

Morris Canal Greenway Prioritized Sites

Table 3. Jersey City File Review

Response*	Segment	BLOCK	LOT	PROP_LOC	OWNER_NAME	PI Number
X	8	21501	1.01	163 HALLADAY STREET	JERSEY CITY SEWERAGE AUTHORITY	G000044581
X	8	21501	16	2 DAKOTA ST.	JERSEY CITY REDEVELOPMENT AGENCY	
X	8	21501	18	880 GARFIELD AVE.	JERSEY CITY REDEVELOPMENT AGENCY	G000005480, RPC000051, CEA18, LSR120001
X	8	21501	19	884 GARFIELD AVE.	JERSEY CITY REDEVELOPMENT AGENCY	
X	8	21501	20	900 GARFIELD AVE	900 GARFIELD AVE,% RYANN LLC	
	8	21510	2	824 GARFIELD AVE.	JERSEY CITY REDEVELOPMENT AGENCY	G000008749, RPC 900001
	8	21510	11	816 GARFIELD AVE.	PPG INDUSTRIES, INC.%TAX ADMIN.DEPT	629388, LSR 140001
	8	21510	39	800 GARFIELD AVE.	PPG INDUSTRIES INC.	777089, LSR 180001
	8	24301	1	20 COMMERCIAL ST.	CITY OF JERSEY CITY	
X	12	15801	3	JOHNSTON AVE.	NEW JERSEY TRANSIT CORP.	PI837645, LSR190001, G000008715, RPC910001
X	12	15801	2			
X	12	14001	1	355 GRAND ST.	JERSEY CITY MEDICAL CENTER	
	12	15702	5	MONMOUTH STREET	CONSOLIDATED RAIL	

*Notation indicates that the City responded to file request and that files have been sent/saved.

2044.3 H-A-
~~1788.5~~ 002781
ASSESSORS COPY 2

See Jack
Block 4 lot

1788-A+A² THIS DEED, made the 9th day of January, in the year of our Lord One Thousand Nine Hundred and Eighty-nine (1989),

2044.5
A.2

1788
A.1

BETWEEN CONSOLIDATED RAIL CORPORATION, a Corporation of the Commonwealth of Pennsylvania, having an office at Six Penn Center Plaza, Philadelphia, Pennsylvania, 19103, hereinafter referred to as the Grantor, and THE JERSEY CITY SEWERAGE AUTHORITY, a municipal authority organized and existing under the laws of the State of New Jersey, having a mailing address of Culver Avenue and State Highway 440, Jersey City, New Jersey 07005, hereinafter referred to as the Grantee.

WITNESSETH, that the said Grantor, for and in consideration of the sum of SIX HUNDRED FIFTY THOUSAND DOLLARS (\$650,000.00) lawful money of the United States of America, unto it well and truly paid by the said Grantee, at or before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged, does by these presents, remise, release and forever quitclaim unto the said Grantee, the successors and assigns of the said Grantee, all right, title and interest of the said Grantor of, in and to:

ALL THOSE TWO (2) CERTAIN pieces or parcels of land, being Parcels No. 1 and No. 3 which are parts or portions of Grantor's property known as the West Side Branch, identified as Line Code 0202 in Grantor's corporate records, situate in Block No. 2044.3, Lot 1 and Block No. 1788.5, Plot H in the City of Jersey City, County of Hudson and State of New Jersey, being separately bounded and described in accordance with a Plat of Survey prepared by Albert N. Faraldi,

Consideration	\$	<u>650,000</u>	R.F.	<u>650,000</u>
Really Transfer Fee			Rec.	
Add'l. Fee	3/6/89			
Add'l. N.C.				
By: <u>J.W.</u>	Total \$	<u>650,000</u>	Amt. Rec.	<u>650,000</u>

TAX REFERENCE:

THIS INSTRUMENT PREPARED BY:

Block 2044.3, Lot 1 and Block 1788.5, Plot H on the Tax Map of Jersey City, Hudson County, New Jersey

Nancy B. Basilio
Nancy B. Basilio
Consolidated Rail Corporation
Fifteenth Floor, Six Penn Center
Philadelphia, PA 19103

Registered Surveyor No. 29346, of Albert N. Faraldi Group,
P.C., 854 Eighth Street, Secaucus, New Jersey, dated December
8, 1987; as follows:

Parcel 1

BEGINNING at a point in the foot of Suydam Avenue (60 feet wide); and running thence (1) easterly and along the arc to the left, having a radius of 1,096.30 feet and an arc length of 244.34 feet; and running thence (2) South 67° 44' West, 60.03 feet; and running thence (3) easterly and along an arc to the left, having a radius of 1,126.3 feet, more or less and an arc length of 294.84 feet, more or less; thence (4) North 65° 10' 47" East, 305 feet, more or less, to a point in the westerly side of Communipaw Avenue; and running thence (5) South 32° 35' East and along the line of Communipaw Avenue, 45 feet, more or less; and running thence (6) South 66° 08' West, 750.0 feet; and running thence (7) South 70° 35' West, 107.0 feet; running thence (8) South 88° 30' West, 72.75 feet; running thence (9) North 20° 15' West, 40 feet, more or less; running thence (10) North 68° 25' East, 400 feet, more or less; running thence (11) westerly and along an arc to the right, having a radius of 1,201.3 feet and an arc length of 240.40 feet, more or less; running thence (12) South 68° 25' West, 300 feet, more or less; running thence (13) westerly and along an arc to the left, having a radius of 361 feet and an arc length of 298.42 feet; running thence (14) North 64° 57' West, 32.06 feet; running thence (15) North 26° 06' East, 120.00 feet; running thence (16) South 64° 57' East, 62.60 feet; running thence (17) North 53° 57' East, 10.00 feet; running thence (18) South 19° 56' 04" East, 33.52 feet; running thence (19) South 64° 57' East, 296.87 feet to the place or point of Beginning.

CONTAINING 3.37 acres, more or less.

Parcel 2

BEGINNING at the center of Pine Street at course North 26° 06' East as mentioned in Parcel No. 1 and about Railroad Mile Post 1.2; and thence extending in a general northwesterly direction to the westerly side of West Side Avenue and course South 52° 36' 35" West as mentioned in Parcel No. 3 which is at or about Railroad Mile Post 2.85. This area is indicated by "PS" on Grantor's Case Plan No. 68897, Exhibit "A" sheets 1, 2 and 3, attached hereto and made a part hereof.

CONTAINING 15.5 acres, more or less.

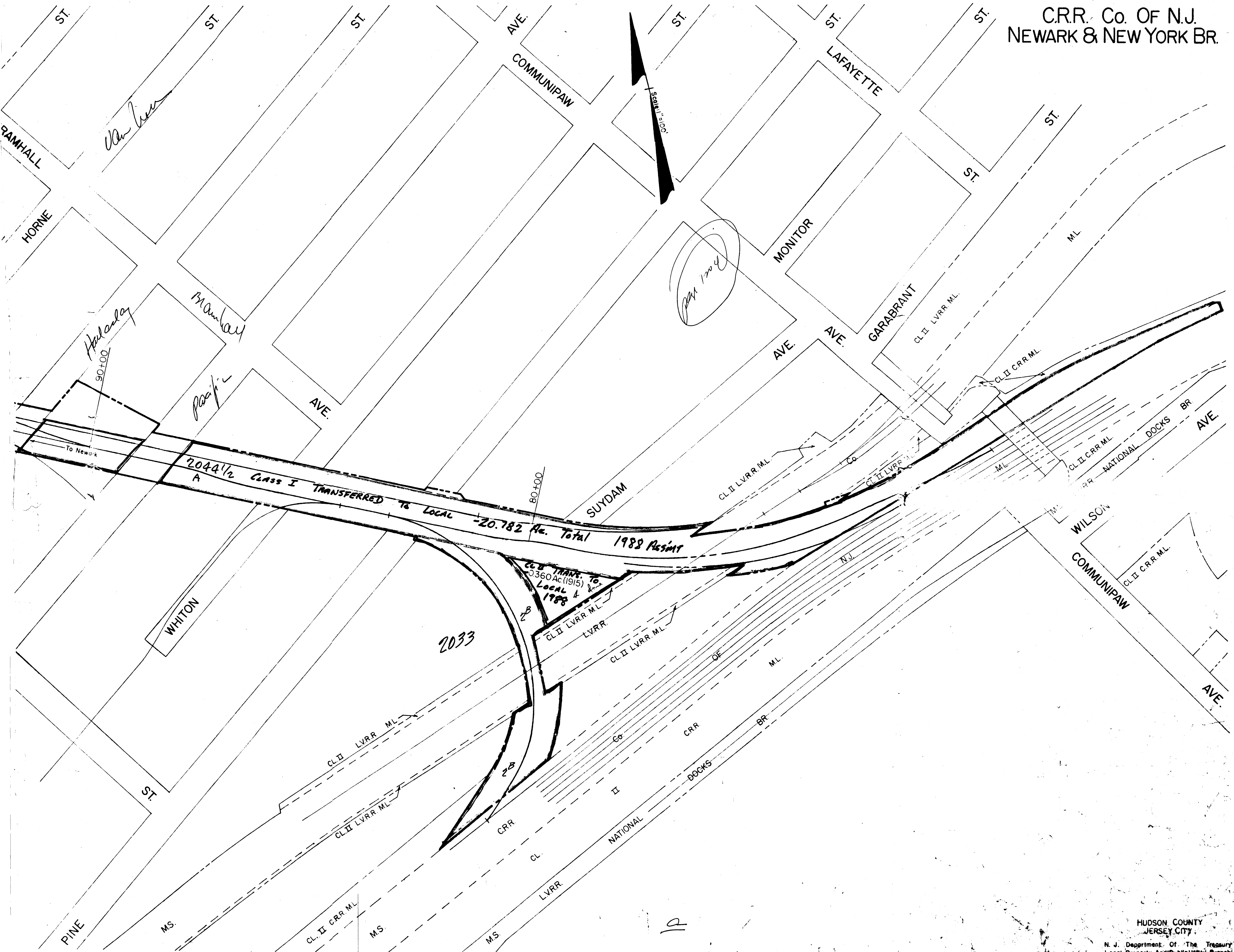
Parcel 3

BEGINNING at a point in the easterly line of Mallory Avenue (80 feet wide), distant 87.04 feet; and running thence (1) North 64° 01' 25" West, 41.92 feet; and running thence (2) North 43° 38' East, 176.00 feet; and running thence (3) South 47° 04' 10" East, 78.47 feet; and running thence (4) South 64° 01' 25" East, 316.37 feet; and running thence (5) South 43° 38' West, 5.25 feet; running thence (6) South 64° 01' 25" East, 670.57 feet to a point, said point being the northwesterly corner of the intersection of Claremont Avenue (30 feet wide) and West Side Avenue (60 feet wide); and running thence (7) South 52° 36' 35" West, and along northwesterly side of West Side Avenue, 109.46 feet; and running thence (8) North 64° 01' 25" West, 624.93 feet; and running thence (9) North 82° 18' 09" West, 97.25 feet; and running thence (10) North 43° 08' 46" East, 35.09 feet; and running thence (11) North 64° 01' 25" West, 301.56 feet; and running thence (12) South 43° 38' West, 47.23 feet to the place or point of Beginning.

ASSIGNED COPY

1788 ~~1788~~

C.R.R. Co. OF N.J.
NEWARK & NEW YORK BR.



OWNERS NAME & ADDRESS
009326
795 LIDGEMOOD CORP.
2520 POLK ST
UNION, N J 07083
Barbara 379-2550

BLDG: 1S-CB-IN-H
LAND: 4.041 ACRES

LAND: 121,200 BLDG: 403,800 TOTAL: 525,000

SIGNATURE:

100	02026	A	00003	A	010	NEW BLOCK	NEW LOT	QUALIFIER	CARD CARDS
104	4-B	105	106	107	108	110	DAKOTA ST.	NUMBER	SUF DIR
CLASS	1	2	3	4	5	6	7	8	9
NRHD	90516	200	378	12	12	12	12	12	12
LVS UNITS									
LAND USE									
ZONING									

120	05/15/86	2	2	044	INTERIOR INSPECTION	NAME	SUF	ADMTL NO
DATE	TYPE	AMOUNT	SOURCE	VALIDITY	DELETE			
250								
251								
252								

LAND DATA & COMPUTATIONS

299	DELETE	300	335	LAND ENTRIES
0	NONE	300	N	Actual Frontage Effective Frontage Effective Depth Actual Unit Price
LOT				
1 Regular Lot	301	L		
2 Minus Lot	302	L		
3 Apartment Site	303	L		
4 Waterfront	303	L		

450	TOPOGRAPHY	451	UTILITIES	452	ROADS
0 N/A	4 Rolling	1 All Public	5 Well	0 None	4 Proposed
1 Level		2 Public Water	6 Septic	1 Dirt	5 Alley
2 Low		3 Public Sewer		2 Gravel	6 Sidewalk
3 High		4 Gas		3 Paved	7 Res Lot

311	S	L	176	100	3.78	INFLUENCE FACTORS	4	110	589,200
1 Primary Site						1 Unimproved			
2 Secondary Site						2 Excavate Front			
3 Undeveloped						3 Topography			
4 Residential						4 Shape or Size			
5 Waterfront						5 Economic			

455	LOCATION	456	FRONTING	457	PARKING AVAILABILITY
1 Central Bus Dist.		1 CBD Street		0 None	0 Far
2 Perm. Con. Bus Dist.		2 Major Thoroughfare		1 Minimum	1 Near
3 Business Center		3 Secondary Artery		2 Adequate	2 Adjacent
4 Major Strip		4 Median Separation		3 Abundant	3 On Site

321	A		ACRES	Soil Type
1 Waterfront				
2 Tillable				
3 Pasture				
4 Woodland				
5 Wasteland				
6 Primary Site				
7 Secondary Site				
8 Undeveloped				
9 Pinelands				
0 Other				

810	BUILDING NAME	815	E.C.F.	820	MODEL ADJ.	825	EXP. CAP.	830	VAL. METHOD	835	USE INC.	840	USE OVRD.	845	COST/NO. I/E

330	A		ACRES	Soil Type
0 TOTAL ACRES				

965	RSN CD	970	RSN	975	DATE	980	QUALIFIER

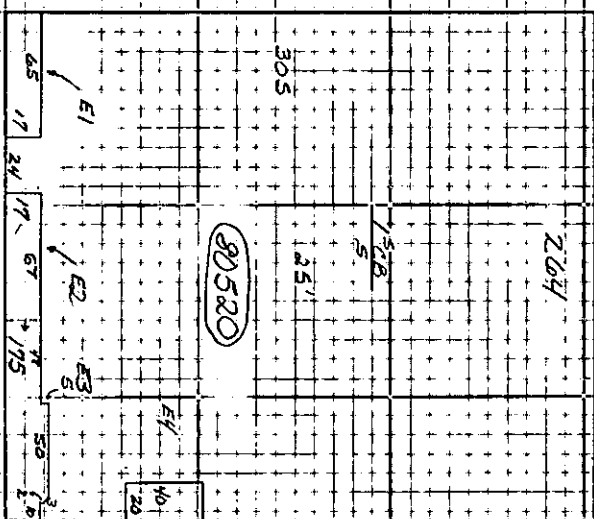
335	G		ACRES	Soil Type
1 Irregular				
2 Site Value				
3 Residential				
4 Homestead				
5 Minus R.O.W.				

901	EFF. DATE	REASON	LOGI	AMOUNT
902	DEACTIVATE			

INTERIOR EXTERIOR DATA														TOTAL OTHER FEATURES & ATTACHED IMPROVEMENTS										L01 Ldg. Dock, Steel or Concr	
NO	SEC NO	LEVELS		DIMENSIONS			USE TYPE	WL HT	EXT WLS	CONS TYPE	NO	INTER FINISH	PTNS	HTG	AC	PLBG	SF RATE	PHYS COND	FUNG UTIL FACT	UNADJUSTED R C N	% GOOD	UNADJUSTED R C N L D	L02 Loading Dock, Wood		
		FROM	TO	SIZE	PERIM																				
611	1	01	01	00	08	05	20	41	38	04	5	25	03	2	100	2	3	0	2				L03 Loading Dock, Interior		
		$\left(\frac{\text{WALL PRICE}}{\text{PAR}} \times \text{WL HT} \right) =$																					L04 Truck or Train Well, Int.		
612	1	E1	E1	00	00	01	10	05	00	82	04	50	13	0	100	2	3	0	0				001 OH Doors, Wd. or Metal		
613	1	E2	E2	00	00	01	13	39	00	84	04	51	12	13	0	100	2	0	0				002 OH Doors, Rolling Steel		
614	1	E3	E3	00	00	02	20	86	01	35	02	41	09	13	0	100	2	0	0				SF1 Store Front, Wood Frame		
615	1	E4	E4	00	00	02	28	00	00	80	08	20	09	13	0	100	2	0	0				SF2 Store Front, Awer. Metal		
616	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	SF3 Store Front, Elaborate		
617	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	MS1 Miscellaneous Structure		
618	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---			
APARTMENT DATA																							L05		
UNITS																							L06		
BEDS																							L07		
BATHS																							L08		
631																							L09		
632																							L10		
633																							L11		
634																							L12		
635																							L13		
636																							L14		
637																							L15		
638																							L16		
639																							L17		
PARKING DATA																							L18		
COV.																							UNCOV.		

[illegible]

1"=100'



REALTY APPRAISAL CO., WEST NEW YORK, NEW JERSEY

Checked By:

[illegible]

WATERS, MCPHERSON, MCNEILL

A PROFESSIONAL CORPORATION

ATTORNEYS AT LAW

SECAUCUS-JERSEY CITY-FAIRFIELD-TRENTON

MEADOWLANDS OFFICE

300 LIGHTING WAY

P.O. Box 1560

SECAUCUS, NEW JERSEY 07096

201-863-4400

JOSEPH G. RAGNO

DIRECT DIAL

201-330-7465

TELEX 129162

TELECOPIER

(201) 863-2866

January 11, 1991

Peter Casamasino, Tax Assessor
City of Jersey City
City Hall
280 Grove Street
Jersey City, NJ 07302

Re: Fishbein Family Partnership v.
City of Jersey City
2 Dakota Street
Block 2026.A Lot 3.A
Our File No. 6326-020

Dear Peter:

This 1989 case was settled with Marvin Joss in April 1990 before the County Board on terms reducing the 1989 assessment from \$4,510,900 to \$3,000,000 and placing an assessment of \$2,500,000 on the books for 1990.

It has now come to my attention that the property was assessed for at 1990 \$3,000,000 in violation of the settlement agreement.

I am sure that you can appreciate that the mix-up has put our client in a difficult position with respect to its tenant, especially since the tenant was present for and had much input in the settlement discussions.

To further compound the problem, you have not returned any of the five telephone calls I have made to you on the subject. On Wednesday night I waited two hours for your call at the suggestion of your assistant.

WATERS, MCPHERSON, MCNEILL
A PROFESSIONAL CORPORATION
ATTORNEYS AND COUNSELLORS AT LAW


Peter Casamasino, Tax Assessor
January 11, 1991
Page 2

Please call me upon receipt of this letter to discuss the
rectification of the error.

Very truly yours,

WATERS, MCPHERSON, MCNEILL, P.C.

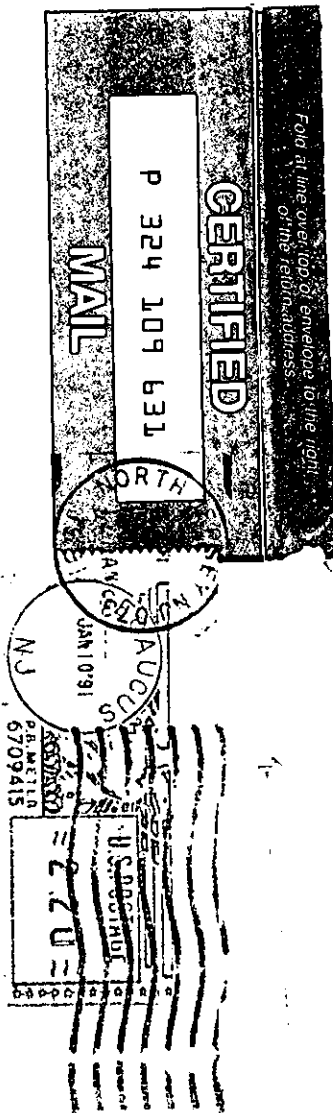
BY:


Joseph G. Ragno

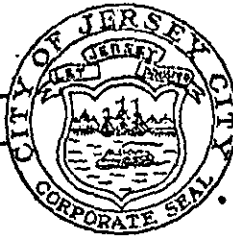
JGR:irf

WATERS, MCPHERSON, MCNEILL
A PROFESSIONAL CORPORATION
ATTORNEYS AND COUNSELLORS AT LAW
300 LIGHTING WAY
P.O. BOX 1560
SECAUCUS, NEW JERSEY 07096

TAX ASSESSOR, CITY OF JERSEY CITY
CITY HALL
280 GROVE STREET
JERSEY CITY, NEW JERSEY 07302



DEPARTMENT OF FINANCE
DIVISION OF ASSESSMENTS



THOMAS J. WHELAN

MAYOR

MARGARET JEFFERS
SUPERVISOR OF ASSESSMENTS
AND TAX COLLECTIONS

CITY HALL
JERSEY CITY, N. J. - 07302

ANTHONY FERRARA
DIRECTOR

Oct. 2, 1970

Mr. William Robertson, Jr.
777 Bergen Avenue
Jersey City, N.J.

