:

(1) Total fill	2,025,000,000 pounds
(2) Core butts	29,800,000 pounds
(3) Isocyanates	149,000 pounds
(4) Phenolic Polyol Resin	143,040 pounds
(5) Amines	5,960 pounds
(6) Isocyanates % of Total	0.00725%
(7) Phenolic Polyol Resin % of Total	0.00696%
(8) Amines % of total	0.00029%

(b) Subcontract Hauling of Core Butts

One problem with this procedure is of a physical nature. Complete avoidance of waste rehandling must be achieved if the method is to be economical. Thus, the waste hopper must be spotted under our core

Wheeler Smith
29 September 1971
M7757-G3
Page Three

butt hopper in such a way that it will be filled and in such a way that the subcontract truck can pick up the container. We had Waste Control, our present subcontract hauler, inspect the site. They are of the opinion that a 20 cubic yard container can be used and that they will achieve a 20 cubic yard payload without a requirement for our rehandling of the waste. Their cost per load was quoted at \$35.00 (Ron Roth 227-6394).

- (c) Purchase a large capacity dump truck and haul core butts to a State approved land fill dump.

Investigation indicates that there is a State approved land fill dump in the vicinity of Anoka. The land is owned by the City of Anoka and leased to Waste Management of Minnesota, Inc. (Phone: 421-0540). Mr. Don Otto manages the dump. He stated that their charge for dumping is \$0.50 per cubic yard.

The price of a new Ford truck 10 to 12 cubic yard capacity is \$15,000.00 for gasoline engine and \$18,000.00 for a diesel engine. The truck height is approximately 10 feet.

- (d) Purchase a truck with hoist plus two 20 cubic yard containers and haul all of our waste material to a State approved land fill dump.

Mr. Richard Abdo, representative for Dempster Dumpster Systems, Refuse Consultants, Phone 488-0838, advised that equipment costs are as follows:

truck	\$21,000
Hoist	8,000
Containers (2)	<u>4,600</u>
	\$33,600

Wheeler Smith
29 September 1971
M7757-G3
Page Four

(e) Reclaim and recycle foundry core butt sand.

Indications are that this procedure has not been perfected yet; there are some unknown problems. The following contacts were made regarding this matter:

- (1) Mr. Bob Kaeli, Plant Engineer, Minneapolis Electric Steel Casting.

They reclaim sand at the rate of 12 tons per hour using a Simplicity Crusher Screen together with a Dry Scrubber. They also haul waste to land fill using their own equipment. They make five trips per day, 15 miles one way with a 20,000 pound payload. Bob invited us to inspect their reclaiming system. He also placed the undersigned in contact with National Engineering (Chicago) with respect to reclaiming equipment.

Mr. Roy Oska, National Engineering advised that they have several systems installed for reclaiming of foundry sand. On our sand we could expect 60% - 65% efficiency.

He will have their Mr. Gil Ceevin contact us on his return from Europe. This will be about 5 October.

3. Cost Estimates

(a) Present method:

- | | |
|--|----------|
| (1) Truck operator time 1518 hours per year @ \$4.42 per hour plus 31% PAC | \$ 8,790 |
| (2) Truck Owning cost (2 - 1952 dump trucks) | None |

Wheeler Smith
29 September 1971
M7757-G3
Page Five

(3)	Truck Operating Cost (Gas, Oil, License, Etc.)	\$ 450
(4)	Truck Maintenance Cost	1,800
(5)	Front End Loader for dump covering, 200 hours per year, operator cost @\$4.42 per hour plus 31% PAC	1,158
(6)	Front end loader owning cost (200 hours out of 2000 hours)	167
(7)	Front end loader operating cost	250
(8)	Front end loader maintenance cost	600
(9)	Snow plowing at dump, extracting stuck trucks, starting stalled trucks, hauling trucks back to shop for repair and the like	<u>3,500</u>
(10)	Subtotal Cost Present Method	\$16,715
(11)	Subcontract Cost of Compactor Hauling	<u>7,020</u>
(12)	Total Cost Rubbish Removal	\$23,735
(b) Subcontract Hauling		
(1)	760 loads per year at \$35.00/load	\$26,600
(2)	Subcontract Cost Compactor Hauling	<u>7,020</u>
(3)	Total Cost	\$33,620
(c) Self Hauling - Dump Truck		
(1)	1520 trips, 1.5 hrs/trip or 2280 operator hours @ \$4.42 per hour plus 31% PAC	\$13,202
(2)	Truck Owing Cost	4,000
(3)	Truck Operating Cost (Gas, Oil, License, Etc.)	3,000
(4)	Truck Maintenance Cost	1,200
(5)	Dumping fee	<u>7,600</u>
(6)	Subtotal Cost	\$29,002
(7)	Subcontract Cost of Compactor Hauling	<u>7,020</u>
(8)	Total Cost of Rubbish Removal	\$36,022

Wheeler Smith
 29 September 1971
 M7757-G3
 Page Six

(d) Total Rubbish Hauling		
(1)	916 trips, 1.5 hrs/trip or 1374 operator hours @ \$4.42 per hour plus 31% PAC	\$ 7,956
(2)	Equipment Owning Cost	7,366
(3)	Truck Operating Cost (Gas, Oil, License, Etc.)	3,500
(4)	Truck Maintenance Cost	1,600
(5)	Dumping Fee	<u>10,720</u>
(6)	Subtotal	\$31,142
(7)	Less present Compactor Hauling Cost	<u>7,020</u>
(8)	Total Cost	\$24,122

(e) Reclaim sand and recycle
 We do not have sufficient data at this time to make an appropriate evaluation.

4. Summary of Costs

	<u>Removal of Core Butt</u>	<u>Compactor Hauling</u>	<u>Total</u>
(a) Present Method	\$16,715	\$7,020	\$23,735
(b) Subcontract Hauling	26,600	7,020	33,620
(c) Self Hauling Core Butts	29,002*	7,020	36,022
(d) Total Rubbish Hauling			24,122*
(e) Reclaim Sand	No data	7,020	No Data

* Equipment owning cost based on 8 year sum of the digits depreciation as required for transportation equipment. 22.22% charged for first years depreciation. For purposes

DATE: 30 November 1971

FROM: Wheeler Smith

TO: File

SUBJECT: Disposal of Foundry Core Butts

NORTHERN ORDNANCE DIVISION



Columbia Heights P. O.
Minneapolis, Minnesota 55421

INTEROFFICE CORRESPONDENCE

Handwritten: 61
11/30-71

On 29 November 1971 I talked to Mr. Blaine Seaborn of the Minnesota Pollution Control Agency and inquired as to what action they plan to take with respect to our letter of 19 October 1971 requesting that we be allowed to continue dumping foundry core butts on our property without the necessity of applying for a permit. Mr. Seaborn is in charge of granting such permits. He stated that he did not want to give us any written statement saying that a permit was not required and he suggested that we continue doing what we are doing. I told him that we are currently placing the foundry core butts on our property and covering them. I told him that the Anoka County authorities were aware of our action and had stated that they would accept whatever was approved by the Minnesota Pollution Control Agency. He stated that he talks to these people from time to time and that he would discuss this matter with them. He also said that he is going on jury duty for the next three weeks. I told him that I would contact him again in about four weeks to see what action he planned to take with respect to our letter. He said that he would further consider it.

In a second phone call to Mr. Seaborn on 29 November 1971, I told him that we could not be in a position of no decision from their agency. Accordingly, he told me that he would try to make a decision this week and let me know by 3 December 1971.

W.S.

WS:cs

cc: H. Randolph
E. R. Wigand
C. M. Underwood
T. W. Collins ✓
J. J. Uppgren

RECEIVED
NOV 30 1971
PLANT ENG.

MINNESOTA POLLUTION CONTROL AGENCY

717 Delaware Street S.E. Minneapolis, Minnesota 55440

Telephone (612) 378-1320



December 1, 1971

RECEIVED
DEC 2 1971
W. S.

gull
G-1
12/3-71

Mr. Wheeler Smith
Attorney & Assistant Secretary
FMC Corporation
Northern Ordinance Division
Columbia Heights Post Office
Minneapolis, Minnesota 55421

Dear Mr. Smith:

A solid waste disposal permit from this office will not be required for the disposal of used foundry sand with other earth in the earth fill project in progress on company property in the City of Fridley.

However, you must not discard other materials from plant operations in this area and must prevent others from using the area as a dumping grounds.