Block: Lot: Location:
Owner: 2026A 3 Hx Halladay St.
Attorney: Lawrence Construction Co.
George Clott, Esq.

Dear Sir:

An appeal has been filed for 1970 with the Hudson County Board of Taxation upon the above property and you are hereby assigned to report upon Form # as soon as possible, together with a letter stating the value which you are prepared to testify.

Copy of appeal attached.

MJ: gs

Handwritten calculation:
Ld. 280,600
Bl. 485,400

766,000

Very truly yours,

Margaret Jeffers
Margaret Jeffers
Supervisor of Assessments
and Tax Collections

WATERS, MCPHERSON, MCNEILL

A PROFESSIONAL CORPORATION

ATTORNEYS AT LAW

CITY OF JERSEY CITY

JOSEPH G. RAGNO

SECAUCUS-JERSEY CITY-FAIRFIELD-TRENTON-CALDWELL

MEADOWLANDS OFFICE

'91 JUN 21 P2:21

300 LIGHTING WAY

P.O. Box 1560

SECAUCUS, NEW JERSEY 07096

201-863-4400

DIV. OF ASSESSMENTS

TELEX 129162

TELECOPIER

(201) 863-2866

DIRECT DIAL
201-330-7465

June 20, 1991

Clerk
Tax Court of New Jersey
Hughes Justice Complex
CN 972
Trenton, New Jersey 08625

RE: Fishbein Family Partnership v.
City of Jersey City
Block 2026.A Lot 3.A
Our File No. 6326-020

Dear Sir/Madam:

Enclosed for filing in the above referenced matter please find an original and two copies of Correction of Error Complaint filed pursuant to N.J.S.A. 54:51a-7. Kindly return a copy marked "filed" in the enclosed self-addressed stamped envelope. Also enclosed is our check in the amount of \$75.00 to cover the cost of filing fees.

Very truly yours,

WATERS, MCPHERSON, MCNEILL

BY:


JOSEPH G. RAGNO

JGR/crr

cc: Clerk, City of Jersey City
Tax Assessor, City of Jersey City
Secretary, Hudson County Board of Taxation
Mary Ann Murphy, Esq.
William J. Stack, II
Brian Lynch



DEPARTMENT OF FINANCE
ASSESSMENT DIVISION

October 13, 1972

Mr. William Robertson Jr.
777 Bergen Ave.
Jersey City, New Jersey

BLOCK 2026A LOT 3A LOCATION Dakota St.
OWNER: Lawrence Construction Co.
ATTORNEY: George Clott Esq.

Dear Sir:

An appeal has been filed for 1972 with the Hudson County Board of Taxation upon the above property and you are hereby assigned to report upon Form # 5 as soon as possible, together with a letter stating the value to which you are prepared to testify.

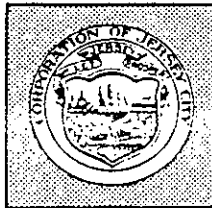
Copy of appeal attached.

Very truly yours,

A handwritten signature in cursive script, reading "Margaret Jeffers".

Margaret Jeffers
Supervisor of Assessments
and Tax Collections

MJ:ad
attach.



CITY OF
JERSEY CITY
CITY HALL • JERSEY CITY, N. J. 07302
(201) 547-5131

DEPARTMENT OF FINANCE
ASSESSMENT DIVISION

September 26, 1983

Mr. Leo T. Souza
205 Main Street
Chatham, N.J.

BLOCK 2026A LOT 3.A

LOCATION Halladay St.

OWNER 795 Lidgewood Corp.

ATTORNEY David Mandelbaum, Esq.
80 Main St.
West Orange, N.J. 07052

Dear Sir:

An appeal has been filed for the taxing year 1983 with the Hudson County Board of Taxation upon the above property and you are hereby assigned to report upon Form # 5 as soon as possible, together with a letter stating the value to which you are prepared to testify.

Copy of appeal attached.

Very truly yours,

Margaret Jeffers
Assessor

MJ:jg
Enc. (Appeal attached)

2026.A - 3.A

- 9 -

Morristown, New Jersey

August 5, 1983

Tax Collector
City Hall
Jersey City, N. J. 07302

RE: Premises 2 Dakota Street
Block 2026A Lot 3A
Carteret Account # 800-322791
Bank Code #2153

Dear Sir:

As owner(s) of the property identified above, I (we) hereby authorize you to mail my tax bills in care of CARTERET SAVINGS AND LOAN ASSOCIATION, F.A., 200 South Street, Morristown, New Jersey 07960.

I (we) further authorize that, in the event of the assignment of my mortgage or the establishment of a paying agent for property taxes, my tax bills are to be forwarded in care of the assignee or paying agent immediately upon notification by Carteret Savings and Loan Association, F.A.

Please change your municipal tax records.

Please include our mortgage account number on all tax bills.

Very truly yours,
CLIF ASSOCIATES, a partnership

By: Dorothy L. Molyneux
Dorothy L. Molyneux,
Signature binding on partnership

WATERS, MCPHERSON, MCNEILL

A PROFESSIONAL CORPORATION

ATTORNEYS AT LAW

SECAUCUS-JERSEY CITY-FAIRFIELD-TRENTON

MEADOWLANDS OFFICE

300 LIGHTING WAY

P.O. BOX 1560

SECAUCUS, NEW JERSEY 07096

201-863-4400

DANIEL J. POLLAK

TELEX 129162

TELECOPIER

(201) 863-2866

March 9, 1990

Stanely Kosakowski, Tax Administrator
Hudson County Board of Taxation
595 Newark Street
Jersey City, New Jersey 07306

Re: Fishbein Family Partnership
Block 2026.A Lots 3.A & 4.A
2 Dakota Street
Our File No. 6326-020

Dear Mr. Kosakowski:

The above referenced matter is scheduled for hearing before the Hudson County Board of Taxation on Wednesday, March 14, 1990 at 9:00 a.m. Please adjourn this matter because our appraiser, William J. Stack, will be testifying at a trial before Judge Rimm on that date. Marvin Joss, Assistant Tax Assessor City of Jersey City, consents to our request.

Thank you for your cooperation.

Very truly yours,

WATERS, MCPHERSON, MCNEILL

BY:


DANIEL J. POLLAK

DJP:lg

cc: Marvin Joss, Assistant Tax Assessor
William J. Stack, II
Iris Buchman
Dan Chestler

OWNERS NAME & ADDRESS
009325
795 LIDGEMOOD CORP.
2520 POLK ST
UNION, N J
07083

OLD PROPERTY ID
02026
A 00002
A

NEW PROPERTY ID
NEW BLOCK
NEW LOT
QUALIFIER
CARD CARDS

BLDG: 1 S CB 1N H
LAND: 5.074 ACRES

LAND: 196,000
BLDG: 804,000
TOTAL: 1,000,000

SIGNATURE:

NUMBER	DATE	AMOUNT	OPEN CODE	PURPOSE
160				
161				
162				

DATE	TYPE	AMOUNT	SOURCE	VALIDITY	DELETE
250					
251					
252					

LAND DATA & COMPUTATIONS

0	NONE	300	N	Actual Frontage	Effective Frontage	Effective Depth	Actual Unit Price	Depth Factor	Effective Unit Price	Influence Factor	Land Value
LOT											
1 Regular Lot		301	L								
2 Minus Lot		302	L								
3 Apartment Site		303	L								
4 Waterfront		303	L								
SQUARE FEET											
1 Primary Site		311	S								
2 Secondary Site		312	S								
3 Undeveloped											
4 Residential											
5 Waterfront											
ACREAGE											
1 Waterfront		321	A								
2 Tillable		322	A								
3 Pasture		323	A								
4 Woodland		324	A								
5 Wasteland		325	A								
6 Primary Site		326	A								
7 Secondary Site											
8 Undeveloped											
9 Pinelands											
0 Other											
0 TOTAL ACRES		330	A								

TYPE	SOURCE	VALIDITY
1 - Land	1 - Buyer	0 - Valid
2 - Ld. & Bldg.	2 - Seller	1 - Invalid
3 - Building	3 - Agent	
4 - Other	4 - Other	

INFLUENCE FACTORS	INFLUENCE FACTOR	Land Value
1 Unimproved		
2 Excessive Front		
3 Topography		
4 Shape or Size		
5 Economic		
6 Misimprovement		
7 Restrictions -		
8 Nonconforming		
9 Corner/Alley (+)		
0 View (+)		

LOCATION	FRONTING	PARKING AVAILABILITY
1 Central Bus. Dist.	1 Major Thoroughfare	0 None
2 Perm. Cen. Bus. Dist.	2 Secondary Artery	1 Minimum
3 Business Cluster	3 Median Separation	2 Adequate
4 Major Strip	4 Frontage/Service Rd.	3 Abundant
5 Secondary Strip	5 Private Road	4 On Site
6 Height or Spot	6 One-way Street	
7 Comm./Ind. Park	7 Rail Access	
8 Industrial Site	8 Parking Deck	

SETS INDUSTRIES	OVERRIDES AVAILABLE ON EACH CARD	INC. EFF. AGE OVRD.
810 BUILDING NAME		
815 E.C.F.		
820 MODEL ADJ.		
830 VAL. METHOD		
840 VALUE OVRD.		

DATE	TYPE	AMOUNT	SOURCE	VALIDITY	DELETE
901					
902					
910					

NOTES	TOTAL VALUE BUILDINGS	FINAL VALUE
00 CLOTHING + TOILE L. MAKE UPS + TWEES		

DATE	TYPE	AMOUNT	SOURCE	VALIDITY	DELETE
901					
902					
910					

GENERAL BLDG. DATA		NO		STRUCT CODE		MEASUREMENT 1		MEASUREMENT 2		IDENT UNITS		COST		%		TOTAL OTHER IMPROVEMENTS		BLDG. OTHER FEATURES/ ATTACHED IMPROVEMENTS	
NO	LINE	NO	LINE	NO	LINE	NO	LINE	NO	LINE	NO	LINE	NO	LINE	NO	LINE	NO	LINE	NO	LINE
01	1965000	601	2	551	181994	0000001	01	005	2	002	000010	11	000010	0000001	01	000010	0000001	01	000010
02	1965000	602	2	551	181994	0000001	01	005	2	002	000010	11	000010	0000001	01	000010	0000001	01	000010
03	1965000	603	2	551	181994	0000001	01	005	2	002	000010	11	000010	0000001	01	000010	0000001	01	000010
04	1965000	604	2	551	181994	0000001	01	005	2	002	000010	11	000010	0000001	01	000010	0000001	01	000010

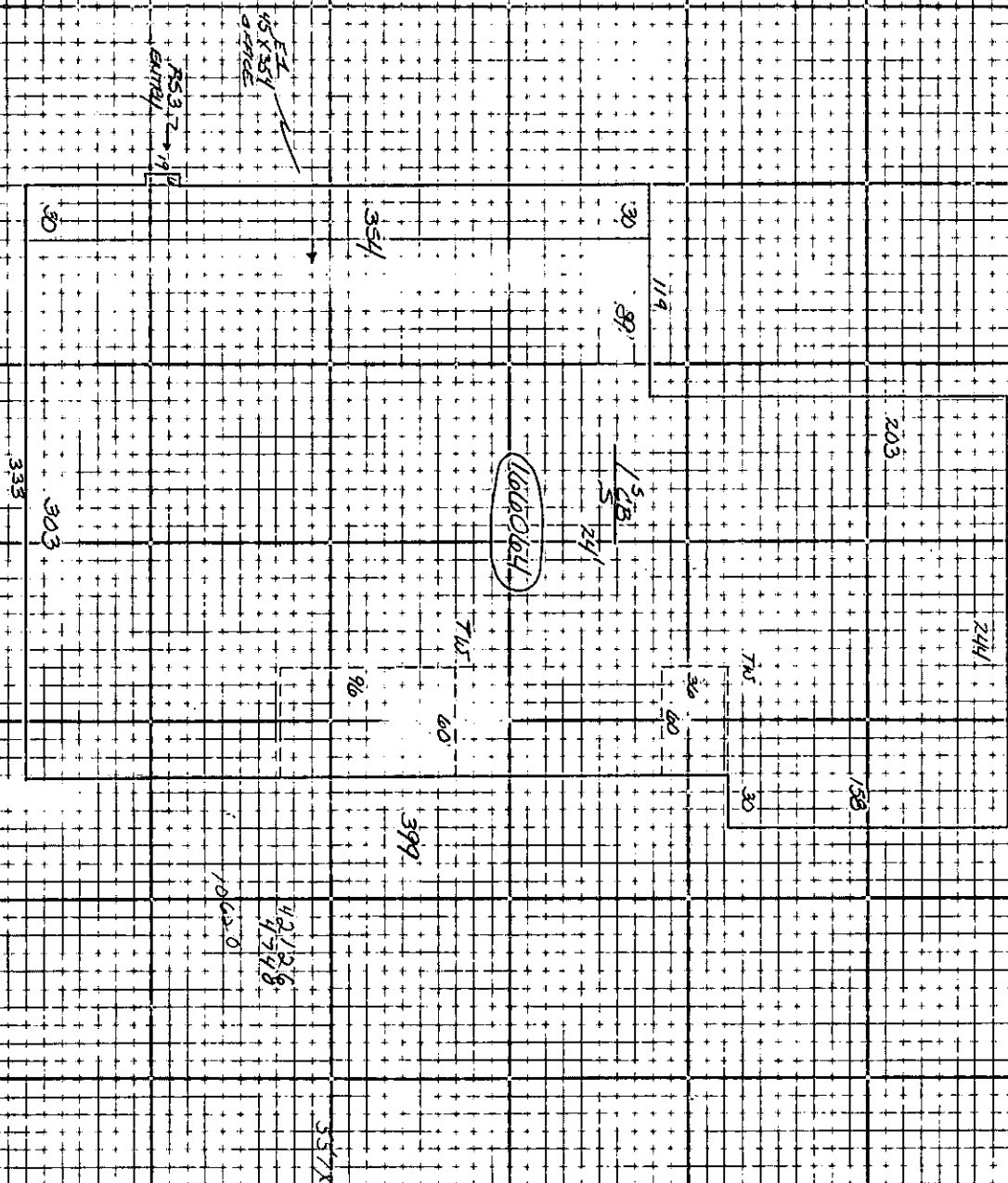
INTERIOR - EXTERIOR DATA												TOTAL OTHER FEATURES & ATTACHED IMPROVEMENTS											
SEC NO		LEVELS FROM TO		DIMENSIONS SIZE		PERIM		USE TYPE		WL HT		EXT WLS		CONS TYPE		INTER FINISH		PTNS HTG		AC PLBG		SF RATE	
611	1	01	01	000	10630	0414	0441	16	03	2	100	2	3	0	2	3	3	3	3	3	3	3	3
612	1	01	01	000	155444	1780	0444	24	03	2	100	2	3	0	2	3	3	3	3	3	3	3	3
613	1	01	01	000	155444	1780	0444	24	03	2	100	2	3	0	2	3	3	3	3	3	3	3	3
614	1	01	01	000	155444	1780	0444	24	03	2	100	2	3	0	2	3	3	3	3	3	3	3	3
615	1	01	01	000	155444	1780	0444	24	03	2	100	2	3	0	2	3	3	3	3	3	3	3	3
616	1	01	01	000	155444	1780	0444	24	03	2	100	2	3	0	2	3	3	3	3	3	3	3	3
617	1	01	01	000	155444	1780	0444	24	03	2	100	2	3	0	2	3	3	3	3	3	3	3	3
618	1	01	01	000	155444	1780	0444	24	03	2	100	2	3	0	2	3	3	3	3	3	3	3	3

STRUCTURE TYPE CODES												USE TYPE CODES											
211	Appt. Garden	344	Strip Shopping Cen.	011	Apartment	053	Office Bldg.	012	Hotel	062	Cinema	00	None	06	Masonry & Frame	07	Metal Light	02	Frame	08	Metal Sandwich	15	Solar Glass
212	Apartment H.R.	345	Dir. Dept. Stores	012	Hotel	062	Cinema	013	Hotel	062	Cinema	01	Brick or Stone	07	Metal Light	02	Frame	08	Metal Sandwich	15	Solar Glass	16	Adapters, Cor. Rig.
314	Hotel/Motel, H.R.	346	Dept. Stores	013	Hotel	062	Cinema	014	Hotel	062	Cinema	02	Frame	08	Metal Sandwich	15	Solar Glass	16	Adapters, Cor. Rig.	17	Concrete Tilt-Up	18	Adapters, Cor. Rig.
315	Hotel/Motel, L.R.	347	Supermarket	014	Hotel	062	Cinema	015	Hotel	062	Cinema	03	Conc. Block	09	Conc. Load Bearing	10	Conc. Non-Load Bearing	17	Concrete Tilt-Up	18	Adapters, Cor. Rig.	19	Adapters, Cor. Rig.
321	Restaurant	348	Conv. Food Market	015	Hotel	062	Cinema	016	Hotel	062	Cinema	04	Brick & C.B.	10	Conc. Non-Load Bearing	11	Glass	18	Adapters, Cor. Rig.	19	Adapters, Cor. Rig.	20	Adapters, Cor. Rig.
325	Fast Food	351	Bank	016	Hotel	062	Cinema	017	Hotel	062	Cinema	05	Tile	11	Glass	19	Adapters, Cor. Rig.	20	Adapters, Cor. Rig.	21	Adapters, Cor. Rig.	22	Adapters, Cor. Rig.
331	Auto Dealer, F.S.	352	Office Bldg.	017	Hotel	062	Cinema	018	Hotel	062	Cinema	06	Brick & C.B.	11	Glass	20	Adapters, Cor. Rig.	21	Adapters, Cor. Rig.	22	Adapters, Cor. Rig.	23	Adapters, Cor. Rig.
333	Auto Dealer, F.S.	353	Office Bldg.	018	Hotel	062	Cinema	019	Hotel	062	Cinema	07	Brick & C.B.	12	Glass	21	Adapters, Cor. Rig.	22	Adapters, Cor. Rig.	23	Adapters, Cor. Rig.	24	Adapters, Cor. Rig.
334	Auto Dealer, F.S.	354	Office Bldg.	019	Hotel	062	Cinema	020	Hotel	062	Cinema	08	Brick & C.B.	13	Glass	22	Adapters, Cor. Rig.	23	Adapters, Cor. Rig.	24	Adapters, Cor. Rig.	25	Adapters, Cor. Rig.
338	Auto Dealer, F.S.	355	Office Bldg.	020	Hotel	062	Cinema	021	Hotel	062	Cinema	09	Brick & C.B.	14	Glass	23	Adapters, Cor. Rig.	24	Adapters, Cor. Rig.	25	Adapters, Cor. Rig.	26	Adapters, Cor. Rig.
341	Auto Dealer, F.S.	356	Office Bldg.	021	Hotel	062	Cinema	022	Hotel	062	Cinema	10	Brick & C.B.	15	Glass	24	Adapters, Cor. Rig.	25	Adapters, Cor. Rig.	26	Adapters, Cor. Rig.	27	Adapters, Cor. Rig.
342	Auto Dealer, F.S.	357	Office Bldg.	022	Hotel	062	Cinema	023	Hotel	062	Cinema	11	Brick & C.B.	16	Glass	25	Adapters, Cor. Rig.	26	Adapters, Cor. Rig.	27	Adapters, Cor. Rig.	28	Adapters, Cor. Rig.
343	Auto Dealer, F.S.	358	Office Bldg.	023	Hotel	062	Cinema	024	Hotel	062	Cinema	12	Brick & C.B.	17	Glass	26	Adapters, Cor. Rig.	27	Adapters, Cor. Rig.	28	Adapters, Cor. Rig.	29	Adapters, Cor. Rig.