Yours very truly,

G. Blaine Seaborn, Chief
Section of Standards, Surveys
and Enforcement
Division of Solid Waste

GBS:nf

CC: Robert Hutchison, Anoka County Comprehensive Health Department

cc
CU
HR
EW
TC ✓

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DEC 3 1971
PLANT ENG.

PRINTED ON 100% RECYCLED PAPER



Wheeler Smith
29 September 1971
M7757-G3
Page Seven

of record we list 8 year sum of digits depreciation as follows:

1st. year	22.22%
2nd. year	19.44%
3rd. year	16.67%
4th. year	13.89%
5th. year	11.11%
6th. year	8.33%
7th. year	5.56%
8th. year	2.78%

5. On an 8 year basis, considering that we could only haul to our river front property for two years we record 8 year costs as follows:

	<u>Removal of Core Butts</u>	<u>Compactor Hauling</u>	<u>Total</u>
(a) Present Method	\$193,030	\$56,160	\$249,190
(b) Subcontract Hauling	212,800	56,160	268,960
(c) Self Hauling Core Butts	218,016	56,160	274,176
(d) Total Rubbish Hauling			167,648
(e) Reclaim Sand	No Data	7,020	No Data

6. The data set forth heretofore is provided for your evaluation without comment or recommendation.

T.W. Collins, Plant Engineer

TWC:jh

cc: C.M. Underwood

DATE: 21 S ptemb r 1971
FROM: Plant Engineering
TO: Wheeler Smith

NORTHERN ORDNANCE DIVISION



Columbia Heights P. O.
Minneapolis, Minnesota 55421

INTEROFFICE CORRESPONDENCE

M7727-G3 ✓

SUBJECT: Metropolitan Sewer Board
Notice of Public Hearing

Enclosure:

(1) One (1) copy Metropolitan Sewer Board
Notice of Public Hearing on 30 September 1971.

Enclosure (1) is forwarded for your information. No
action will be taken by Plant Engineering pending receipt
of instructions.

T. W. Collins, Plant Engineering

TWC:kp
Encl.

cc: C. M. Underwood w/encl. (1)
File G1 w/encl. (1)

METROPOLITAN SEWER BOARD
Capitol Square Building, Saint Paul, Minnesota 55101
222-8423

RECEIVED
SEP 20 1971
PLANT ENG.

NOTICE OF PUBLIC HEARING
September 30, 1971
SEWAGE AND WASTE CONTROL RULES AND REGULATIONS
FOR THE METROPOLITAN DISPOSAL SYSTEM

NOTICE IS HEREBY GIVEN That on Thursday, September 30, 1971, at 7:30 o'clock P.M., C.D.S.T., the Metropolitan Sewer Board will hold a Public Hearing on their proposed "Sewage and Waste Control Rules and Regulations for the Metropolitan Disposal System". The hearing will be held in the Members Lounge of the St. Paul Arts and Science Center, 30 East 10th Street, Saint Paul, Minnesota 55101.

Copies of the "Rules and Regulations" are on file and open for public inspection during regular business hours at the offices of the Metropolitan Sewer Board, 800 Capitol Square Building, 10th and Cedar Streets, Saint Paul, Minnesota 55101.

Comments previously submitted by local governments, industries, associations, etc. are now being reviewed and evaluated by the Sewer Board Staff. Any revisions in the previously proposed "Rules and Regulations" will be announced at the Public Hearing.

Interested parties may appear at the hearing and present their views concerning the proposed Rules and Regulations. Any presentations to be made at the hearing should be typewritten and a copy forwarded to the attention of the undersigned at the Sewer Board prior to September 30.

The hearing may be adjourned to a time and place to be stated at the hearing and continued without additional notice.

Dated this 15th day of September, 1971.

A handwritten signature in cursive script that reads "Maurice L. Robins". The signature is written in dark ink and is positioned above a horizontal line.

Maurice L. Robins, P.E.
Deputy Chief Administrator
METROPOLITAN SEWER BOARD

DATE: 20 September 1971

FROM: Wheeler Smith

TO: H. Randolph

SUBJECT: Disposal of Foundry Core Butts

NORTHERN ORDNANCE DIVISION



Columbia Heights P. O.
Minneapolis, Minnesota 55421

INTEROFFICE CORRESPONDENCE

RECEIVED

SEP 20 1971

PLANT ENG.

WSP
9/20-71
(63)

On 17 September 1971 Tom Collins and I met with Mr. D. Seaborn, an engineer in the Division of Solid Waste in the Minnesota Pollution Control Agency in their office at the Board of Health Building, Oak and Delaware Streets S. E., Minneapolis, Minnesota (Phone 378-1320). We told Mr. Seaborn that we presently plan to dispose of our foundry core butts by dumping them on our river front property in the same location where the fill operations are going on so that the small amount of core butts and demolition waste in the form of broken up concrete will be covered almost daily by the fill operations being conducted by Park Construction Company. Mr. Seaborn stated that it would be necessary for us to apply for a permit from their office to carry out our proposed procedure.

As the discussion progressed, it became clear that there would not be any simplified procedures with respect to our application but we would have to go through and meet all of the requirements and follow the procedures for an application for a sanitary land fill. The application will be in two general parts:

1. Procedures to be followed. In the procedures we will have to indicate the types of fill material and the method of operation. We will have to specify that the site will be fenced and the access controlled, that no public usage will be allowed, that an attendant will be on duty whenever the site is open, that the material to be dumped will not cause pollution.
2. Plot plans must be prepared showing:
 - a. The dimensions of the land and the adjacent land usage including streams, highways, wells and municipal wells within one mile.
 - b. Pertinent land features including present elevation, existing drainage patterns and water table elevation, as well as type of soil.

DATE: 20 September 1971

FROM: Wheeler Smith

TO: H. Randolph

NORTHERN ORDNANCE DIVISION



Columbia Heights P. O.
Minneapolis, Minnesota 55421

INTEROFFICE CORRESPONDENCE

SUBJECT: Disposal of Foundry Core Butts
Page Two

- c. Final elevations and drainage patterns and final land usage.

Mr. Seaborn seemed to be quite concerned about the intended use of the property after the fill was completed. We told him that one idea had been to use the property for research and office facilities and he speculated as to how the Metropolitan Council would react to this type of land usage.

3. Approvals required. Mr. Seaborn indicated that his office cooperates with all agencies. We must file three copies of the application for permit. They will mail one copy of the application to the Metropolitan Council and then must wait forty-five days to see whether or not the Metropolitan Council will approve the application. Mr. Seaborn suggested that we secure the following consents to our proposed procedure:
 - a. Minnesota Pollution Control Agency.
 - b. Metropolitan Council
 - c. Anoka County
 - d. City of Fridley
 - e. Corps of Engineers

No mention of the Corps of Engineers was made but since this property is in a flood plane area we may well expect them to require their consent and possibly the Minnesota Department of Natural Resources.

Mr. Seaborn also speculated as to how much public adverse reaction we may have to our proposed plan of disposal of core butts and demolition waste.

DATE: 20 September 1971

FROM: Wheeler Smith

TO: H. Randolph

SUBJECT: Disposal of Foundry Core Butts
Page Three

NORTHERN ORDNANCE DIVISION



Columbia Heights P. O.
Minneapolis, Minnesota 55421

INTEROFFICE CORRESPONDENCE

After attending this meeting, Tom Collins and I decided that we would explore the feasibility of other ways of dealing with this disposal problem rather than rush into this application for permit and all the possible ramifications that it may have. When we returned from the meeting with Mr. Seaborn we talked to John Uppgren about the possibility of developing some sort of recycling operation. We estimated that if we spent approximately \$75,000 a year to purchase sand and spent another \$25,000 per year to dispose of the sand, it appears that some type of recycling operation would be worth pursuing in some manner.

Wheeler
WS:cs

cc: J. J. Uppgren
C. M. Underwood
E. R. Wigand
T. W. Collins ✓

DATE: 27 August 1971
 FROM: Wheeler Smith
 TO: H. Randolph
 SUBJECT: Disposal of Foundry Core Butts

NORTHERN ORDNANCE DIVISION



Columbia Heights P. O.
 Minneapolis, Minnesota 55421

INTEROFFICE CORRESPONDENCE

RECEIVED

AUG 27 1971

PLANT ENG.