STRUCTURE TYPE CODES												USE TYPE CODES											
701	APL	0108	0540	01	3	3	75	RCN	RCNLD	RCN	RCNLD	00	None	06	Masonry & Frame	07	Metal Light	02	Frame	08	Metal Sandwich	15	Solar Glass
702	PAI	0001	8000	01	3	3	75	RCN	RCNLD	RCN	RCNLD	01	Brick or Stone	07	Metal Light	02	Frame	08	Metal Sandwich	15	Solar Glass	16	Adapters, Cor. Rig.
703	PAI	0001	8000	01	3	3	75	RCN	RCNLD	RCN	RCNLD	02	Frame	08	Metal Sandwich	15	Solar Glass	16	Adapters, Cor. Rig.	17	Concrete Tilt-Up	18	Adapters, Cor. Rig.
704	PAI	0001	8000	01	3	3	75	RCN	RCNLD	RCN	RCNLD	03	Conc. Block	09	Conc. Load Bearing	10	Conc. Non-Load Bearing	17	Concrete Tilt-Up	18	Adapters, Cor. Rig.	19	Adapters, Cor. Rig.
705	PAI	0001	8000	01	3	3	75	RCN	RCNLD	RCN	RCNLD	04	Brick & C.B.	10	Conc. Non-Load Bearing	11	Glass	18	Adapters, Cor. Rig.	19	Adapters, Cor. Rig.	20	Adapters, Cor. Rig.
706	PAI	0001	8000	01	3	3	75	RCN	RCNLD	RCN	RCNLD	05	Tile	11	Glass	19	Adapters, Cor. Rig.	20	Adapters, Cor. Rig.	21	Adapters, Cor. Rig.	22	Adapters, Cor. Rig.

YARD AND SECONDARY BUILDING STRUCTURE CODES									
AP1	Fence, Chain Link	CP8	Canopy, Serv Stat. Average	634	Serv. Stat. Attendant's Booth	LT4	Light, Inland, pole & btk.	SH2	Shed, Aluminum
CP1	Canopy only	CP9	Canopy, Serv Stat. Good	LT1	Light, Merc. Vap., Wall Mt'd. Fld.	LT5	Light, Merc. Vap., pole & btk.	SH3	Shed, Fluted Metal
CP5	Canopy, Roof/Slab	633	Serv Stat. Attendant's Booth	LT2	Light, Inland, Wall Mt'd. Fld.	PA1	Paving, Asphalt Parking	SH4	Shed, Fluted
CP7	Canopy, Serv Stat. Econ.		Steel/Glass on Masonry	LT3	Light, Fluor., pole & btk. inc.	PA2	Paving, Service Station	SH5	Lumber Shed, Frame, 2 sides open
								SH6	Lumber Shed, Frame, 4 sides open
800	TOTAL OTHER IMPROVEMENTS					+			

DD-1740



PHOTOGRAPH

854-856 Garfield Av., ne.cor.Carteret
Av., J.C., 07305, Lot. pt.2A, Bk.2026A,
County Bks.520-522, 1-story brick and
concrete block bldg., plot 363.04x514.22
irregular (5.074 acres) 795 Lidgerwood
Corp. to Fred and Claire Fishbein,
Shirley Moss and Lester A.Granet, trustees,
215 Route 22, Springfield, a.v.-assessed
with other property; mtg.original amt.
\$900,000; RTT.\$764.00; cons.\$764,000;
dated 5/7/71, recorded 5/10/71 (Book
3098, page 967) (4B)
Recorded by McCarter & English

NOTES

NOTES

115000 @ 6.00 690000

A blank sheet of graph paper with a grid pattern. The grid consists of 20 columns and 30 rows of squares. There are some faint marks and a small dark speck near the top right corner, and a small mark near the bottom right corner. The left edge shows some irregularities, possibly from the binding or scanning process.

854-856 Garfield Av., ne.cor.Carteret
Av., J.C., 07305, Lot pt. 2, Bk.2026A,
County Bks.520-522, 1-story brick and
concrete block bldg., plot 363.04x514.22
irregular (5.074 acres) Fred Fishbein
et als to Lawrence Construction Co.,
a.v.-assessed with other property; RTF.
exempt A, cons.\$1.00; dated 5/13/71,
recorded 5/18/71 (Book 3099, page 203)
Same property: Lawrence Construction Co.
to Fred and Claire Fishbein; Shirley
Moss and Lester A. Granet, trustees;
trading as 795 Ledgerwood Associates,
215 Route 22, Springfield, mtg.original
amt.\$1,400,000; RTF.\$1,400.00; cons.
\$1,400,000; dated 5/13/71, recorded
5/18/71 (Book 3099, page 215) (4r)
Recorded by McCarter & English(Newa)

LAND VALUE COMPUTATIONS

LOT SIZE OR ACREAGE	UNIT FRONT FOOT PRICE	CORNER INFLUENCE	DEPTH FACTOR	% DEPR.	EFF. FR. FT.	VALUE
331,175 sq. ft.	70/50 ft. 1.02					231,822

NOTES:

NOTES:		APPRAISED VALUE	
	49,331.200	LAND	231,800
	138,690.000	BUILDINGS	815,800
	1,021,300	TOTAL VALUE	1,047,600
	196.8		
	17.4		



CITY OF
JERSEY CITY
CITY HALL • JERSEY CITY, N. J. 07302
(201) 547-5131

DEPARTMENT OF FINANCE
ASSESSMENT DIVISION

Date: 1/17/96

Block: 2026. A

Lot: 2. A

Address: 280 Warfield Ave

Recommend
~~1,141,700~~
~~1,700,900~~
~~2,851,600~~

on time

Description of property:

15-CB-W-H

At present Bldg is Vacant and
not in use

Inspector: (13)



L18-96



CITY OF
JERSEY CITY
CITY HALL • JERSEY CITY, N. J. 07302
(201) 434-3600

DEPARTMENT OF FINANCE
ASSESSMENT DIVISION

August 24, 1973

Mr. William Robertson, Jr.
777 Bergen Avenue
Jersey City, New Jersey

Block: 2026A Lot: 2 Location: 880 Garfield Avenue
Having Envelope to -
Owner: Morton Hirschklau, esq.

Attorney:

Dear Sir:

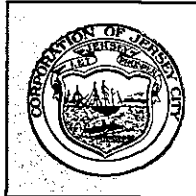
An appeal has been filed for 1973 with the Hudson County Board of Taxation upon the above property and you are hereby assigned to report upon form # 5 as soon as possible, together with a letter stating the value to which you are prepared to testify.

Copy of appeal attached.

Very truly yours,

Margaret Jeffers
Supervisor of Assessments
and Tax Collections

MJ
Enc.



CITY OF
JERSEY CITY
CITY HALL • JERSEY CITY, N. J. 07302
(201) 434-3600

DEPARTMENT OF FINANCE
ASSESSMENT DIVISION

October 11, 1973

Morton Hirschklau, Esq.
11-11 River Road
Fair Lawn, New Jersey

Re: Block 2026A - Lot 2
880 Garfield Avenue

Dear Sir:

Stipulations are enclosed on the above. Will you kindly sign them in duplicate where indicated and return both copies to this office.

Very truly yours,

Margaret Jeffers
Supervisor of Assessments
and Tax Collections

MJ:ad
Encls.



CITY OF

JERSEY CITY

CITY HALL • JERSEY CITY, N. J. 07302
(201) 547-5131

DEPARTMENT OF FINANCE
ASSESSMENT DIVISION

August 16, 1978

**Mr. Hugh A. McGuire
855 Summit Avenue
Jersey City, New Jersey**

BLOCK 2026-A LOT 2-A

LOCATION: 880 Garfield Avenue

OWNER: Waring Envelope Company

ATTORNEY: Rosenblum & Rosenblum

Dear Sir:

An appeal has been filed for the taxing year 1978 with the Hudson County Board of Taxation upon the above property and you are hereby assigned to report upon Form # 5 as soon as possible, together with a letter stating the value to which you are prepared to testify.

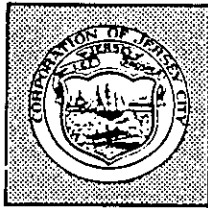
Copy of appeal attached.

Very truly yours,

Margaret Jeffers
Assessor

MJ:ad

Enc. (Appeal attached)



CITY OF
JERSEY CITY
CITY HALL · JERSEY CITY, N. J. 07302
(201) 547-5131

DEPARTMENT OF FINANCE
ASSESSMENT DIVISION

September 21, 1982

Mr. Hugh McGuire
855 Summit Avenue
Jersey City, New Jersey

BLOCK 2026.A LOT 2.A

LOCATION 880 Garfield Avenue

OWNER 795 Lidgewood Corp.

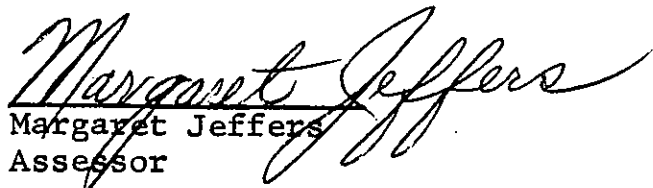
ATTORNEY David Mandelbaum, Esq.
80 Main Street
West Orange, N.J. 07052

Dear Sir:

An appeal has been filed for the taxing year 1982 with the Hudson County Board of Taxation upon the above property and you are hereby assigned to report upon Form # 5 as soon as possible, together with a letter stating the value to which you are prepared to testify.

Copy of appeal attached.

Very truly yours,


Margaret Jeffers
Assessor

MJ:jg
Enc. (Appeal attached)



CITY OF
JERSEY CITY
CITY HALL • JERSEY CITY, N. J. 07302
(201) 434-3600

DEPARTMENT OF FINANCE
ASSESSMENT DIVISION

October 24, 1972

Morton Hirschklaw, Esq.
410 Ramapo Valley Road
Oakland, New Jersey

Re: Block 2026A Lot 2
880 Garfield Avenue
a

Dear Sir:

Withdrawals

~~Not to be used~~

are enclosed on the above properties.

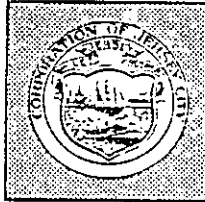
Will you kindly sign them in duplicate where indicated and return both copies to this office.

Very truly yours,

Margaret Jeffers
Margaret Jeffers
Supervisor of Assessments
and Tax Collections

MJ:ad
Encls.

In Mail



CITY OF
JERSEY CITY
CITY HALL · JERSEY CITY, N. J. 07302
(201) 547-5131

DEPARTMENT OF FINANCE
ASSESSMENT DIVISION

August 13, 1979

Tasso Pd.

Mr. Hugh A. McGuire
855 Summit Avenue
Jersey City, New Jersey

BLOCK 2026A LOT 2A
LOCATION: 880 Garfield Ave.
OWNER: Waring Envelope Co.
ATTORNEY: Rosenblum & Rosenblum

Dear Sir:

An appeal has been filed for the taxing year 1979 with the Hudson County Board of Taxation upon the above property and you are hereby assigned to report upon Form # 5 as soon as possible, together with a letter stating the value to which you are prepared to testify.

Copy of appeal attached.

Very truly yours,

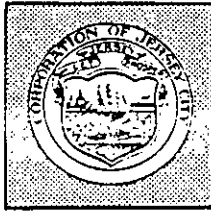
Margaret Jeffers
Margaret Jeffers
Assessor

MJ:ad
Enc. (Appeal attached)

Taf. Cf. 12/2/80

78-79-80

To be Wd. by Leo Rosenthal



CITY OF
JERSEY CITY
CITY HALL • JERSEY CITY, N. J. 07302
(201) 547-5131

DEPARTMENT OF FINANCE
ASSESSMENT DIVISION

September 26, 1983

Mr. Leo T. Souza
205 Main Street
Chatham, N.J.

BLOCK 2026A LOT 2.A

LOCATION Gar., Cart. & Halladay Sts.

OWNER 795 Lidgewood Corp.

ATTORNEY David Mandelbaum, Esq.
80 Main Street
West Orange, N.J. 07052

Dear Sir:

An appeal has been filed for the taxing year 1983 with the Hudson County Board of Taxation upon the above property and you are hereby assigned to report upon Form # 5 as soon as possible, together with a letter stating the value to which you are prepared to testify.

Copy of appeal attached.

Very truly yours,

Margaret Jeffers
Assessor

MJ:jg
Enc. (Appeal attached)

TAX COURT OF NEW JERSEY

OFFICE OF THE CLERK



CN 972
TRENTON, NJ
08625

September 26, 1983

George G. Frino, Esq.
80 Main Street
West Orange, NJ 07052

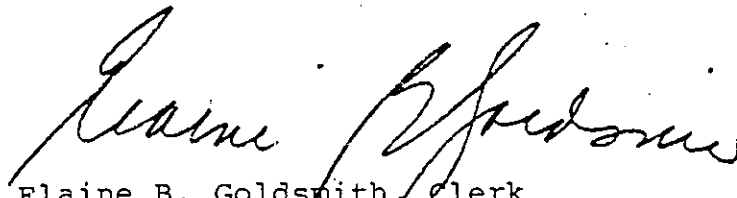
Robert E. Barry, Esq.
11 Elizabeth Street
Jersey City, NJ 07306

RE: 795 Lidgewood Corp. vs.
City of Jersey City
Block/Lot 2026.A/1, 2026.A/2.A
2-26.A/3A
09-06092A-82 09-06096A-82
09-06093A-82

Dear Gentlemen:

I enclose a copy of the Judgment which has been entered
by the Court.

Very truly yours,


Elaine B. Goldsmith, Clerk
Tax Court of New Jersey

EBG:rab
enc.
CC:

Municipal Clerk
Municipal Tax Assessor
Municipal Tax Collector
County Board of Taxation

GOLDMAN, CARLET, GARRISON & BERTONI, P.A.

A PROFESSIONAL CORPORATION

ATTORNEYS AT LAW

1135 CLIFTON AVENUE

P. O. BOX 725

CLIFTON, NEW JERSEY 07013

(201) 777-6200

GERALD GOLDMAN
FRANK A. CARLET N.J. & D.C. BARS
GEORGE L. GARRISON
LOUIS B. BERTONI
HAROLD GOLDMAN

MARJORIE NEIFELD

GILBERT KLAPERMAN
OF COUNSEL
N.Y. BAR ONLY

FILE NO.

August 5, 1983

City Assessor
769 Montgomery Street
Jersey City, New Jersey 07306

RE: 795 LIDGEWOOD CORP. VS. CITY OF JERSEY CITY

Dear Sir:

Enclosed please find a copy of the complaint in the referenced matter.

Very truly yours,
Goldman, Carlet, Garrison & Bertoni

By: Frank A. Carlet /res
Frank A. Carlet

FAC/res

TAX COURT OF NEW JERSEY

OFFICE OF THE CLERK



CN 972
TRENTON, NJ
08625

August 12, 1983

Goldman, Carlet,
Garrison & Bertoni, Esqs.
1135 Clifton Avenue
Clifton, N. J. 07013

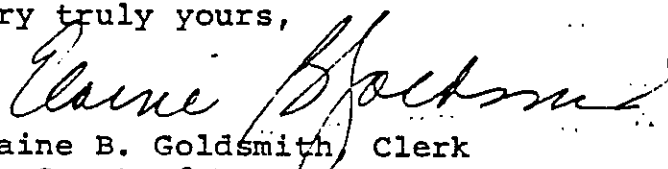
Re: Docket No. 09-06030A-83D
795 Ledgewood Corporation vs.
City of Jersey City
Block 2026.A, Lot 2.A
Filing Date: August 10, 1983
Filing Fee: \$75.00

Gentlemen:

We are in receipt of the above named pleading and requisite filing fee. The pleading has been filed and assigned a docket number. Kindly refer to this docket number when forwarding additional papers or correspondence concerning this case.

Acceptance for filing shall not be deemed approval of validity or timeliness by the Tax Court.

Very truly yours,


Elaine B. Goldsmith, Clerk
Tax Court of New Jersey

EBG:lh

cc: County Tax Administrator
Municipal Attorney
Municipal Assessor

8.13.
TAX COURT OF NEW JERSEY

OFFICE OF THE CLERK
609-292-5082



CN 972
TRENTON, NJ
08625

April 8, 1985

Frank. A. Carlet, Esq.
Goldman, Carlet, Garrison
& Bertoni, Esqs.
1135 Clifton Avenue
P.O. Box 725
Clifton, N.J. 07013

RE: 795 Ledgewood Corp. v.
City of Jersey City

Robert E. Barry
Asst. Corporation Counsel
Old Court House
583 Newark Avenue
Jersey City, N.J. 07306

09-06030A-83D

Counsel,

Enclosed please find a copy of the judgment that
was entered by the Court.

Very truly yours,

Holly C. Bakke, Clerk
Tax Court of New Jersey

Shirley R. Bird

By: Shirley R. Bird

HCB:srb

Enc.

cc: Municipal Clerk
Municipal Tax Assessor
Municipal Tax Collector
County Board of Taxation

TAX COURT OF NEW JERSEY

OFFICE OF THE CLERK
(609)292-5082



CN 972
TRENTON, N.J.
08625-0972

May 22, 1990

WATERS MCPHERSON MCNEILL
300 LIGHTING WAY
SECAUCUS NJ 07094

RE: Complaint: FISHBEIN FAMILY
PARTNERSHIP T/A LIDGEWOOD CORP.
vs JERSEY CITY
Filing Date: 05/18/90
Block #: 2026.A
Lot #: 2.A

*Taxes
unpaid*

Counsel:

Your pleading and filing fee in the above captioned case have been received. It is filed under docket number 09-06-2619-90. Kindly refer to this number when forwarding additional papers or correspondence.

Acceptance for filing shall not be deemed approval of validity or timeliness by the Tax Court.

Very truly yours,

Wesley R. LaBar, Clerk
Tax Court of New Jersey

cc: ☐ County Tax Administrator
☐ Deputy Attorney General
☒ Municipal Assessor
☐ Municipal Attorney
☐ Taxpayer:
☐ File 2026.A

21 JUN 1990 12:12 PM
DIV. OF ASSESSMENTS

TAX COURT OF NEW JERSEY

OFFICE OF THE CLERK
(609)292-5082



CITY OF JERSEY CITY

91 JUL 11 A11:01

DIV. OF ASSESSMENTS

CN 972
TRENTON, N.J.
08625-0972

July 2, 1991

WATERS, MCPHERSON, MCNEILL, ESQS.
300 LIGHTING WAY
SECAUCUS, NJ 07096

Re: Complaint:
FISHBEIN FAMILY PRT. T/A 795 LIDGEWOOD CORP.
vs. JERSEY CITY
Filing Date: 04/26/91
Block #: 2026A
Lot #: 2.A

Counsel:

Your pleading in the above captioned case has been received. It is filed under docket number 09-06-4818-91. Kindly refer to this number when forwarding additional papers or correspondence.

Acceptance for filing shall not be deemed approval of validity or timeliness by the Tax Court.

Very truly yours,

Wesley R. LaBar, Clerk
Tax Court of New Jersey

NOTE:

All communications from the Court to the attorney for the municipality will be to the Municipal Attorney to whom a copy of this letter is being sent unless the Clerk of the Court is notified in writing of a change in attorney for the municipality.

cc: County Tax Administrator
Municipal Assessor /
Attorney for Defendant
JOSEPH HEALY, ESQ.
File

Municipal Assessor's Copy



Fact Sheet

In accordance with New Jersey Department of Environmental Protection (NJDEP) requirements for "Notification and Public Outreach," PPG is providing the following information relating to environmental conditions, remedial activities and off-site impacts in connection with the site described below.

Hudson County Chrome Site No. 114 – Garfield Avenue Site
880-900 Garfield Avenue, Jersey City, N.J. 07305
Block 21501, Lots 16, 17, 18, 19 and 20
NJDEP ID No. G000005480

From 1905 to 1976, Hudson County was a center for chrome manufacturing, processing chromite ore imported into the United States. In the early 1900s, the Natural Products Refining Company opened a chrome plant at 880-900 Garfield Avenue. PPG purchased the plant in 1954 and ceased operations in 1963, selling the facility and property in 1964. The manufacturing process used at the facility produced a waste byproduct known as chromate chemical production waste, or CCPW. Over the years, the soil impacted with CCPW was used as fill material at residential, commercial and industrial construction sites.

PPG first detected hexavalent chromium at the Garfield Avenue Site (the Site) in the early 1980s. Concentrations of hexavalent chromium – a component of CCPW – were found to exceed soil cleanup criteria and total chromium concentrations in groundwater exceeded NJDEP groundwater quality standards (GWQS). As a result, PPG assumed responsibility for the remediation of 67 sites in Hudson County. In addition, PPG jointly accepted responsibility with Honeywell for 10 other sites. PPG is also responsible for addressing non-chromium contamination at Site 114, including volatile organics, semivolatile organics, non-CCPW metals, polychlorinated biphenyls and pesticides.

Before remediation was conducted, investigation activities identified that hexavalent chromium in soil was present throughout the Site with the majority above the meadow mat layer (approximately 15 feet below surface). Deeper soil impacts were found in the area of the former Morris Canal, which ran through the Site in a north-south direction.