File
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 (63)

On 26 August 1971 Richard J. Astrup, Public Health Sanitarian for Anoka County, (Anoka County Courthouse, 325 E. Main Street, Anoka, Minnesota 55303, Telephone 421-4760) met with Tom Collins and myself. Mr. Astrup called our attention to the Anoka County Solid Waste Ordinance that was adopted 13 August 1970 which provides that no person shall allow his land to be used for disposal of any solid waste unless a license has been granted by the County Board. He stated that our current practice of dumping foundry core butts on our property along the river is in violation of this ordinance. Both the state and county laws provide that land within 300 feet of a river is defined as shore land and solid wastes shall not be disposed of on shore lands.

If we want to continue disposing of our foundry core butts on our own property, we would be operating a solid waste disposal by sanitary land fill. We would have to compact the solid waste as densely as practicable and cover it after each day of operation with a compacted layer of at least six inches of suitable cover material. Mr. Astrup stated that in about two months they expect this ordinance to be amended to provide that the covering should be done at least once a week instead of daily. The disposal has to be at least twenty feet from the property line. Mr. Astrup stated that as a temporary measure and until further notice from him, it would be satisfactory if we would dump our foundry core butts at least 200 feet from the river and would cover it weekly. In scaling my map of the river property, it appears that at the north end it is a little over 300 feet deep and about 550 feet deep at the south end with the average depth being about 400 feet. It appears that any location which is more than 300 feet from the river's edge would be located pretty close to the highway and be very obvious to all drivers on the highway.

In order to conduct a sanitary land fill, it will be necessary for us to make application and secure approval from the Anoka County Comprehensive Health Department as well as the Minnesota Pollution Control Agency. The annual county license fee for a sanitary land fill is \$1250 for the first year and \$750 for each succeeding year.

DATE: 27 August 1971

FROM: Wheeler Smith

TO: H. Randolph

SUBJECT:

NORTHERN ORDNANCE DIVISION



Columbia Heights P. O.
Minneapolis, Minnesota 55421

INTEROFFICE CORRESPONDENCE

Tom Collins has made the following estimates concerning our use of foundry sand: In May and June 1971 the foundry used 1,241.5 tons of sand. By extrapolation this is 7,449 tons per year. Tom estimates this to be 60 cubic yards per day or approximately 15,000 cubic yards per year. If the operation is to continue for three years, we would need 45,000 to 50,000 cubic yards of space or if it is to go on for ten years, we would need 150,000 cubic yards. We currently have one man who is operating one truck and makes ten to twelve loads which are dumped each day. If we are to continue this operation we should compute our costs as being one man's time which may be approximately \$10,000 per year, the cost of operating the truck which may be \$3,000, the cost of covering weekly which may be \$4,000, the cost of license fees which may be \$1,000, for a total of \$18,000. The concept of continuing dumping on our property assumes that we can find a location suitable to continue this operation.

We also should consider having the foundry core butts hauled away. Waste Control will provide a steel box under our core butt hopper which has a 15 cubic yard capacity. They will haul the box and dispose of the waste at the rate of \$30.00 per load. This would amount to \$120.00 per day or \$28,800.00 per year. The foregoing are very rough estimates on my part which may not be accurate but they are attempted to help bring the problem into focus. I am wondering if for awhile there is a possibility that we could for a short period operate a land fill operation in the area that we have set aside for limestone stockpiling. Mr. Don Kaiser of the Industrial Waste Section of the Minnesota Pollution Control Agency, phone number 378-1320, has advised me that our type of disposal can be handled under their procedures for demolition waste. He will send me the necessary papers for application and the regulations governing this type of waste. He stated that we would not have to make application for the more complicated sanitary land fill. We may be able to follow the same

DATE: 27 August 1971

FROM: Wheeler Smith

TO: H. Randolph

SUBJECT:

NORTHERN ORDNANCE DIVISION



Columbia Heights P. O.
Minneapolis, Minnesota 55421

INTEROFFICE CORRESPONDENCE

-3-

procedure as far as the Anoka County Comprehensive Health
Department is concerned.