CCPW in the soil was the source of hexavalent chromium in the groundwater at the Site. The highest concentrations of hexavalent chromium were found in the western portion of the Site, in the shallow (approximately 15 to 20 feet below ground surface) and intermediate (approximately 30 to 40 feet below ground surface) groundwater zones. Limited impacts have been observed at deeper depths. In 2005, PPG determined that chromium-impacted groundwater was migrating to the south and east of the Site and reported this information to the NJDEP in 2006. Investigations have since concluded that the southern boundary of the groundwater plume is at Caven Point Avenue, which is about 800 feet from the Garfield Avenue Site. The eastern boundary is along Pacific Avenue, which is approximately 200 feet away. The northern boundary is located at a commercial property located at 90 and 98 Forrest Street.

Interim remedial measures for soil were installed at the Garfield Avenue Site between 1990 and 1992. These measures, consisting of plastic covering, crushed gravel, and a perimeter fence, prevented direct contact with,

(Over)



or airborne exposure to, chrome residue at the Site until the cleanup began. Inspections of these measures were conducted quarterly and repairs were made as necessary.

Groundwater recovery sumps were installed at the Site between 2004 and 2005 to prevent water from migrating onto Garfield Avenue. Water generated by this system was collected on-site and transported to an offsite, permitted treatment facility until this procedure was replaced by the use of an onsite treatment facility to support excavation activities in 2011.

The excavation of chromium-impacted soil and debris at the Site was completed in November 2014. More than 530,000 tons of chromium-impacted soil were excavated, hauled off site, treated and disposed of at permitted disposal facilities.

The placement of clean backfill to near-final grade was completed in January 2015. Clean fill for a majority of the Site was amended with FerroBlack®-H. This water-based suspension of ferrous iron and sulfide is designed to prevent the backfill from being contaminated by chromium-impacted groundwater and to support groundwater remediation. Ongoing groundwater testing indicates that shallow groundwater (less than 20 feet deep) throughout most of the Site is already in compliance with the federal and New Jersey drinking water standard for total chromium.

The on-site groundwater treatment facility had treated approximately 100 million gallons of chromium-impacted groundwater. The on-site groundwater treatment facility continues operation to facilitate the cleanup of sites near Garfield Avenue and to assist with groundwater remediation pilot studies.

Since December 2017, PPG has been conducting a focused pumping-and-treating process designed to clean up groundwater immediately adjacent to the former chromate processing plant. PPG has extracted more than 10 million gallons of groundwater from depths ranging from 20 to 65 feet below ground surface. The water is then conveyed to a treatment plant south of Carteret Avenue. Once chromium and other contaminants are removed at the plant, the water, with the addition of molasses, is then injected below grade via a set of up to 68 wells.

The molasses continues the treatment of impacted groundwater through the stimulation of biological activity that converts hexavalent chromium to its much less toxic trivalent form. PPG is in the process of installing the infrastructure for a second phase of groundwater program, which calls for approximately 190 injection, extraction and monitoring wells, in addition to below ground and above ground conveyance piping. Based on the results of the interim remediation and other studies, PPG is scheduled to submit a remedial action work plan for groundwater in mid-2021.

It is important to note that groundwater is not used for drinking water purposes in Jersey City. Reservoirs in Boonton, N.J., supply Jersey City with its drinking water.

To learn more about hexavalent chromium, visit:

- New Jersey Department of Environmental Protection: <http://www.state.nj.us/dep/dsr/chromium/>
- Agency for Toxic Substances and Disease Registry: <http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=61&tid=17>



If you have questions about the Garfield Avenue Site and related off-site impacts, you can contact the independent, court-appointed site administrator overseeing the investigation and cleanup of the Site. The administrator can be reached by:

- Calling: 201-777-2099;
- Sending an email to: info@chromecleanup.com;
- Writing to: Chromium Cleanup Partnership, One Hovchild Plaza, 4000 Route 66, 4th Floor (MCDC), Tinton, Falls, N.J. 07753; or
- Visiting: www.chromecleanup.com.

You can also direct your questions and comments to:

- PPG's community relations consultant, Jeff Worden: 412.253.0816; or
- New Jersey Department of Environmental Protection, Office of Community Relations: 1-800-253-5647.



AECOM
30 Knightsbridge Road
Piscataway, New Jersey
www.aecom.com

732 564 3600 tel
732 369 0122 fax

March 7, 2019

Via Certified Mail with Return Receipt Requested

Mrs. Stacey Flanagan, Director
Department of Health & Human Services
1 Jackson Square
Jersey City, NJ 07305
Tel: (201) 547-6800

**Subject: Dewatering Permit-By-Rule
Phase 2 Stormwater Basins
PPG Site 114, 880-900 Garfield Avenue
Block 21501; Lots 3-6
Jersey City, Hudson County, New Jersey**

Dear Mrs. Flanagan,

On behalf of PPG, AECOM is notifying the City of Jersey City Department of Health & Human Services that a Dewatering Permit-By-Rule application will be submitted to the New Jersey Department of Environmental Protection (NJDEP) for the above referenced property. Attached is the completed application form and attachments for your reference.

If you have any further questions or require additional information, please contact the undersigned.

Yours sincerely,

Hue Quan, P.E.
Project Engineer
Hue.Quan@aecom.com

Cameron Dixon
Project Manager
Cameron.Dixon@aecom.com

Attachment: Dewatering Permit-By-Rule

cc via email: L. Kinsey, AECOM
M. Terril, PPG
J. Overmyer, PPG
R. Feinberg, PPG
C. Fiore, JCRA
P. Baker, Jersey City (JC)
N. Strasser, JC
H. Bartges, JC
L. Hahn, PSEG
C. Flanders, ARCADIS



NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAIL CODE 401-04Q
DIVISION OF WATER SUPPLY & GEOSCIENCE
BUREAU OF WATER ALLOCATION & WELL PERMITTING
P.O. BOX 420
TRENTON, NEW JERSEY 08625-0420
(609) 984-6831



DEWATERING PERMIT-BY-RULE

This form, once it is completed and submitted, constitutes a permit-by-rule for any person intending to divert more than 100,000 gallons of water per day associated with temporary dewatering utilizing a coffer dam or a confined area where the impacts of dewatering are contained. This form must be submitted 30 days prior to the start of the diversion activity.

In accordance with N.J.A.C. 7:19-2.17(b)2, any well or surface water supply system which becomes damaged, dry, has reduced capacity, reduced water quality or is otherwise rendered unusable as a result of this diversion shall be repaired or replaced at the expense of the owner of the project.

1. General Information

Owner/Facility Name PPG Site 114
Address 880-900 Garfield Avenue
Block 21501, Lots 3-6
Contact Name Hue Quan Telephone No. 732-564-3631
Contact Affiliation AECOM
Estimated Start Date April 6, 2019 Estimated Completion Date May 6, 2019

Location:

Municipality Jersey City County Hudson County

Depth to water at the site 0 ' to 3 ' Depth of excavations 0 ' to 3 '
Limit of dewatering (depth) up to 6 '

Diversion is to be used for the following purpose: The stormwater basins are not draining properly and need to be dewatered to install wells for the next phase of groundwater remediation (Phase II).
Minor trenching is required to grade basins to collect water.

An 8-1/2" x 11" photocopy of the portion of the USGS quadrangle map indicating the exact location of the diversion sources must be attached.

2. Diversion Sources:

a. Wells/Wellpoints

Dewatering System/ Well Permit No.	Well Name	Depth (feet)	Screen Interval	Capacity (gpm)	Formation
<u>Not applicable</u>					

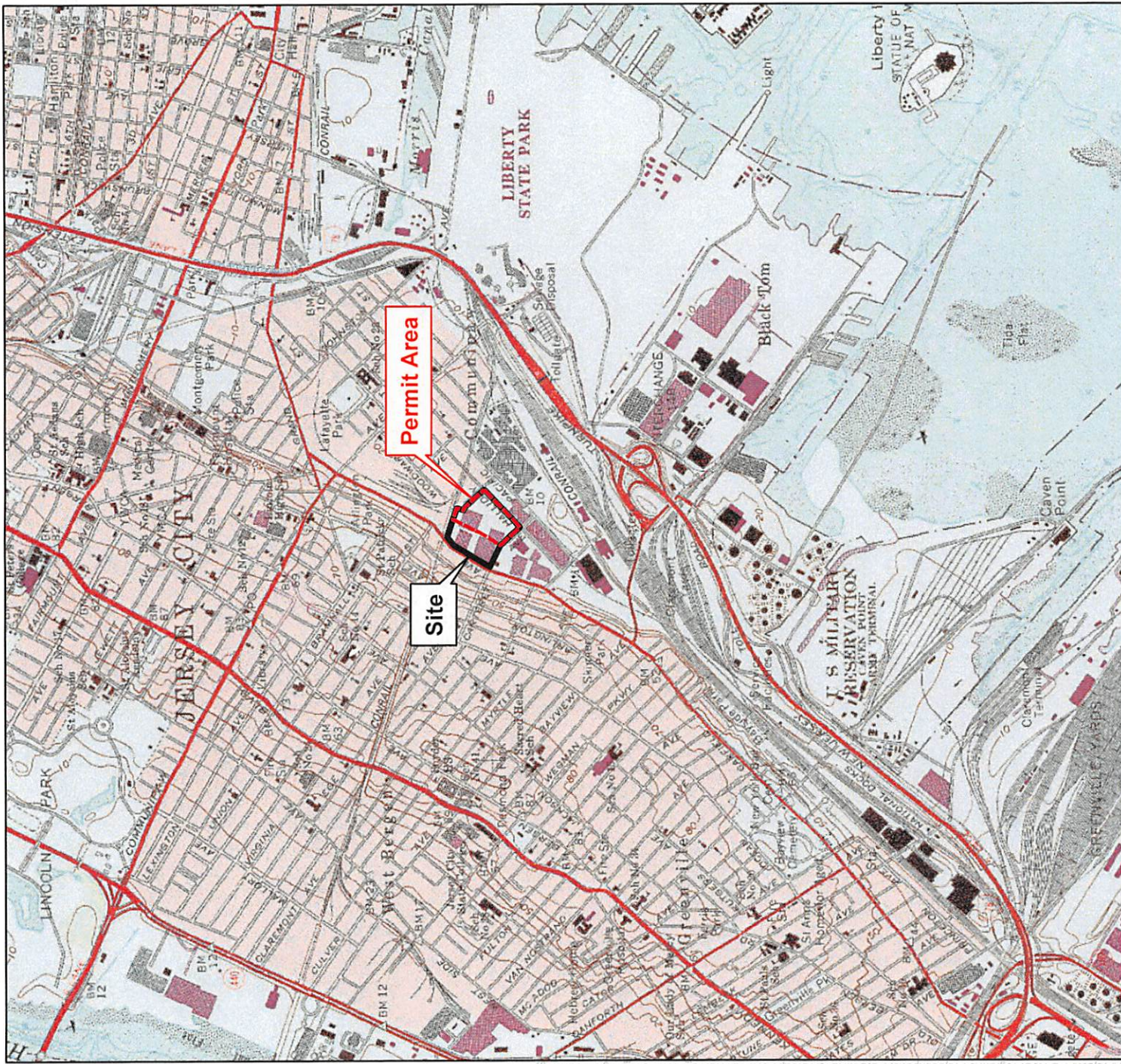
b. Trenches/Pits

Length of Trench	Depth	Pump Capacity	Formation
<u>Stormwater Basins</u>		<u>variable up to 300 gpm</u>	<u>Shallow zone/piedmont physiographic province along eastern edge of Newark Basin</u>

The owner is also responsible for:

- ☒ notifying their local Health Department of the proposed diversion;
- ☒ notifying all well owners within the estimated zone of influence of the diversion;
- ☐ investigating valid complaints of interference and reporting to the Bureau of Water Allocation & Well Permitting on the findings. Wells which have been adversely impacted as a result of the diversion shall be repaired or replaced.

A COPY OF THIS COMPLETED FORM MUST BE KEPT AT THE WORKSITE AS NO FORMAL PERMIT WILL BE ISSUED FOR THIS ACTIVITY.



AECOM

Notes:

1. New Jersey State Plane North American Datum 1983 Coordinates, U.S. Survey Feet.
2. Image Source: United States Geological Survey Topographic Quadrangle: Jersey City, NJ, 1967 - Photorevised 1981.
3. Latitude Coordinates: 403730 - 404500; Longitude Coordinates: -740730 - -740000.

PPG
Garfield Avenue Group
Jersey City, New Jersey
60577798

Date: 03/06/2018 Drawn by: AC

Figure 1
USGS Site Location Map
Dewatering Permit-by-Rule



Letters: Aug 11, NJDEP



RECEIVED

AECOM
30 Knightsbridge Road
Piscataway, New Jersey
www.aecom.com

732 564 3600 tel
732 369 0122 fax

11 AUG 15 PM 1:45

CITY OF JERSEY CITY
ENGINEERING

August 11, 2011

Via Registered Certified Mail

Mr. Chuck Lee
Jersey City Municipal Engineer
575 Route 440
Jersey City, NJ 07305
Telephone: (201) 547-4411

**Subject: Notification of General Industrial Treatment Works Approval Application
Temporary Water Treatment Connection
PPG Site 114, 880-900 Garfield Avenue
Blocks 2026.A; 2026.1, Lots 1 & 3A; 2A, 4A & 3B
Jersey City, Hudson County, New Jersey**

Dear Mr. Lee:

On behalf of PPG Industries, Inc. (PPG), AECOM is notifying the City of Jersey City Municipal Engineer that an application for a Treatment Works Approval (TWA) will be submitted to the New Jersey Department of Environmental Protection (NJDEP) for the above referenced property. Attached is the completed application form (Treatment Works Approval Permit Application, Form TWA-1) for your reference.

Description of Proposed Treatment Works

The Treatment Works Application is being submitted as required for a sewer extension that will convey over 25,000 gallons per day of sewage flow. The sewer extension will serve as a conveyance pipe from a temporary on-site water treatment system. The temporary treatment system (which does not independently warrant a Treatment Works Application) will pre-treat construction water (groundwater from dewatering activities during excavation, storm water that contacts and accumulates within the excavation trenches, and washdown water utilized for construction vehicles) prior to discharge into the public sewage system. The proposed conveyance pipe will be an extension of an existing lateral sewage pipe connection to the publically owned sewer system. The existing connection is an on-site lateral pipe that connects to a 72" diameter public sanitary line on Carteret Avenue. The on-site discharge piping is believed to be a 12" diameter pipe, but its exact dimensions and competency are uncertain. PPG intends to work with the Jersey City Municipal Utilities Authority (JCMUA) in order to complete a survey of all necessary on-site and off-site drainage piping in the area. Information from the survey will be utilized in order to determine appropriate invert elevations, effluent sump float level elevation, and the final location of the tie into existing on-site piping with the plants discharge. PPG will replace or repair on-site piping as necessary in order to ensure that an adequately sized, competent pipe run exists between the plants effluent sump, and the ultimate JCMUA owned 72" public sanitary line on Carteret Avenue in Jersey City, New Jersey.

To enhance and sustain the world's built, natural and social environments

\\uspsw2vfp001\DATA_USPSW2VFP001\Environment\Piscataway\Project\PPG-
NJCProgram\5-Legal\5.1-Permits\5.1.B-GA Group\114-2011_TWA-GWTP\Final to
NJDEP\2011-08-10 TWA_JCME_NotificationCovLtr.docx

Because Jersey City has a combined sewer system, provisions to store and dispose of collected water during rain events (and 24-hrs following) are included under a separate treatment works approval (TWA No.10-0127). The current system includes seven (7) 21,000-gallon fractionation tanks. The holding tanks will temporarily contain construction water (groundwater from dewatering activities during excavation, storm water that contacts and accumulates within the excavation trenches, and wash down water utilized for construction vehicles). The anticipated dewatering rates for the area of excavation range between 25,000 to 72,000 gallons per day (gpd). However, maximum rates of up to 120 gallons per minute and 95,000 gpd may be necessary following large precipitation events. A separate TWA Application for two large capacity tanks (245,700 gallons each) was submitted to the NJDEP on March 15, 2011 and approved on July 1, 2011 (TWA No. 11-0109) to ensure adequate storage is available on-site. This new tank system is anticipated to be installed Fall 2011 in preparation of additional remedial activities.

In the event the water treatment system is not operating within discharge limits or is off-line during rain events, the stored construction water will be transported to one of three receiving facilities (DuPont, Envirite or Passaic Valley Sewerage Commission) via vacuum tanker. The DuPont Secure Environmental Treatment facility is located in Deepwater, New Jersey. The Envirite facility is located in York, Pennsylvania. The Passaic Valley Sewerage Commission is located in Newark, New Jersey. The receiving facility will be determined by the concentrations of pollutants, particularly hexavalent chromium, in the water as determined via laboratory analysis. The concentrations are expected to fluctuate throughout the remediation period.

Written comments regarding the TWA application can be sent to the following address:

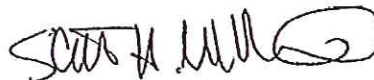
New Jersey Department of Environmental Protection
Bureau of Financing and Construction Permits
401 East State Street
3rd Floor West Wing
P.O. Box 425
Trenton, New Jersey 08625-0425

If you have any further questions or require additional information, please contact the undersigned.

Yours sincerely,



Hue Quan, P.E.
Project Engineer
Hue.Quan@aecom.com



Scott H. Mikaelian, P.E.
Program Manager
Scott.Mikaelian@aecom.com

Attachment: Form TWA-1

To enhance and sustain the world's built, natural and social environments

\\uspsw2vfp001\DATA_USPSW2VFP001\Environment\Piscataway\Project\PPG-
NJCPProgram\5-Legal\5.1-Permits\5.1.B-GA Group\114-2011_TWA-GWTP\Final to
NJDEP\2011-08-10 TWA_JCME_NotificationCovLtr.docx

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Division of Water Quality

TREATMENT WORKS APPROVAL PERMIT APPLICATION

—Refer to Instructions on Page 4 and Provide All Applicable Information. Please Print or Type. —

1. APPLICANT/OWNER*

Name Telephone
Permanent Legal Address
City or Town State Zip Code

* Applicant/Owner should be the eventual owner of the proposed Treatment Works.

2. LOCATION OF ACTIVITY

Name of Facility/Site
Street Address/Location
Lot No. Block No.
City or Town State Zip Code
Municipality County

3. NEW JERSEY LICENSED PROFESSIONAL ENGINEER

Name N.J. License No.
Name of Firm, if employee
Mailing Address
City or Town State Zip Code
Telephone Telefax

4. ESTIMATED CONSTRUCTION COST AND APPLICATION FEE

- A. Cost of treatment works proposed in this application \$
(attach a breakdown of the cost of all items related to the construction of the proposed treatment works)
- B. Application Fee \$
(in accordance with N.J.A.C. 7:14A-22.25 et seq., made payable to Treasurer, State of NJ, Environmental Services Fund)

5. OTHER REQUIRED PERMITS

If any of the following applications have been submitted for this project, provide the applicable information.

Permit Type	Application Status		Application Date (or Application No.)
	Pending (check one)	Approved*	
● Treatment Works Approval	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10-0127, 11-0109
● Exemption From Sewer Ban	<input type="checkbox"/>	<input type="checkbox"/>	
● Water Quality Management Plan Amendment	<input type="checkbox"/>	<input type="checkbox"/>	
● CAFRA	<input type="checkbox"/>	<input type="checkbox"/>	
● Stream Encroachment	<input type="checkbox"/>	<input type="checkbox"/>	
● Freshwater Wetlands	<input type="checkbox"/>	<input type="checkbox"/>	
● Tidal or Coastal Wetlands	<input type="checkbox"/>	<input type="checkbox"/>	
● Waterfront Development	<input type="checkbox"/>	<input type="checkbox"/>	
● NJPDES (DSW, DGW or SIU)	<input type="checkbox"/>	<input type="checkbox"/>	
● Pinelands Certificate	<input type="checkbox"/>	<input type="checkbox"/>	
● Delaware & Raritan Canal Commission	<input type="checkbox"/>	<input type="checkbox"/>	
● Hackensack/Meadowlands Commission	<input type="checkbox"/>	<input type="checkbox"/>	
● Other Related Approvals <input type="checkbox"/> SESCO (Soil Erosion S...	<input type="checkbox"/>	<input checked="" type="checkbox"/>	210-H-2765

(* - If any of the above applications were approved, please provide a copy of the approval with this application)

6. PROJECT DESCRIPTION (Brief Description of Proposed Treatment Works and Intended Use)

Installation of a conveyance pipe from a temporary on-site wastewater treatment system to public sewer system. The proposed conveyance pipe will be an extension of an existing lateral sewage pipe connection to the publicly owned sewer system. The existing connection is an on-site lateral pipe that connects to a 72" diameter public sanitary line on Carteret Avenue in Jersey City, New Jersey. The on-site discharge piping is believed to be 15" diameter pipe, but its exact dimensions and competency are uncertain. Due to JCMUA's combined sewer system, holding tanks will be used to store treated water until 24 hours following a rain event. The holding tanks subject to the TWA will be used to temporarily store water from dewatering activities conducted during remedial activities (excavation). Stored water that cannot be treated will be transported to one of three receiving facilities (DuPont, Envirite or Passaic Valley Sewerage Commission) via tanker.

7. APPLICANT'S AGENT (Optional)

I, _____

PPG Industries, Inc.
(Applicant/Owner's Name)

authorize to act as my agent/representative in all matters pertaining to my application the following person:

Name Hue N. QuanPosition Project EngineerAddress 30 Knightsbridge RoadCity PiscatawayState NJZip Code 08854Telephone 732.564.3631

Signature of Agent

2/23/2011
Date

Signature of Applicant/Owner

February 23, 2011
Date
8. PROPERTY OWNER'S CERTIFICATION

I hereby certify that I, _____

Redevelopment Agency
Jersey City Renewal Association (JCRA)

(Property Owner's Name)

owns the property identified in this application. As owner, I grant permission for the activity to be permitted under this application and authorize the Department of Environmental Protection to conduct on-site inspections, if necessary. If the construction activity will take place in an easement, I certify that with this application, I presently have or will obtain permission of the property owner(s) prior to initiation of construction of this proposed treatment works.

Signature of Owner

Date

Name Robert AntonicelloPosition Executive Director**9. STATEMENT OF PREPARER OF PLANS, SPECIFICATIONS AND ENGINEER'S REPORT AND/OR ABSTRACT**

I hereby certify that the engineering plans, specifications, and engineer's report and/or abstract applicable to this project comply with the current rules and regulations of the Department of Environmental Protection with the exceptions as noted.

Signature of Engineer

Date

2/23/2011

Professional Engineer's

Name

Hue N. Quan, PE

Embossed Seal

Position

Project Engineer

7. APPLICANT'S AGENT (Optional)

I, PPG Industries, Inc.
(Applicant/Owner's Name)

authorize to act as my agent/representative in all matters pertaining to my application the following person:

Name Hue N. Quan Position Project Engineer

Address 30 Knightsbridge Road City Piscataway

State NJ Zip Code 08854 Telephone 732.564.3631

[Signature]
Signature of Agent

2/23/2011
Date

[Signature]
Signature of Applicant/Owner

February 23, 2011
Date

8. PROPERTY OWNER'S CERTIFICATION

I hereby certify that I,

900 Garfield Ave.

(Property Owner's Name)

owns the property identified in this application. As owner, I grant permission for the activity to be permitted under this application and authorize the Department of Environmental Protection to conduct on-site inspections, if necessary. If the construction activity will take place in an easement, I certify that with this application, I presently have or will obtain permission of the property owner(s) prior to initiation of construction of this proposed treatment works.

[Signature]
Signature of Owner

3/10/11
Date

Name Robert T. Schmitt

Position Senior Vice President

9. STATEMENT OF PREPARER OF PLANS, SPECIFICATIONS AND ENGINEER'S REPORT AND/OR ABSTRACT

I hereby certify that the engineering plans, specifications, and engineer's report and/or abstract applicable to this project comply with the current rules and regulations of the Department of Environmental Protection with the exceptions as noted.

[Signature]
Signature of Engineer

Date

2/23/2011

Professional Engineer's

Name Hue N. Quan, PE

Embossed Seal

Position Project Engineer

10. PROPER CONSTRUCTION AND OPERATION CLAUSE

I, the Applicant/Owner, PPG Industries, Inc., agree that the treatment works will be properly constructed and operated in accordance with the engineering plans, specifications and conditions under which approval is granted by the Department of Environmental Protection.

Mark E. Terril
Signature of Applicant/Owner

Date February 23, 2011

Name Mark Terril

Position Director Environmental Affairs

11. CERTIFICATION BY APPLICANT/OWNER

I certify, under penalty of law, that the information provided in this application and the attachments is true, accurate, and complete. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment.

Mark E. Terril
Signature of Applicant/Owner

Date February 23, 2011

Name Mark Terril

Position Director Environmental Affairs

INSTRUCTIONS FOR COMPLETING FORM TWA - 1

This form should accompany all Treatment Works Approval permit applications.

1. General Information - (items #1 through #4, #6) Complete the requested applicant and project information.
2. Other Required Permits (item # 5) - Please list all permits issued for the subject project (in addition to the permits being applied for at this time).
3. Signatures (items #7 through #11) - All signatures must comply with N.J.A.C. 7:14A-4.9 and N.J.A.C. 7:14A-22.8(c). Where indicated under items #1, #10 and #11, the applicant/owner should be the eventual owner of the proposed treatment works. Item #8 shall be completed by the owner of the property.

Should you need assistance in completing the application, please call the appropriate phone number listed below:

• Bureau of Finance and Construction Permits (609) 984-4429 Municipal Treatment Works, Industrial Treatment Works, Sewer Extension, Sewer Ban Exemption, Subsurface Disposal Systems	• Bureau of Non-Point Pollution Control (609) 292-0407 Alternate Design Septic Systems (design flow less than 2,000 GPD)
--	---

Inspections

Address like garfield ave, 880

Sorted On : Date desc

Inspector: BRIAN KILROY Ticket Type: Summons

Date	File Number	Type	Section	Violation	Address	Ward
12/06/2018	360365	Summons	West	59 - Land must be registered/fence required	GARFIELD AVE, 880	F
12/06/2018	360364	Summons	West	59 - Land must be registered/fence required	GARFIELD AVE, 880	F

Total Summons: 2

Total Inspections : 2

Inspections

Address like garfield ave, 900

Sorted On : Date desc

Inspector: GERRY MCCANN

Ticket Type: Summons

Date	File Number	Type	Section	Violation	Address	Ward
12/17/2018	361557	Summons	South	59 - Land must be registered/fence required	GARFIELD AVE, 900	A
12/17/2018	361558	Summons	South	59 - Land must be registered/fence required	GARFIELD AVE, 900	A

Total Summons: 2

Total Inspections : 2

JERSEY CITY

(ENGINEERING DEPT.)



LDS JC-E 10503605

Garfield Avenue
Plant Site - PPG's

900 Garfield Avenue
~~960 Garfield Avenue~~

HUDSON REGIONAL HEALTH COMMISSION

215 HARRISON AVE, HARRISON, NEW JERSEY 07029

TEL. 201-485-7001 FAX 201-485-1251

Charles J. Sheridan, President

Robert Ferraiuolo, Director

FIELD INVESTIGATION REPORT

LOCATION: 900 Garfield Ave., Jersey City
[Site 114]

INSPECTOR: Ron Ross

DATE: 24 October 1989

RE: Possible chromium contamination

FINDINGS: The facility was visited and samples taken with the assistance of John Maloney. The description of the samples taken and the results of their testing are given in the attached Table.

Weighed portions of these samples were mixed with water for five minutes and an aliquot of the supernatant tested with the chromogenic reagent from the Hach chromate in waste water kit [DR-100]. All of the positive samples were quantitated with the HC-14 Hach chromate in waste water kit. The indeterminate samples [ID] contained materials which interfered with the analytical procedure.

CONCLUSION AND RECOMMENDATIONS: Chromate appears to have migrated into this facility to some extent. Additional evaluation to ascertain the extent of contamination is needed. Hudson Regional Health Commission will assist in this evaluation. New Jersey Department of Health and New Jersey Department of Environmental Protection will be provided with these results and asked to assist in the evaluation and remediation activities if needed. Because of the probability of exposure of employees outside this facility it is recommended that urine testing be performed on the workforce on a voluntary basis to document that this workplace is not a source of hazardous chromium exposure. This is the quickest way to identify any problems which may exist within the facility and proves the safety of the workplace itself if no such problems exist. Attached is a description of the recommended testing procedure.

HCFIR67

HUDSON REGIONAL HEALTH COMMISSION

215 HARRISON AVE, HARRISON, NEW JERSEY 07029

TEL. 201-485-7001 FAX 201-485-1251

Charles J. Sheridan, President

Robert Ferraiuolo, Director

Kodak
900 Garfield Ave.
Jersey City, NJ 07305

The location at which several samples were taken was marked with a number as indicated. ID indicates the chromate concentration could not be determined.

Chromate Concentration Parts Per Million	Location At Which Sample Taken
860	Dust and Debris from floor crack/joint; location marked 1 F & W Room
<10	Dust and Debris from floor crack/joint; location marked 2 Stock Room
ID	Dust from vacuum
50	Unpaved north edge of parking area
ID	Dust from air filter from AC on roof

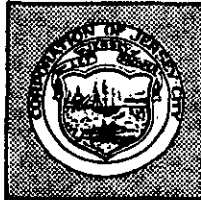
HCFIR67

JERSEY CITY

(ENGINEERING DEPT.)



LDS JC-E 10504152



CITY OF
JERSEY CITY
CITY HALL • JERSEY CITY, N. J. 07302
(201) 547-4776

Hazardous Waste Task Force

EARL ZELA TEX ALDREDGE
DIRECTOR

May 25, 1983

Mrs. D.L. Molyneux
Lawrence Construction Company
2520 Polk Street
Union NJ 07083

Dear Mrs. Molyneux

It has been determined that the property in Block 2026A in the City of Jersey City New Jersey may constitute a danger to the environment, and to the public health, safety, and welfare and is a violation of the Ordinances of the City of Jersey City NJ.

Hexavalent Chromium levels of 7 to 100ppm have been detected in surface water on the site. ~~Hexavalent Chromium~~ Chromium levels of 118,000 ppm to 197,000 ppm have been detected on the site in the ~~soil~~ soil samples.

YOU ARE HEREBY DIRECTED to:

1. Erect and maintain a fence around all parts of the ~~property~~ property not containing structures or paved parking lot.
2. Cease further construction, development, or other surface dislocation of the property
3. Permit the access to the ~~property~~ property by the consultants/contractors of PPG Ind. and the staff of PPG Ind. for the purposes of obtaining samples and performing geological and hydrological investigations.

If you fail to respond to this directive within five (5) days or fail to comply with this directive within fourteen (14) days, this agency shall institute legal proceedings against you to comply with this directive.

Sincerely,

Earl Zela Tex Aldredge
Earl Zela Tex Aldredge
Director

as of 1/1/83

Title Holder	BL	LT	Location	Status
Laverace Const	1497A	PLA	Caven Pt Rd	C
"	2006	1A	Commercial St	
"	2007	2A	Garfield Ave + Caven Pt Ave	
"	2006A	2	Carteret + Garfield	C
F. Fishbein T/A Lawrence Const	2006A	1	Garfield Ave	C
"	2006A	3	" "	C
"	2002	3A	859 Garfield	
"	2002	3B	861 Garfield	
"	1510	21 + Y	E. Linden Ave	
F. Fishbein T/A 795 Lidgewood	2026A	3B	Carteret + Halladay	6
F. Fishbein T/A Cliff Associates	2002	81B	Garfield Ave	
795 Lidgewood Corp	2026A	1	900 Garfield	C
"	2026A	2A	880 Garfield	C
"	2026A	3A	Dakota St	C
"	2026A	4A	Dakota St	C

~~Architect Harris Corp~~

F. Fishbein T/A Lavances	1497	2J	
"	1497	2L	
"	"	2N	
"	"	2P	
"	"	2R	
"	"	2S	

Caven Point Rd



CITY OF
JERSEY CITY
CITY HALL · JERSEY CITY, N. J. 07302
547-5204

Hazardous Waste Task Force

Earl Zela Tex Aldredge
Director

April 30, 1982

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

795 Lidgerwood Corp.
2520 Polk Street
Unibn, New Jersey 07083

Dear Sir/Madam:

The Hazardous Waste Task Force has determined that the following conditions at Block 2026A in the City of Jersey City, may constitute a danger to the environment, and to the public health, safety, and welfare and or violations of the Ordinances of the City of Jersey City, New Jersey.

Hazardous substances have been disposed of on the property, in such a manner as to allow runoff to local surface waters streets, sewers and ground water.

YOU ARE HEREBY DIRECTED to initiate at once the following remedial measures at the site:

1. Erect and maintain a fence around the property (section that does not contain structures).
2. Evaluate the quality of the ground water at the site. If the ground water should be contaminated, develop a remedial plan for decontamination.
3. Remove and properly dispose of any and all contaminated soils located at the property in accordance with the laws and regulations of the City of Jersey City, State of New Jersey and United States of America.

In addition, you must notify this agency upon the commencement of any and all remedial action taken in this regard. If you fail to respond to this notice, within ten (10) days of the receipt of this directive by you, this agency shall institute legal proceedings against you to comply with this directive.

Sincerely,

Earl Zela Tex Aldredge,
Director

LAWRENCE CONSTRUCTION COMPANY

CUSTOM BUILT INDUSTRIAL PLANTS FROM SITE SELECTION TO FINANCING

2520 POLK STREET
UNION, NEW JERSEY 07083
TEL: 379-2550

May 12, 1982

Earl Zela Tex Alderedge
City of Jersey City
Hazardous Waste Task Force
City Hall
Jersey City, New Jersey 07302

Dear Mr. Alderedge:

We acknowledge receipt of your letter dated April 30, 1982 and appreciate your time in discussing this problem with the writer on Monday, May 10th.

We are looking into the facts in this matter and we will be in touch with you.

Very truly yours,

LAWRENCE CONSTRUCTION CO.

BY D. L. Molyneux
D. L. MOLYNEUX

DLM:bm
Enc. Copy of April 30th letter

JERSEY CITY

(ENGINEERING DEPT.)



LDS JC-E 10506090

15th Quait
3rd Quait

BROWNFIELDS ASSESSMENT DEMONSTRATION PILOT GRANT SITE PROFILE

Project Name:		880 - 900 Garfield Ave	
Address:		880 - 900 Garfield Avenue	
City, State, Zip Code		Jersey City, New Jersey Jersey City, N.J. 07304	
Site Acreage:		16	
Site Description/History/Ownership: Former PPQ Chromate Processing facility and →			
Planned Reuse: Warehouse & distribution - retail			
Communities/Group Involvement: ^{Environmental Commission} Charette creating site & site selection			
Phase I Site Assessment Started		No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> NA <input type="checkbox"/> Date: (Mo. Year) Oct, 2003	
Phase I Site Assessment Completed		No <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> NA <input type="checkbox"/> Date: (Mo. Year) Jan 2004 ^{PPQ} _{PSERG}	
Phase I Funded By:		EPA \$ Federal, State, Local, <input checked="" type="checkbox"/> Private \$ unknown to be determined	
Phase II Site Assessment Started		<input checked="" type="checkbox"/> No Yes Date: (Mo. Year)	
Phase II Site Assessment Completed		<input checked="" type="checkbox"/> No Yes Date: (Mo. Year)	
Phase II Funded By:		EPA \$ Federal, State, Local, <input checked="" type="checkbox"/> Private \$ unknown	
Contaminants: Indicate if contaminants have been found in the property/parcel. If analysis has not been conducted or results are not yet available please check undetermined (Und.) If media (i.e. surface water) is not found in the property please check (N/A). List known contaminants in the space provided.			
Soil/Sediments:		No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Und. <input type="checkbox"/> N/A Contaminants:	
Ground Water:		No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Und. <input type="checkbox"/> N/A Contaminants:	
Surface Water:		No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Und. <input type="checkbox"/> N/A Contaminants:	
Building:		No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Und. <input type="checkbox"/> N/A Contaminants: Required Demolition	
Is Clean-Up Required:		No <input type="checkbox"/> Yes <input checked="" type="checkbox"/>	
Have Site Remedial Plans Been Developed:		<input checked="" type="checkbox"/> No Yes	
Remedial Plans Funded By:		EPA \$ Federal, State, Local, <input checked="" type="checkbox"/> Private \$ unknown	
Clean-Up Activities Started:		<input checked="" type="checkbox"/> No Yes Date: (Mo. Year)	
Clean-Up Activities Completed:		<input checked="" type="checkbox"/> No Yes Date: (Mo. Year)	
Other Funded Activities:			

BROWNFIELDS ASSESSMENT DEMONSTRATION PILOT GRANT SITE PROFILE

Project Name: 880-900 Garfield Ave			
Address: 880-900 Garfield Ave			
City, State, Zip Code: Jersey City, New Jersey 07304			
Site Acreage: 16			
Site Description/History/Ownership: Former PPG Chromate Processing Facility and PSE&G coal gastrification plant. Redeveloped with three large warehouses. One waarehouse was a film processing facility.			
Planned Reuse: Warehouse-distribution - retail			
Communities/Group Involvement: Environmental commission Charette creating site & site selection			
Phase I Site Assessment Started <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> NA Date: (Mo. Year) 10/03			
Phase I Site Assessment Completed <input checked="" type="checkbox"/> Xppg <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> NA Date: (Mo. Year) 1/04 PSE&G			
Phase I Funded By: EPA \$ Federal, State, Local, <input checked="" type="checkbox"/> Private \$ unknown to be determined			
Phase II Site Assessment Started <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Date: (Mo. Year)			
Phase II Site Assessment Completed <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Date: (Mo. Year)			
Phase II Funded By: EPA \$ Federal, State, Local, <input checked="" type="checkbox"/> Private \$ Unknown			
Contaminants: Indicate if contaminants have been found in the property/parcel. If analysis has not been conducted or results are not yet available please check undetermined (Und.) If media (i.e. surface water) is not found in the property please check (N/A). List known contaminants in the space provided.			
Soil/Sediments: No <input checked="" type="checkbox"/> Yes Und. N/A Contaminants:			
Ground Water: No <input checked="" type="checkbox"/> Yes Und. N/A Contaminants:			
Surface Water: No <input checked="" type="checkbox"/> Yes Und. N/A Contaminants:			
Building: No <input checked="" type="checkbox"/> Yes Und. N/A Contaminants: Required Demolition			
Is Clean-Up Required: No <input checked="" type="checkbox"/> Yes			
Have Site Remedial Plans Been Developed: <input checked="" type="checkbox"/> No Yes			
Remedial Plans Funded By: EPA \$ Federal, State, Local, <input checked="" type="checkbox"/> Private \$ unknown			
Clean-Up Activities Started: <input checked="" type="checkbox"/> No Yes Date: (Mo. Year)			

BROWNFIELDS ASSESSMENT DEMONSTRATION PILOT GRANT SITE PROFILE

Project Name: 880-900 Garfield Ave			
Address: 880-900 Garfield Ave			
City, State, Zip Code: Jersey City, New Jersey 07304			
Site Acreage: 16			
Site Description/History/Ownership: Former PPG Chromate Processing Facility and PSE&G coal gastrification plant. Redeveloped with three large warehouses. One warehouse was a film processing facility.			
Planned Reuse: Warehouse-distribution - retail			
Communities/Group Involvement: Environmental commission Charette creating site & site selection			
Phase I Site Assessment Started <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> NA Date: (Mo. Year) 10/03			
Phase I Site Assessment Completed <input checked="" type="checkbox"/> Ppg <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> NA Date: (Mo. Year) 1/04 PSE&G			
Phase I Funded By: EPA \$ Federal, <u>State</u> , Local, <input checked="" type="checkbox"/> Private \$ unknown to be determined			
Phase II Site Assessment Started <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Date: (Mo. Year)			
Phase II Site Assessment Completed <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Date: (Mo. Year)			
Phase II Funded By: EPA \$ Federal, <u>State</u> , Local, <input checked="" type="checkbox"/> Private \$ Unknown			
Contaminants: Indicate if contaminants have been found in the property/parcel. If analysis has not been conducted or results are not yet available please check undetermined (Und.) If media (i.e. surface water) is not found in the property please check (N/A). List known contaminants in the space provided.			
Soil/Sediments: No <input checked="" type="checkbox"/> Yes Und. N/A Contaminants:			
Ground Water: No <input checked="" type="checkbox"/> Yes Und. N/A Contaminants:			
Surface Water: No <input checked="" type="checkbox"/> Yes Und. N/A Contaminants:			
Building: No <input checked="" type="checkbox"/> Yes Und. N/A Contaminants: Required Demolition			
Is Clean-Up Required: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes			
Have Site Remedial Plans Been Developed: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes			
Remedial Plans Funded By: EPA \$ Federal, <u>State</u> , Local, <input checked="" type="checkbox"/> Private \$ unknown			
Clean-Up Activities Started: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Date: (Mo. Year)			