Wheeler
WS:cs

cc: K. K. Knutzen
C. M. Underwood
T. W. Collins ✓
J. J. Uppgren

DATE: 12 August 1971
FROM: Plant Engineering
TO: C.M. Underwood
SUBJECT: Disposal of Foundry Core Butts

NORTHERN ORDNANCE DIVISION



Columbia Heights P. O.
Minneapolis, Minnesota 55421

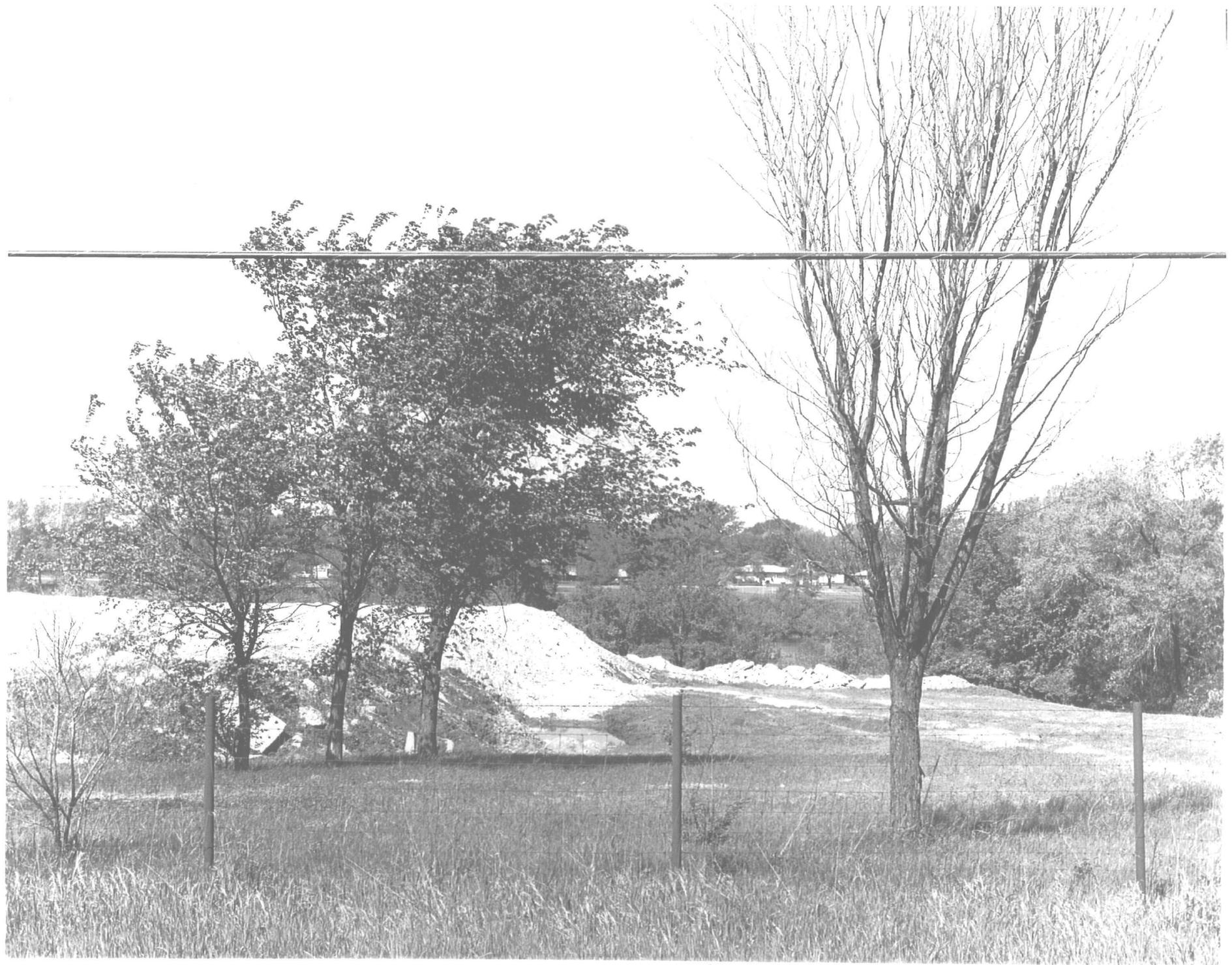
INTEROFFICE CORRESPONDENCE

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1. The following data is set forth for purposes of rec rd.
2. In May and June 1971 the foundry used 1241.5 tons of sand. By extrapolation this is 7449 tons per year. We estimate this to be 60 cubic yards per day.
3. Waste Control will provide a steel box under our core butt hopper - 15 cubic yard capacity. They will haul the box and dispose of the waste at the rate of \$30.00 per load. This amounts to \$120.00 per day or \$28,800.00 per year. The offsetting cost is approximately one man day and the owning and operating cost of one truck.