BROWNFIELDS ASSESSMENT DEMONSTRATION PILOT GRANT SITE PROFILE

Project Name: 880-900 Garfield Ave			
Address: 880-900 Garfield Ave			
City, State, Zip Code: Jersey City, New Jersey 07304			
Site Acreage: 16			
Site Description/History/Ownership: Former PPG Chromate Processing Facility and PSE&G coal gastrification plant. Redeveloped with three large warehouses. One warehouse was a film processing facility.			
Planned Reuse: Warehouse-distribution - retail			
Communities/Group Involvement: Environmental commission Charette creating site & site selection			
Phase I Site Assessment Started <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> NA Date: (Mo. Year) 10/03			
Phase I Site Assessment Completed <input checked="" type="checkbox"/> Xppg <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> NA Date: (Mo. Year) 1/04 PSE&G			
Phase I Funded By: EPA \$ Federal, <input type="checkbox"/> State, <input type="checkbox"/> Local, <input checked="" type="checkbox"/> Private \$ unknown to be determined			
Phase II Site Assessment Started <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Date: (Mo. Year)			
Phase II Site Assessment Completed <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Date: (Mo. Year)			
Phase II Funded By: EPA \$ Federal, <input type="checkbox"/> State, <input type="checkbox"/> Local, <input checked="" type="checkbox"/> Private \$ Unknown			
Contaminants: Indicate if contaminants have been found in the property/parcel. If analysis has not been conducted or results are not yet available please check undetermined (Und.) If media (i.e. surface water) is not found in the property please check (N/A). List known contaminants in the space provided.			
Soil/Sediments: No <input checked="" type="checkbox"/> Yes Und. N/A Contaminants:			
Ground Water: No <input checked="" type="checkbox"/> Yes Und. N/A Contaminants:			
Surface Water: No <input checked="" type="checkbox"/> Yes Und. N/A Contaminants:			
Building: No <input checked="" type="checkbox"/> Yes Und. N/A Contaminants: Required Demolition			
Is Clean-Up Required: No <input checked="" type="checkbox"/> Yes			
Have Site Remedial Plans Been Developed: <input checked="" type="checkbox"/> No Yes			
Remedial Plans Funded By: EPA \$ Federal, <input type="checkbox"/> State, <input type="checkbox"/> Local, <input checked="" type="checkbox"/> Private \$ unknown			
Clean-Up Activities Started: <input checked="" type="checkbox"/> No Yes Date: (Mo. Year)			

BROWNFIELDS ASSESSMENT DEMONSTRATION PILOT GRANT SITE PROFILE

1st Q+
2002

18
update

Project Name: 900 - 880 Garfield Avenue	
Address: 880 Garfield Avenue and 2 Dakota Street	
City, State, Zip Code Jersey City, New Jersey 07305	
Site Acreage: 16 Acres Zone (Federal EC/EZ, State, Local) State UEZ, City Redevelopment Area	
Site Description/History/Ownership: SEE ATTACHED	
Planned Reuse: Modern Industrial Park	
Communities/Group Involvement: Charette creating site and site selection	
Phase I Site Assessment Started	<input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Yes Date: (Mo. Year) Oct 2003
Phase I Site Assessment Completed	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Date: (Mo. Year)
Phase I Funded By: <input type="checkbox"/> EPA \$ to be determined after foreclosure <input type="checkbox"/> Federal, <input type="checkbox"/> State, <input type="checkbox"/> Local, <input checked="" type="checkbox"/> Private \$ X	
Phase II Site Assessment Started	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Date: (Mo. Year)
Phase II Site Assessment Completed	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Date: (Mo. Year)
Phase II Funded By: <input type="checkbox"/> EPA \$ <input type="checkbox"/> Federal, <input type="checkbox"/> State, <input type="checkbox"/> Local, <input checked="" type="checkbox"/> Private \$	
* Contaminants: Indicate if contaminants have been found in the property/parcel. If analysis has not been conducted or results are not yet available please check undetermined (Und.) If media (i.e. surface water) is not found in the property please check (N/A). List known contaminants in the space provided.	
Soil/Sediments: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Und.	Contaminants: chromium, pah's coal tar
Ground Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Und. <input type="checkbox"/> N/A	Contaminants: 11
Surface Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Und. <input checked="" type="checkbox"/> N/A	Contaminants: 11
Building: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Und. <input type="checkbox"/> N/A	Contaminants: asbestos / chromium
Is Clean-Up Required: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	
Have Site Remedial Plans Been Developed: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
Remedial Plans Funded By: <input type="checkbox"/> EPA \$ <input type="checkbox"/> Federal, <input type="checkbox"/> State, <input type="checkbox"/> Local, <input checked="" type="checkbox"/> Private \$ to be determined	
Clean-Up Activities Started:	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Date: (Mo. Year)
Clean-Up Activities Completed:	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Date: (Mo. Year)
Other Funded Activities:	

Site Description

Site of former PPG chromium production plant and PSE&G Coal Gasification Plant. Subsequently developed with warehouses that included a photo processing plant. Currently abandoned and deteriorated.

STATUS OF JCRA DEVELOPMENT PROJECT

PROJECT NAME: 900 Garfield Avenue

REDEVELOPMENT AREA: Morris Canal

DESCRIPTION OF PROJECT: Construction of warehouse-distribution-retail

PROJECT/CONTRACT STATUS: Contract signed
DATE OF DESIGNATION: January 10, 2002

EXT: November 14, 2002 till 3/21/03 w/ additional 90 days at ED's discretion extended till 10/25/03 w/ add'l 30 days

enter on property located at 900 Garfield Avenue

12/16/03 till January 31, 04 w/ add'l 30 days

DEVELOPER: The Hampshire Redevelopment UTR Co.

PROPERTY ADDRESS:

DEVELOPER REIMBURSEMENT: _____

CDBG FUNDING _____ YES; _____ NO; _____ OTHER

Acquisition / Status of Property Source of Funding	Status of Professional Service Contracts	Environmental Issues	Status / Things to be Done
<p>1/16/03 BoFC established fair market value for property at \$1,125,000.00. Appraisal came in high but due to certain circumstances [outlined in reso] value was reduced to above #)</p>		<p>PPG and PSE&G will perform environmental clean-up of sites. Site is not ready to be transferred.</p>	<p>DEMOLITION: _____ YES; <u>XX</u> _____ NO</p> <p>5/13/03 Sue sent letter to Fr. Schiller stating that at this time she was not extending the designation, but would meet with Hampshire and JCRA's attorneys over the next two weeks and would reconsider their request for designation at that time.</p> <p>5/27/03 Bd authorization rec'd to accept title to property owned by the City which property comprises part of the Hampshire development</p>

5049

**New Jersey Department of Environmental Protection
COMMUNICATION CENTER NOTIFICATION REPORT**

Received: 12/4/2007 13:19:07

Comm. Center #: 07-12-04-1319-07

Operator: 26

Reviewed By: _____

Reporter Type: Facility Rep.

Reported By: LARRY BRUFFEY

Affiliation: HAZ MAT ENVIRONMENTAL Phone: 440-543-2400

Street Address: 8401 CHAGRIN ROAD SUITE 15 B,

Municipality: Out Of State

State: OH

Incident Category: Facility

Location Description: EMPTY FIELD THAT STORE BRINE WATER FROM WTP

Address: 900 GARFIELD AVENUE

Municipality: Jersey City

County: Hudson

State: NJ Zip Code: 07

Location Type: Commercial

Occurred Date: 12/04/2007 Occurred Time: 10:00 AM

Substance Released: WATER, WASTE INDUSTRIAL

Amount Released: 20

Units: gallons

Estimated

ID: Known

State: Liquid

CAS#:

Incident Status at Time of Report: Terminated

Substance Contained: Yes

HAZMAT: Unknownr TCPA: No

Haz Waste: No

Incident Type: Spill

Incident Type 2:

Injuries: No

Public Evac: No

Facility Evac: No

Public Exposure: No

Police At Scene: No

Firemen At Scene: No

Dep Requested: No

Road Closure: No

Wind Speed/Direction:

Contamination Of: Land

Watershed:

Other Watershed:

Incident Description: SPILL ON ASPHALT PAD. CLEANUP IN PROGRESS BY ATLANTIC RESPONSE INC. CHRIS HAGGERMAN 732-433-6302 .

Responsible Party Name: HAZ MAT ENVIRONMENTAL

Responsible Party Phone: 440-543-2400

Responsible Party Street Address: 8401 CHAGRIN ROAD SUITE 15 B,

Municipality: Out Of State

County: Out Of State

State: OH Zip Code: 44023

Officials Notified

Name	Affiliation	Phone	Date	Time	Action
	Case Assignment Section		12/04/2007	0:00	Notification - Fax
DISP 38	JERSEY CITY	201-547-4271	12/04/2007	13:26	Notification - A310
	NJDOH - HAZMAT		12/04/2007	0:00	Notification - Fax

Comments:

**New Jersey Department of Environmental Protection
COMMUNICATION CENTER NOTIFICATION REPORT**

Received: 1/9/2012 14:17:58

Comm. Center #: 12-01-09-1417-58

Operator: 25

Reviewed By: _____

Incident ID: 414675

Reporter Type: Facility Rep.

Reported By: DAN AMICO

Affiliation: PSE&G

Phone: 201-420-3944

Street Address: 444 ST PAULS AVE,

Municipality: Jersey City

State: NJ

Incident Category: Other

Location Description: VACANT LOT

Address: 900 GARFIELD AVE

Municipality: Jersey City

County: Hudson

State: NJ Zip Code: 07305

Location Type: Industrial

Occurred Date: 01/09/2012 Occurred Time: 02:00 PM

Substance Released: NATURAL GAS

Amount Released: 0

Units: unknown

Unknown

ID: Known

State: Gas

CAS#:

Incident Status at Time of Report: Terminated

Substance Contained: No

HAZMAT: Yes

TCPA: No

Haz Waste: No

Incident Type: Air Release

Incident Type 2:

Injuries: No

Public Evac: No

Facility Evac: No

Public Exposure: No

Police At Scene: Yes

Firemen At Scene: Yes

Dep Requested: No

Road Closure: No

Wind Speed/Direction:

Contamination Of: Air

Watershed:

Other Watershed:

Incident Description: CONTRACTOR STRUCK A 6 INCH PLASTIC MAIN CAUSING AN AIR RELEASE. REPAIR CREW ON SCENE. NON EMERGENT.

Responsible Party Name: UNKNOWN

Responsible Party Phone:

Responsible Party Street Address: ,

Municipality:

County:

State: NJ

Zip Code:

Officials Notified

Name	Affiliation	Phone	Date	Time	Action
	Air - North		01/09/2012	0:00	Notification - Fax
OPER 34	JERSEY CITY	201-547-4271	01/09/2012	14:22	Notification - A310

Comments:



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Department of Environmental Protection
SITE REMEDIATION AND WASTE MANAGEMENT PROGRAM
Division of Remediation Management
Remediation Oversight Element
Mail Code 401-05A
P.O. Box 420
Trenton, NJ 08625
609-984-1351
Fax: 609-984-6514

PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

CATHERINE R. MCCABE
Commissioner

9 May 2019

Mark Terril, Corporate Director Environmental Affairs
PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15222

Re: Discharge to Ground Water Authorization
PPG Industries (COPR)
Garfield Avenue Group and Former Halladay Street Gas Works
900 Garfield Avenue; Block: 21501, Lots: 16, 17, 18, 19, and 20
Jersey City, Hudson County
NJ Program Interest Numbers: G000005480
Subject Item ID: DGWD0000167709

Dear Mr. Terril:

This New Jersey Pollutant Discharge Elimination System/Discharge to Ground Water (NJPDES/DGW) authorization is hereby issued under the authority of the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq. and the implementing regulations, N.J.A.C. 7:14A-1 et seq. N.J.A.C. 7:14A-7.5 authorizes the discharge described below which will allow the recovery and treatment of contaminated ground water, as well as implementation of in-situ remediation of contaminated ground water at the above referenced site.

Pursuant to N.J.A.C. 7:14A-22.4(b)5, a Treatment Works Approval is not required for discharges to ground water authorized pursuant to N.J.A.C. 7:14A-7.5 or 8.5 and a licensed operator is not required pursuant to N.J.A.C. 7:10A-1.10(c)1. The discharge shall be conducted as proposed in the February 2019 *Groundwater Interim Remedial Measure (IRM): Phase II Design and Permit-By-Rule (PBR) Authorization Request*, received on 28 February 2019 and clarified and revised as described in the email correspondence of 11 April 2019. This document and supporting clarification information was submitted by Cullen Flanders, Andrew Fuller, Matthew Schnobrich, and John Horst of Arcadis U.S. Inc., on behalf of PPG Industries.

A public notice describing this discharge was published in The Jersey Journal on 20 March 2019 which initiated a 30-day public comment period. In addition, a copy of the public notice has been sent to the Municipal Clerk and designated local health official for Jersey City and Hudson County. The Department did not receive any comments on the DGW proposal.

Pursuant to N.J.A.C. 7:14A-2.7 the maximum approved discharge duration is five (5) years from the date of this letter, regardless of the date when the discharge first occurs. The Department shall be notified of the date when the discharge begins as instructed in section IV of this letter. Only the discharge described in Section I below is authorized. The discharge shall be conducted in conformance with the above mentioned DGW proposal and shall comply with the requirements of Sections II, III, and IV, farther below.

I. DISCHARGE DESCRIPTION

The authorized discharge includes organic carbon substrate (e.g., molasses and/or emulsified vegetable oil [EVO]) which will be mixed with treated groundwater recovered from the site. Groundwater will be recovered from the northern portion of Site 114, from an area containing the highest total chromium (Cr) and hexavalent chromium [Cr(VI)] concentrations, and will also be recovered from areas in southern Site 114 to enhance the organic carbon recirculation program. Groundwater will be treated using an on-site water treatment plant to provide direct treatment of Cr and Cr(VI). Treatment of the recovered water will also make it suitable for re-injection with organic carbon substrate.

The treated water will be amended with substrates to provide a degradable source of organic carbon within the subsurface to support an in situ anaerobic bioprecipitation (ISAB) approach. Both dilute organic carbon and treated water will be reinjected in the southern portion of Site 114, where concentrations of Cr are lower and more amenable to rapid bioremediation. The organic carbon will stimulate several primary mechanisms that: (1) promote the in-situ reduction of Cr(VI) to trivalent Cr (Cr[III]); and (2) support the development of an environment that enables the precipitation and fixation of Cr within the aquifer matrix.

Within the reactive zone, fermentation of the organic carbon substrate promotes development of iron- and sulfate-reducing groundwater conditions that are favorable for the reduction of Cr(VI). Under these conditions, Cr(VI) is reduced to Cr(III) through reactions with multiple biologically generated reductants or via direct anaerobic respiration with Cr(VI) serving as the terminal electron acceptor. Specifically, Cr(VI) is reduced to form less soluble Cr(III)-hydroxide.

The combination of groundwater extraction from the northern area of Site 114 and portions of southern Site 114 with reinjection in southern Site 114 will help maintain the hydraulic balance inside the sheet pile enclosure around Site 114 and may also support flushing of Cr mass toward the extraction wells to speed up the reduction of Cr concentrations in the groundwater.

The IRM Phase II operation is anticipated to start in second quarter of 2019 and last for a duration of up to approximately 12 months, followed by a post-operational monitoring of 2 years. However, this will be evaluated as the program proceeds, and modifications may be requested.

It is expected that the average organic carbon dosing over the course of the 12-month Phase II program is 0.5% by volume that will be delivered during 6-hour weekday pulsing cycles. Based on the projected total recirculation volume of 31.5 million gallons of groundwater, the organic carbon demands for Phase II will be no more than 158,000 gallons of substrate (either molasses, EVO, or a combination of both). The actual dosing strength of these organic carbon substrates, the dosing durations per day (or per week), and the timing of molasses and EVO use will be determined based on monitoring observations. Groundwater recovered from Site 114 and treated at the water treatment plant will serve as the primary source of reinjection water over the course of the Phase II IRM, but potable water from an on-site source will also be used, especially during warmer periods, to reduce the incidence of biofouling.

Reagent flexibility is considered a key consideration for maximizing overall treatment during the IRM Program. While the carbon substrates above will serve as the primary reagents for use, other reagents are being included in this PBR to allow flexibility in the event that unique areas of the site are better suited to their application. Both FerroBlack[®]-H (a water-based suspension of 7 to 8% by weight ferrous sulfide and 1 to 2% by weight sodium hydrosulfide) and CaS_x (calcium polysulfide) were used to achieve treatment during prior pilot test activities, and these reagents are retained for potential consideration during Phase II. CaS_x could be delivered via the recirculation network as a soluble reagent for in situ chemical reduction (ISCR) in select areas of Site 114 in lieu of, prior to, or following use of carbon substrate. In addition to these two reagents, ferrous sulfate heptahydrate may also be used as a supplement to the carbon substrate source to provide additional iron and sulfide to further enhance Cr abiotic reduction mechanisms. As applicable, other equivalent reagents capable of reducing Cr may also be considered during the Phase II IRM and if used, would be detailed in a modification to this PBR.

The planned Phase II IRM design consists of 144 new injection wells and 20 new groundwater extraction wells. However, up to 160 total injection wells and 30 total extraction wells may be installed if needed. Using a combination of hollow stem auger (HSA) and mud rotary drilling techniques (or similar equivalent drilling technologies), wells will be constructed with 4-inch stainless steel screens. Individual well screen lengths are proposed to range between 5 to 20 feet in length, which will be further refined based on high-resolution sampling results obtained during the drilling program. Similar to the Phase I IRM well installation, injection/extraction wells may entail longer well screens up to 20 feet in length to overwhelm potential heterogeneities within the intermediate and deep soils and allow propagation of the reactive through the soils of higher relative permeability. Intermediate-depth wells are expected to reach approximate depths of between 20 to 40 feet below ground surface (bgs). Deep water-bearing zone wells will be constructed with 4-inch stainless steel, 10-slot, 20-foot screens between 45 to 65 feet bgs. Actual length of screen, screen size and general depths are free to change based on pre-design testing and field observations.

Based on previous hydraulic testing and Phase I observations, it is assumed that average extraction rates per well may be up to 3 gallons per minute (gpm). The Phase II design estimates a combined total recirculation rate (both extraction and injection) of 21 gpm and 12 gpm within the northern and southeastern areas, respectively. Where achievable, injection and extraction rates will be increased to maximize the total quantity of groundwater extracted and injected within the capabilities of both treatment areas (40 gpm each). Based on previous testing at the site and the common ratios of injection well capacity relative to injection wells, it is estimated

that injection rates may vary between 0.5 to 3 gpm per well. Injection wells may be operated at higher flow rates, depending on the nature of the soil formation and ability to receive fluids. Over the course of operation, the Phase II design entails initiation of injection activities within the northern end of Site 114, followed by gradual southward shifts in operating wells. Based on the model flow rates, these have been conceptualized as three, 8-week cycles. Similarly, injection activities in the southeastern area will gradually shift further east during the Phase II operation. Individual cycles may be extended in length (e.g., to 12 or 16 weeks) based on performance and observed reactive zone development.

The treatment of groundwater used for reinjection will be sufficient to achieve either 95% reduction of influent levels (e.g., primarily for Cr and Cr[VI]) or concentrations below the applicable Ground Water Quality Standard (GWQS) values (e.g., for Cr, Cr[VI], and other compounds with historical detections) in the effluent of the water treatment plant, whichever is less stringent. A groundwater Classification Exception Area (CEA) was established on 7 June 2018, which allows for the discharge of water containing Cr, Cr(VI), metals, volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs) which may not be treated to levels below the GWQS by the water treatment plant prior to re-injection. The compounds other than Cr and Cr(VI) that were historically detected above the respective GWQS in the shallow, intermediate, and deep water-bearing zones are listed in the table below. Groundwater generated from the shallow water-bearing zone during soil excavation dewatering will be combined with groundwater extracted from the intermediate and deep water-bearing zones and treated with the water treatment plant. The CEA comprises the entirety of the project area (Block 21501, Lots 16 through 20), and extends to a depth of 100 feet below ground surface.

METALS	VOCs	SVOCs
ALUMINUM ANTIMONY ARSENIC BARIUM BERYLLIUM CADMIUM COBALT COPPER IRON LEAD MANGANESE MERCURY NICKEL SELENIUM SILVER SODIUM THALLIUM VANADIUM ZINC	1,1-DICHLOROETHYLENE 1,1,2-TRICHLOROETHANE 1,2-DICHLOROETHANE 1,2,4-TRICHLOROBENZENE BENZENE CHLOROBENZENE CIS-1,2-DICHLOROETHENE DICHLOROMETHANE ETHYLBENZENE METHYL-TERT-BUTYL ETHER STYRENE (MONOMER) TETRACHLOROETHENE TOLUENE TRICHLOROETHENE VINYL CHLORIDE XYLENES	1,2,4-TRICHLOROBENZENE 2,4-DIMETHYLPHENOL 2-METHYLNAPHTHALENE 2-METHYLPHENOL 3+4-METHYLPHENOL ACENAPHTHENE BENZO(A)ANTHRACENE BENZO(A)PYRENE BENZO(B)FLUORANTHENE BENZO(K)FLUORANTHENE BIS(2-ETHYLHEXYL)PHTHALATE CHRYSENE DIBENZO(A,H)ANTHRACENE FLUORENE HEXACHLOROBENZENE INDENO(1,2,3-CD)PYRENE NAPHTHALENE NITROBENZENE N-NITROSO-DI-N-PROPYLAMINE N-NITROSODIPHENYLAMINE PENTACHLOROPHENOL PHENANTHRENE PHENOL

II. SYSTEM OPERATION AND MONITORING

The area of discharge shall be monitored for evidence of malfunction. Said evidence shall include, but is not limited to: injection solution observation at land surface, wet areas, ponding, odors, and elevated photoionization detector (PID) readings in the nearby work area or building. If encountered, appropriate controls and system modification will be implemented.

The discharge shall not cause any of the following negative impacts: adverse impact on the behavior of free product or the plume; adverse impacts to a water supply well or have a long term adverse impact on ground water quality; create an unpermitted discharge to any surface water of the State or violation of Surface Water Quality Standards; create a persistent standing, ponded or surface-flowing fluid condition; or cause adverse vapor intrusion to occur.

Pursuant to N.J.A.C. 7:14A-6.2(a)5 and 11, if free product in ground water, vapors or odors in any building, or any malfunction resulting in a potential impact to a receptor are detected and are a result of the discharge authorized by this approval, the discharger will immediately: (1) cease the discharge or make necessary adjustments to the discharge rate or system operation; and (2) repair or mitigate any negative impacts.

After completion of the discharge, the property returned to its previous condition, or as agreed to with property owner if the permittee is not the property owner. All UIC-Class V injection wells shall be properly abandoned in accordance with N.J.A.C. 7:14A-8.16(d)1 as applicable. The permittee will comply with any applicable provisions of the Additional Conditions Applicable to Class I, II, III and V UIC Permits of the NJPDES regulations, N.J.A.C. 7:14A-8.9, et seq. when UIC-Class V injection well units (i.e., the injection points) are used.

III. GROUND WATER MONITORING REQUIREMENTS

The Permittee shall perform the following ground water sampling as was specified in the DGW proposal (including all addendums and modifications) for the purpose of complying with this Discharge to Ground Water Permit-By-Rule authorization.

Baseline Sampling, before injection:

Prior to the startup of Phase II operations, but following the installation of the remediation well network and new monitoring well locations, samples will be collected for baseline analysis to establish the starting conditions for IRM treatment performance review. In accordance with the attached Table 1, baseline samples will be collected for TAL metals (total and dissolved); Cr(VI) (total and dissolved); key geochemical parameters (sulfate/sulfide and methane); total organic carbon (TOC), field parameters (pH, specific conductivity, dissolved oxygen [DO], oxidation-reduction potential [ORP], turbidity, and temperature); and depth to groundwater.

Baseline samples will be collected using the low-flow sampling method. Purge water generated during sampling will be temporarily stored and then transferred to the groundwater treatment system. Prior to the start of purging, depth to water will be

gauged at each well location. Following purging, field parameter measurements will be recorded. Samples collected for dissolved metal analyses will be filtered using 0.45 micrometer (μm) filters in the field.

Operational and Treatment Monitoring, during the injections:

The operational monitoring program will be used to assess ongoing remedial system performance in support of guiding potential modifications to injection and extraction flow rates, recirculation well balancing, carbon dosing and timing, and to preemptively guide potential biofouling management and well redevelopment.

Operational monitoring will be performed at variable frequencies (weekly, biweekly, or monthly), as necessary, over the course of operation pursuant to Table 1. Measurements may be periodically performed more frequently than specified in Table 1 to support potential troubleshooting activities over the course of operation. Given the adaptive nature of the recirculation program and the sequencing of different groupings of injection and extraction wells during operation, it is anticipated that the operational sampling frequency of existing monitoring wells will be adapted over time. As an example, monitoring wells located within the northernmost area of Site 114 are most relevant for operational monitoring during the first step of recirculation activities. Following this initial period and the transition to more southerly injection wells, the frequency and parameter list of the initial monitoring locations may be reduced to maintain remedial efficiency, as applicable, subject to NJDEP approval. For the operational monitoring, analytical data and field parameter measurements for extracted and treated groundwater will be collected at operating extraction wells from sampling ports located at the wellheads or at the influent to the water treatment system.

Overall Phase II remedial performance will be documented via ongoing treatment monitoring during the 12-month IRM program. Sampling parameters will be collected to verify organic carbon distribution, assess the development of reduced geochemical groundwater conditions within the subsurface, and confirm corresponding declines in total Cr and Cr(VI). Evaluation of these parameters will confirm development of the subsurface reactive zone and will be used to guide carbon substrate dosing strength and frequency. This will enable treatment optimization and confirmation prior to transitioning the operating recirculation wells to subsequent steps. A summary of the analytical and field parameter measurements for treatment sampling is provided in Table 1.

Similar to the operational monitoring specifications, treatment monitoring parameters will be collected at specified frequency based on the relevance of a given parameter to operation and optimization activities. TOC and field parameter sampling is proposed most frequently (biweekly to monthly) to effectively gauge propagation of both carbon substrate and geochemical influence within the subsurface. Total Cr and Cr(VI) and select geochemical parameters (ferrous [dissolved] iron, dissolved manganese, sulfate) will be collected monthly to enable the collection of at least one to two samples between recirculation well steps. Methane sampling is also proposed, albeit less

frequently, to confirm the overall extent of reduced groundwater conditions. Similar to the sampling frequency considerations presented for the operational monitoring program, treatment monitoring parameters will be collected at a specified frequency based on the relevance of a given parameter to operation and optimization activities.

Treatment monitoring samples will be collected using the low-flow sampling method and select wells may be sampled at 5-foot intervals. Purge water generated during sampling will be temporarily stored and then transferred to the groundwater treatment system. Prior to the start of purging, depth to water will be gauged at each well location. Following purging, field parameter measurements will be recorded. Samples collected for dissolved metal analyses will be filtered using 0.45 µm filters in the field.

Post Treatment Sampling, after completion of injections:

Following the 12-month Phase II operational program, post-treatment monitoring will be used to document overall Cr treatment performance, confirm the residual reactive zone reduction capacity (via residual TOC and reduced geochemistry species), and develop an appropriate data set to demonstrate ongoing natural attenuation of any residual total Cr and Cr(VI). Post-treatment sampling will be performed in accordance with Table 1.

Treatment monitoring samples will be collected using the low-flow sampling method and select screen locations with wells will be sampled at 5-foot intervals. Purge water generated during sampling will be temporarily stored and then transferred to the groundwater treatment system – or containerized and disposed of off-site, as appropriate. Prior to the start of purging, depth to water will be gauged at each well location. Following purging, field parameter measurements will be recorded. Samples collected for dissolved metal analyses will be filtered using 0.45 µm filters in the field.

Post-treatment sampling activities will be performed on a quarterly basis over a total duration of two years.

Pursuant to the Tech Regs, the Permittee shall measure ground water elevations at all sampled wells during each sampling event and shall construct ground water flow maps with the water elevation data to document the direction of ground water flow. Any non-aqueous phase liquid (NAPL) observed, including sheen, shall be documented and the NJDEP shall be notified. The Permittee shall check for both light non-aqueous phase liquid (LNAPL) and dense non-aqueous phase liquid (DNAPL). If NAPL is identified in thicknesses greater than 0.01 feet in wells planned for injection use during baseline gauging or subsequent routine performance monitoring activities, these wells will be operated first as extraction wells to facilitate NAPL recovery and removal. NAPL will be recovered and modifications will be made to allow oil separation prior to transfer to the water treatment system. Prior to converting these wells for injection use, extraction will be discontinued to allow static gauging for NAPL reoccurrence. If NAPL is not observed with thicknesses in excess of 0.01 feet for two consecutive gauging events, and the NJDEP concurs, then NAPL will be considered eliminated or recovered to the extent practicable and wells will be deemed acceptable for injection use. Alternatively, if NAPL is identified in

excess of 0.01 feet in thickness but is considered no longer recoverable (or immobile), and the NJDEP concurs, the NAPL will be considered recovered to the extent practicable and wells may also be deemed acceptable for injection use.

All sampling shall be performed as proposed and consistent with the methods specified in the most current edition of the Department's Field Sampling Procedures Manual. All samples shall be analyzed by a New Jersey Certified Laboratory certified for the methods being used to analyze groundwater samples. Analytical method MDLs shall be less than or equal to the ground water quality standards (N.J.A.C. 7:9C-1.7). Parameters determined in the field (pH, specific conductance, dissolved oxygen, temperature) are to be measured by a certified contractor or laboratory.

Comparison to the VI screening levels is necessary in order to monitor whether or not the discharge activities have the potential to cause VI issues within any nearby structures by means of adversely impacting the behavior of the ground-water contaminants (e.g., unexpected contaminant movement). If there are any exceedances of the VI screening levels caused by the authorized discharge, a VI evaluation shall be conducted of any potentially impacted structures.

Compliance with N.J.A.C. 7:26E-5.7(b) requires that the Permittee satisfy the post-injection ground water monitoring requirements that are set forth in this letter before applying for any Remedial Action Permit for Ground Water. If a Remedial Action Permit application is submitted before the required ground water sampling has been completed, the application will be denied.

Additionally, contingency compliance ground water sampling is required if ground water sampling results indicate that GWQS have been contravened because of the authorized discharge (e.g., the GWQS for sulfate is exceeded as a result of calcium polysulfide injection, or the GWQS for iron is exceeded as a result of FerroBlack[®]-H injection), or that ground water quality has not returned to baseline conditions (when baseline concentrations are greater than GWQS) in the expected timeframe. Ground water sampling must continue until it can be demonstrated that the GWQS have been met or until the ground water quality has returned to baseline conditions. To demonstrate either of these conditions, a minimum of two consecutive ground water sampling events spaced far enough apart to account for seasonal fluctuations, must be conducted.

Furthermore, if the Permittee is planning to apply for a Ground Water Remedial Action Permit for Natural Attenuation in the future, and exceedances of the GWQS that are due to the discharge remain, those exceedances must be treated similarly to any other site related contaminants (i.e., a sufficient number of samples is required and a decreasing concentration trend must be evident) consistent with the Department's Remedial Action Permits for Ground Water Guidance.

IV. REPORTING REQUIREMENTS AND INFORMATION SUBMITTALS

Details of the supplemental pre-design testing, well and system installation, system operation, and performance monitoring results associated with the IRM Phase II program will be documented as part of a quarterly technical status reports submitted to the NJDEP. These quarterly status reports will include succinct, high-level summaries of activities performed, data collected, adaptive steps taken to modify or optimize Phase II treatment, and an overview of activities planned for the subsequent quarter.

Succinct performance summary results will be submitted as part of quarterly status reports. All information, including a complete summary of the work performed under the PBR, a complete set of the data collected, a summary of data trends, an evaluation and interpretation of the data, and conclusions reached (as well as the QA/QC package specified at N.J.A.C. 7:26E-2.1(a)15) shall be submitted as part of the completion report within 6 months following cessation of active Phase II operation. All information shall be submitted to:

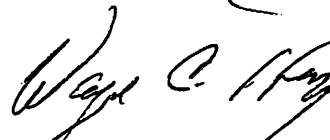
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CASE ASSIGNMENT & INITIAL NOTICE
MAILCODE 401-05H
P.O. BOX 420
TRENTON, NJ 08625-0420
ATTN: COPR

Consistent with N.J.A.C. 7:14A-2.11(a) and 6.2(a)14, within 90 days after initiation of the discharge, notify the Department of the "start date" of the discharge. To report this date, send an email to Wayne.Howitz@dep.nj.gov stating the start date of the discharge.

Consistent with N.J.A.C. 7:14A-2.11(a) and 6.2(a)14, any malfunctions or non-compliance should be reported by fax or telephone within 24 hours to Wayne Howitz of the Site Remediation Program at (609) 984-2905, and in writing within 7 days to the above address using the subject line "DGW Permit-by-Rule Compliance Report - COPR." Written submissions must include the facility name and PI Number. Failure to report this information is a violation of N.J.A.C. 7:14A and the permit-by-rule.

If you have any questions or concerns, please contact Wayne C. Howitz of the Site Remediation Program at (609) 984-2905.

Sincerely,



Wayne C. Howitz, Assistant Director
Remediation Oversight Element

Attachment

- c: John Horst, Arcadis U.S. Inc.
- Rolando R. Lavarro, Jersey City Redevelopment Agency
- Carrie Nawrocki, Health Officer, Hudson Regional Health Commission
- Stacey Flanagan, Director, Department of Health and Human Services
- Robert Byrne, Jersey City Clerk

Table 1:

IRM Phase I and II Groundwater Monitoring Program, PPG Garfield Avenue Group Sites, Jersey City, New Jersey

Monitoring Program	Monitoring Well Network	Monitoring Parameters	Monitoring Frequency
Baseline Monitoring	New extraction, injection, monitoring wells and existing monitoring wells	1. Field Parameters: DTW, pH, conductivity, DO, ORP, turbidity, and temperature 2. Lab Analytical: Total/dissolved TAL metals, total/dissolved Cr(VI), TOC, sulfate/sulfide, and methane	Prior to operation start
Operational Monitoring	New extraction and monitoring wells, existing shallow, intermediate and deep monitoring wells, and system sampling port (influent and effluent)	1. Field Parameters: DTW	Weekly - Biweekly
		2. System Parameters - Injection / extraction well flow rates	Weekly
		- Wellhead pressures	Weekly
		- Water treatment system monitoring	Weekly - Monthly (as appropriate)
Treatment Monitoring	New extraction and monitoring wells, and existing intermediate and deep monitoring wells	1. Field Parameters: DTW, pH, conductivity, DO, ORP, turbidity, and temperature	Biweekly - Monthly
		2. Lab Analytical: - Total/dissolved Cr and Cr(VI)	Monthly
		- TOC	Biweekly - Monthly
		- Supplemental geochemical parameters (sulfate, ferrous [dissolved] iron, dissolved manganese)	Monthly
Post-Treatment Monitoring	New monitoring wells and existing shallow, intermediate and deep monitoring wells	- Methane	Monthly-Quarterly
		1. Field Parameters: DTW, pH, conductivity, DO, ORP, turbidity, and temperature 2. Lab Analytical: Total/dissolved TAL metals, total/dissolved Cr and Cr(VI), VOCs, SVOCs, TOC, sulfate/sulfide, dissolved iron, dissolved manganese, and methane.	Quarterly following system shutdown for up to 2 years

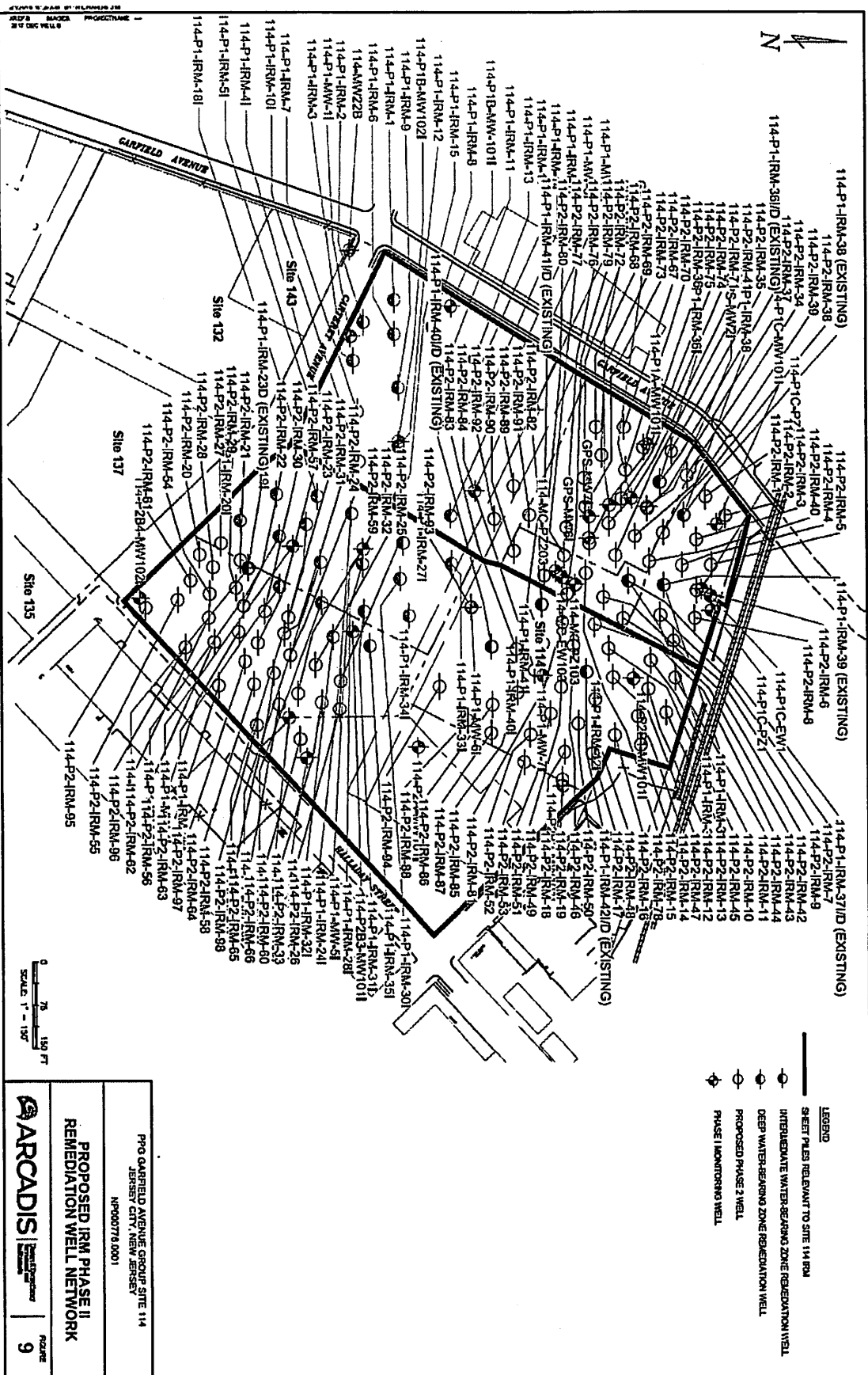
Notes:

- The monitoring locations, parameters, and frequencies provided in this table serve as a general guidance for IRM-related monitoring activities and may be adjusted or changed based on IRM Phase II performance, injection and extraction areas in operation, and observed monitoring results.
- Dissolved metal samples are to be field filtered prior to sample collection.

Cr - chromium
 Cr(VI) - hexavalent chromium
 DO - dissolved oxygen
 DTW - depth-to-water

IRM - Interim Remedial Measures
 ORP - oxidation-reduction potential
 PBR - Permit-by-Rule
 SVOCs - semi-volatile organic compounds

TAL - target analyte list
 TOC - total organic carbon
 VOCs - volatile organic compounds





State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Department of Environmental Protection
SITE REMEDIATION AND WASTE MANAGEMENT PROGRAM
Division of Remediation Management
Remediation Oversight Element
Mail Code 401-05A
P.O. Box 420
Trenton, NJ 08625
609-984-1351
Fax: 609-984-6514

PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

CATHERINE R. MCCABE
Commissioner

9 May 2019

Mark Terril, Corporate Director Environmental Affairs
PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15222

Re: Discharge to Ground Water Authorization
PPG Industries (COPR)
Garfield Avenue Group and Former Halladay Street Gas Works
900 Garfield Avenue; Block: 21501, Lots: 16, 17, 18, 19, and 20
Jersey City, Hudson County
NJ Program Interest Numbers: G000005480
Subject Item ID: DGWD0000167709

Dear Mr. Terril:

This New Jersey Pollutant Discharge Elimination System/Discharge to Ground Water (NJPDES/DGW) authorization is hereby issued under the authority of the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq. and the implementing regulations, N.J.A.C. 7:14A-1 et seq. N.J.A.C. 7:14A-7.5 authorizes the discharge described below which will allow the recovery and treatment of contaminated ground water, as well as implementation of in-situ remediation of contaminated ground water at the above referenced site.

Pursuant to N.J.A.C. 7:14A-22.4(b)5, a Treatment Works Approval is not required for discharges to ground water authorized pursuant to N.J.A.C. 7:14A-7.5 or 8.5 and a licensed operator is not required pursuant to N.J.A.C. 7:10A-1.10(c)1. The discharge shall be conducted as proposed in the February 2019 *Groundwater Interim Remedial Measure (IRM): Phase II Design and Permit-By-Rule (PBR) Authorization Request*, received on 28 February 2019 and clarified and revised as described in the email correspondence of 11 April 2019. This document and supporting clarification information was submitted by Cullen Flanders, Andrew Fuller, Matthew Schnobrich, and John Horst of Arcadis U.S. Inc., on behalf of PPG Industries.

A public notice describing this discharge was published in The Jersey Journal on 20 March 2019 which initiated a 30-day public comment period. In addition, a copy of the public notice has been sent to the Municipal Clerk and designated local health official for Jersey City and Hudson County. The Department did not receive any comments on the DGW proposal.