T.W. Collins, Plant Engineer

TWC:jh



N39140 (5/22/72)



N39143 (5/22/72)

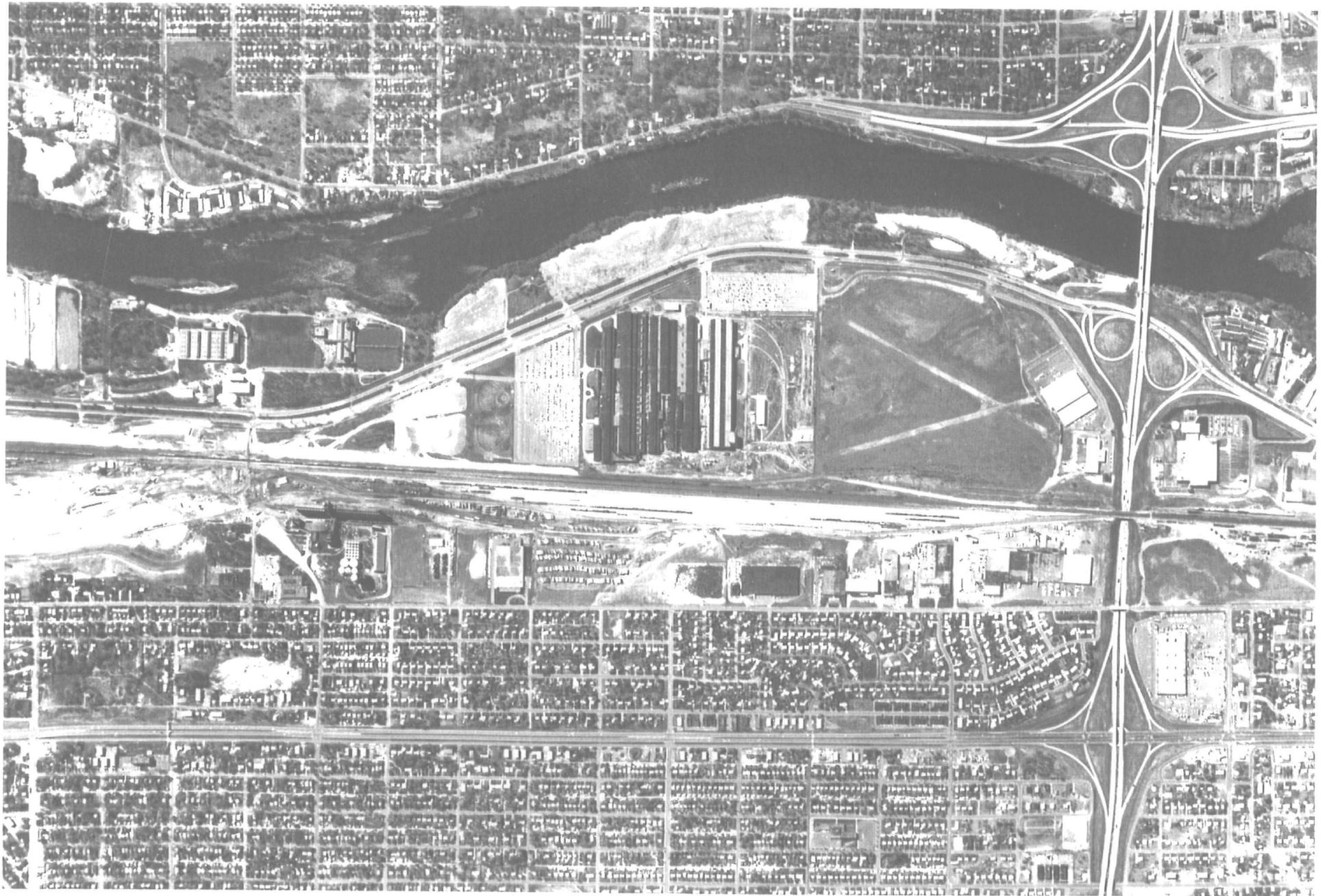


N39142 (5/22/72)



N39141 (5/22/72)





N040892 (7/6/73)