Pursuant to N.J.A.C. 7:14A-2.7 the maximum approved discharge duration is five (5) years from the date of this letter, regardless of the date when the discharge first occurs. The Department shall be notified of the date when the discharge begins as instructed in section IV of this letter. Only the discharge described in Section I below is authorized. The discharge shall be conducted in conformance with the above mentioned DGW proposal and shall comply with the requirements of Sections II, III, and IV, farther below.

I. DISCHARGE DESCRIPTION

The authorized discharge includes organic carbon substrate (e.g., molasses and/or emulsified vegetable oil [EVO]) which will be mixed with treated groundwater recovered from the site. Groundwater will be recovered from the northern portion of Site 114, from an area containing the highest total chromium (Cr) and hexavalent chromium [Cr(VI)] concentrations, and will also be recovered from areas in southern Site 114 to enhance the organic carbon recirculation program. Groundwater will be treated using an on-site water treatment plant to provide direct treatment of Cr and Cr(VI). Treatment of the recovered water will also make it suitable for re-injection with organic carbon substrate.

The treated water will be amended with substrates to provide a degradable source of organic carbon within the subsurface to support an in situ anaerobic bioprecipitation (ISAB) approach. Both dilute organic carbon and treated water will be reinjected in the southern portion of Site 114, where concentrations of Cr are lower and more amenable to rapid bioremediation. The organic carbon will stimulate several primary mechanisms that: (1) promote the in-situ reduction of Cr(VI) to trivalent Cr (Cr[III]); and (2) support the development of an environment that enables the precipitation and fixation of Cr within the aquifer matrix.

Within the reactive zone, fermentation of the organic carbon substrate promotes development of iron- and sulfate-reducing groundwater conditions that are favorable for the reduction of Cr(VI). Under these conditions, Cr(VI) is reduced to Cr(III) through reactions with multiple biologically generated reductants or via direct anaerobic respiration with Cr(VI) serving as the terminal electron acceptor. Specifically, Cr(VI) is reduced to form less soluble Cr(III)-hydroxide.

The combination of groundwater extraction from the northern area of Site 114 and portions of southern Site 114 with reinjection in southern Site 114 will help maintain the hydraulic balance inside the sheet pile enclosure around Site 114 and may also support flushing of Cr mass toward the extraction wells to speed up the reduction of Cr concentrations in the groundwater.

The IRM Phase II operation is anticipated to start in second quarter of 2019 and last for a duration of up to approximately 12 months, followed by a post-operational monitoring of 2 years. However, this will be evaluated as the program proceeds, and modifications may be requested.

It is expected that the average organic carbon dosing over the course of the 12-month Phase II program is 0.5% by volume that will be delivered during 6-hour weekday pulsing cycles. Based on the projected total recirculation volume of 31.5 million gallons of groundwater, the organic carbon demands for Phase II will be no more than 158,000 gallons of substrate (either molasses, EVO, or a combination of both). The actual dosing strength of these organic carbon substrates, the dosing durations per day (or per week), and the timing of molasses and EVO use will be determined based on monitoring observations. Groundwater recovered from Site 114 and treated at the water treatment plant will serve as the primary source of reinjection water over the course of the Phase II IRM, but potable water from an on-site source will also be used, especially during warmer periods, to reduce the incidence of biofouling.

Reagent flexibility is considered a key consideration for maximizing overall treatment during the IRM Program. While the carbon substrates above will serve as the primary reagents for use, other reagents are being included in this PBR to allow flexibility in the event that unique areas of the site are better suited to their application. Both FerroBlack[®]-H (a water-based suspension of 7 to 8% by weight ferrous sulfide and 1 to 2% by weight sodium hydrosulfide) and CaS_x (calcium polysulfide) were used to achieve treatment during prior pilot test activities, and these reagents are retained for potential consideration during Phase II. CaS_x could be delivered via the recirculation network as a soluble reagent for in situ chemical reduction (ISCR) in select areas of Site 114 in lieu of, prior to, or following use of carbon substrate. In addition to these two reagents, ferrous sulfate heptahydrate may also be used as a supplement to the carbon substrate source to provide additional iron and sulfide to further enhance Cr abiotic reduction mechanisms. As applicable, other equivalent reagents capable of reducing Cr may also be considered during the Phase II IRM and if used, would be detailed in a modification to this PBR.

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Based on previous hydraulic testing and Phase I observations, it is assumed that average extraction rates per well may be up to 3 gallons per minute (gpm). The Phase II design estimates a combined total recirculation rate (both extraction and injection) of 21 gpm and 12 gpm within the northern and southeastern areas, respectively. Where achievable, injection and extraction rates will be increased to maximize the total quantity of groundwater extracted and injected within the capabilities of both treatment areas (40 gpm each). Based on previous testing at the site and the common ratios of injection well capacity relative to injection wells, it is estimated

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The treatment of groundwater used for reinjection will be sufficient to achieve either 95% reduction of influent levels (e.g., primarily for Cr and Cr[VI]) or concentrations below the applicable Ground Water Quality Standard (GWQS) values (e.g., for Cr, Cr[VI], and other compounds with historical detections) in the effluent of the water treatment plant, whichever is less stringent. A groundwater Classification Exception Area (CEA) was established on 7 June 2018, which allows for the discharge of water containing Cr, Cr(VI), metals, volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs) which may not be treated to levels below the GWQS by the water treatment plant prior to re-injection. The compounds other than Cr and Cr(VI) that were historically detected above the respective GWQS in the shallow, intermediate, and deep water-bearing zones are listed in the table below. Groundwater generated from the shallow water-bearing zone during soil excavation dewatering will be combined with groundwater extracted from the intermediate and deep water-bearing zones and treated with the water treatment plant. The CEA comprises the entirety of the project area (Block 21501, Lots 16 through 20), and extends to a depth of 100 feet below ground surface.

METALS	VOCs	SVOCs
ALUMINUM ANTIMONY ARSENIC BARIUM BERYLLIUM CADMIUM COBALT COPPER IRON LEAD MANGANESE MERCURY NICKEL SELENIUM SILVER SODIUM THALLIUM VANADIUM ZINC	1,1-DICHLOROETHYLENE 1,1,2-TRICHLOROETHANE 1,2-DICHLOROETHANE 1,2,4-TRICHLOROBENZENE BENZENE CHLOROBENZENE CIS-1,2-DICHLOROETHENE DICHLOROMETHANE ETHYLBENZENE METHYL-TERT-BUTYL ETHER STYRENE (MONOMER) TETRACHLOROETHENE TOLUENE TRICHLOROETHENE VINYL CHLORIDE XYLENES	1,2,4-TRICHLOROBENZENE 2,4-DIMETHYLPHENOL 2-METHYLNAPHTHALENE 2-METHYLPHENOL 3+4-METHYLPHENOL ACENAPHTHENE BENZO(A)ANTHRACENE BENZO(A)PYRENE BENZO(B)FLUORANTHENE BENZO(K)FLUORANTHENE BIS(2-ETHYLHEXYL)PHTHALATE CHRYSENE DIBENZO(A,H)ANTHRACENE FLUORENE HEXACHLOROBENZENE INDENO(1,2,3-CD)PYRENE NAPHTHALENE NITROBENZENE N-NITROSO-DI-N-PROPYLAMINE N-NITROSODIPHENYLAMINE PENTACHLOROPHENOL PHENANTHRENE PHENOL

II. SYSTEM OPERATION AND MONITORING

The area of discharge shall be monitored for evidence of malfunction. Said evidence shall include, but is not limited to: injection solution observation at land surface, wet areas, ponding, odors, and elevated photoionization detector (PID) readings in the nearby work area or building. If encountered, appropriate controls and system modification will be implemented.

The discharge shall not cause any of the following negative impacts: adverse impact on the behavior of free product or the plume; adverse impacts to a water supply well or have a long term adverse impact on ground water quality; create an unpermitted discharge to any surface water of the State or violation of Surface Water Quality Standards; create a persistent standing, ponded or surface-flowing fluid condition; or cause adverse vapor intrusion to occur.

Pursuant to N.J.A.C. 7:14A-6.2(a)5 and 11, if free product in ground water, vapors or odors in any building, or any malfunction resulting in a potential impact to a receptor are detected and are a result of the discharge authorized by this approval, the discharger will immediately: (1) cease the discharge or make necessary adjustments to the discharge rate or system operation; and (2) repair or mitigate any negative impacts.

After completion of the discharge, the property returned to its previous condition, or as agreed to with property owner if the permittee is not the property owner. All UIC-Class V injection wells shall be properly abandoned in accordance with N.J.A.C. 7:14A-8.16(d)1 as applicable. The permittee will comply with any applicable provisions of the Additional Conditions Applicable to Class I, II, III and V UIC Permits of the NJPDES regulations, N.J.A.C. 7:14A-8.9, et seq. when UIC-Class V injection well units (i.e., the injection points) are used.

III. GROUND WATER MONITORING REQUIREMENTS

The Permittee shall perform the following ground water sampling as was specified in the DGW proposal (including all addendums and modifications) for the purpose of complying with this Discharge to Ground Water Permit-By-Rule authorization.

Baseline Sampling, before injection:

Prior to the startup of Phase II operations, but following the installation of the remediation well network and new monitoring well locations, samples will be collected for baseline analysis to establish the starting conditions for IRM treatment performance review. In accordance with the attached Table 1, baseline samples will be collected for TAL metals (total and dissolved); Cr(VI) (total and dissolved); key geochemical parameters (sulfate/sulfide and methane); total organic carbon (TOC), field parameters (pH, specific conductivity, dissolved oxygen [DO], oxidation-reduction potential [ORP], turbidity, and temperature); and depth to groundwater.

Baseline samples will be collected using the low-flow sampling method. Purge water generated during sampling will be temporarily stored and then transferred to the groundwater treatment system. Prior to the start of purging, depth to water will be

gauged at each well location. Following purging, field parameter measurements will be recorded. Samples collected for dissolved metal analyses will be filtered using 0.45 micrometer (μm) filters in the field.

Operational and Treatment Monitoring, during the injections:

The operational monitoring program will be used to assess ongoing remedial system performance in support of guiding potential modifications to injection and extraction flow rates, recirculation well balancing, carbon dosing and timing, and to preemptively guide potential biofouling management and well redevelopment.

Operational monitoring will be performed at variable frequencies (weekly, biweekly, or monthly), as necessary, over the course of operation pursuant to Table 1. Measurements may be periodically performed more frequently than specified in Table 1 to support potential troubleshooting activities over the course of operation. Given the adaptive nature of the recirculation program and the sequencing of different groupings of injection and extraction wells during operation, it is anticipated that the operational sampling frequency of existing monitoring wells will be adapted over time. As an example, monitoring wells located within the northernmost area of Site 114 are most relevant for operational monitoring during the first step of recirculation activities. Following this initial period and the transition to more southerly injection wells, the frequency and parameter list of the initial monitoring locations may be reduced to maintain remedial efficiency, as applicable, subject to NJDEP approval. For the operational monitoring, analytical data and field parameter measurements for extracted and treated groundwater will be collected at operating extraction wells from sampling ports located at the wellheads or at the influent to the water treatment system.

Overall Phase II remedial performance will be documented via ongoing treatment monitoring during the 12-month IRM program. Sampling parameters will be collected to verify organic carbon distribution, assess the development of reduced geochemical groundwater conditions within the subsurface, and confirm corresponding declines in total Cr and Cr(VI). Evaluation of these parameters will confirm development of the subsurface reactive zone and will be used to guide carbon substrate dosing strength and frequency. This will enable treatment optimization and confirmation prior to transitioning the operating recirculation wells to subsequent steps. A summary of the analytical and field parameter measurements for treatment sampling is provided in Table 1.

Similar to the operational monitoring specifications, treatment monitoring parameters will be collected at specified frequency based on the relevance of a given parameter to operation and optimization activities. TOC and field parameter sampling is proposed most frequently (biweekly to monthly) to effectively gauge propagation of both carbon substrate and geochemical influence within the subsurface. Total Cr and Cr(VI) and select geochemical parameters (ferrous [dissolved] iron, dissolved manganese, sulfate) will be collected monthly to enable the collection of at least one to two samples between recirculation well steps. Methane sampling is also proposed, albeit less

frequently, to confirm the overall extent of reduced groundwater conditions. Similar to the sampling frequency considerations presented for the operational monitoring program, treatment monitoring parameters will be collected at a specified frequency based on the relevance of a given parameter to operation and optimization activities.

Treatment monitoring samples will be collected using the low-flow sampling method and select wells may be sampled at 5-foot intervals. Purge water generated during sampling will be temporarily stored and then transferred to the groundwater treatment system. Prior to the start of purging, depth to water will be gauged at each well location. Following purging, field parameter measurements will be recorded. Samples collected for dissolved metal analyses will be filtered using 0.45 µm filters in the field.

Post Treatment Sampling, after completion of injections:

Following the 12-month Phase II operational program, post-treatment monitoring will be used to document overall Cr treatment performance, confirm the residual reactive zone reduction capacity (via residual TOC and reduced geochemistry species), and develop an appropriate data set to demonstrate ongoing natural attenuation of any residual total Cr and Cr(VI). Post-treatment sampling will be performed in accordance with Table 1.

Treatment monitoring samples will be collected using the low-flow sampling method and select screen locations with wells will be sampled at 5-foot intervals. Purge water generated during sampling will be temporarily stored and then transferred to the groundwater treatment system – or containerized and disposed of off-site, as appropriate. Prior to the start of purging, depth to water will be gauged at each well location. Following purging, field parameter measurements will be recorded. Samples collected for dissolved metal analyses will be filtered using 0.45 µm filters in the field.

Post-treatment sampling activities will be performed on a quarterly basis over a total duration of two years.

Pursuant to the Tech Regs, the Permittee shall measure ground water elevations at all sampled wells during each sampling event and shall construct ground water flow maps with the water elevation data to document the direction of ground water flow. Any non-aqueous phase liquid (NAPL) observed, including sheen, shall be documented and the NJDEP shall be notified. The Permittee shall check for both light non-aqueous phase liquid (LNAPL) and dense non-aqueous phase liquid (DNAPL). If NAPL is identified in thicknesses greater than 0.01 feet in wells planned for injection use during baseline gauging or subsequent routine performance monitoring activities, these wells will be operated first as extraction wells to facilitate NAPL recovery and removal. NAPL will be recovered and modifications will be made to allow oil separation prior to transfer to the water treatment system. Prior to converting these wells for injection use, extraction will be discontinued to allow static gauging for NAPL reoccurrence. If NAPL is not observed with thicknesses in excess of 0.01 feet for two consecutive gauging events, and the NJDEP concurs, then NAPL will be considered eliminated or recovered to the extent practicable and wells will be deemed acceptable for injection use. Alternatively, if NAPL is identified in

excess of 0.01 feet in thickness but is considered no longer recoverable (or immobile), and the NJDEP concurs, the NAPL will be considered recovered to the extent practicable and wells may also be deemed acceptable for injection use.

All sampling shall be performed as proposed and consistent with the methods specified in the most current edition of the Department's Field Sampling Procedures Manual. All samples shall be analyzed by a New Jersey Certified Laboratory certified for the methods being used to analyze groundwater samples. Analytical method MDLs shall be less than or equal to the ground water quality standards (N.J.A.C. 7:9C-1.7). Parameters determined in the field (pH, specific conductance, dissolved oxygen, temperature) are to be measured by a certified contractor or laboratory.

Comparison to the VI screening levels is necessary in order to monitor whether or not the discharge activities have the potential to cause VI issues within any nearby structures by means of adversely impacting the behavior of the ground-water contaminants (e.g., unexpected contaminant movement). If there are any exceedances of the VI screening levels caused by the authorized discharge, a VI evaluation shall be conducted of any potentially impacted structures.

Compliance with N.J.A.C. 7:26E-5.7(b) requires that the Permittee satisfy the post-injection ground water monitoring requirements that are set forth in this letter before applying for any Remedial Action Permit for Ground Water. If a Remedial Action Permit application is submitted before the required ground water sampling has been completed, the application will be denied.

Additionally, contingency compliance ground water sampling is required if ground water sampling results indicate that GWQS have been contravened because of the authorized discharge (e.g., the GWQS for sulfate is exceeded as a result of calcium polysulfide injection, or the GWQS for iron is exceeded as a result of FerroBlack[®]-H injection), or that ground water quality has not returned to baseline conditions (when baseline concentrations are greater than GWQS) in the expected timeframe. Ground water sampling must continue until it can be demonstrated that the GWQS have been met or until the ground water quality has returned to baseline conditions. To demonstrate either of these conditions, a minimum of two consecutive ground water sampling events spaced far enough apart to account for seasonal fluctuations, must be conducted.

Furthermore, if the Permittee is planning to apply for a Ground Water Remedial Action Permit for Natural Attenuation in the future, and exceedances of the GWQS that are due to the discharge remain, those exceedances must be treated similarly to any other site related contaminants (i.e., a sufficient number of samples is required and a decreasing concentration trend must be evident) consistent with the Department's Remedial Action Permits for Ground Water Guidance.

IV. REPORTING REQUIREMENTS AND INFORMATION SUBMITTALS

Details of the supplemental pre-design testing, well and system installation, system operation, and performance monitoring results associated with the IRM Phase II program will be documented as part of a quarterly technical status reports submitted to the NJDEP. These quarterly status reports will include succinct, high-level summaries of activities performed, data collected, adaptive steps taken to modify or optimize Phase II treatment, and an overview of activities planned for the subsequent quarter.

Succinct performance summary results will be submitted as part of quarterly status reports. All information, including a complete summary of the work performed under the PBR, a complete set of the data collected, a summary of data trends, an evaluation and interpretation of the data, and conclusions reached (as well as the QA/QC package specified at N.J.A.C. 7:26E-2.1(a)15) shall be submitted as part of the completion report within 6 months following cessation of active Phase II operation. All information shall be submitted to:

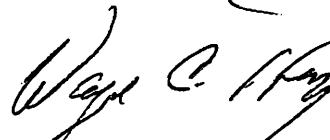
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CASE ASSIGNMENT & INITIAL NOTICE
MAILCODE 401-05H
P.O. BOX 420
TRENTON, NJ 08625-0420
ATTN: COPR

Consistent with N.J.A.C. 7:14A-2.11(a) and 6.2(a)14, within 90 days after initiation of the discharge, notify the Department of the "start date" of the discharge. To report this date, send an email to Wayne.Howitz@dep.nj.gov stating the start date of the discharge.

Consistent with N.J.A.C. 7:14A-2.11(a) and 6.2(a)14, any malfunctions or non-compliance should be reported by fax or telephone within 24 hours to Wayne Howitz of the Site Remediation Program at (609) 984-2905, and in writing within 7 days to the above address using the subject line "DGW Permit-by-Rule Compliance Report - COPR." Written submissions must include the facility name and PI Number. Failure to report this information is a violation of N.J.A.C. 7:14A and the permit-by-rule.

If you have any questions or concerns, please contact Wayne C. Howitz of the Site Remediation Program at (609) 984-2905.

Sincerely,



Wayne C. Howitz, Assistant Director
Remediation Oversight Element

Attachment

- c: John Horst, Arcadis U.S. Inc.
- Rolando R. Lavarro, Jersey City Redevelopment Agency
- Carrie Nawrocki, Health Officer, Hudson Regional Health Commission
- Stacey Flanagan, Director, Department of Health and Human Services
- Robert Byrne, Jersey City Clerk

Table 1:

IRM Phase I and II Groundwater Monitoring Program, PPG Garfield Avenue Group Sites, Jersey City, New Jersey

Monitoring Program	Monitoring Well Network	Monitoring Parameters	Monitoring Frequency
Baseline Monitoring	New extraction, injection, monitoring wells and existing monitoring wells	1. Field Parameters: DTW, pH, conductivity, DO, ORP, turbidity, and temperature 2. Lab Analytical: Total/dissolved TAL metals, total/dissolved Cr(VI), TOC, sulfate/sulfide, and methane	Prior to operation start
Operational Monitoring	New extraction and monitoring wells, existing shallow, intermediate and deep monitoring wells, and system sampling port (influent and effluent)	1. Field Parameters: DTW	Weekly - Biweekly
		2. System Parameters - Injection / extraction well flow rates	Weekly
		- Wellhead pressures	Weekly
		- Water treatment system monitoring	Weekly - Monthly (as appropriate)
Treatment Monitoring	New extraction and monitoring wells, and existing intermediate and deep monitoring wells	1. Field Parameters: DTW, pH, conductivity, DO, ORP, turbidity, and temperature	Biweekly - Monthly
		2. Lab Analytical: - Total/dissolved Cr and Cr(VI)	Monthly
		- TOC	Biweekly - Monthly
		- Supplemental geochemical parameters (sulfate, ferrous [dissolved] iron, dissolved manganese)	Monthly
Post-Treatment Monitoring	New monitoring wells and existing shallow, intermediate and deep monitoring wells	- Methane	Monthly-Quarterly
		1. Field Parameters: DTW, pH, conductivity, DO, ORP, turbidity, and temperature 2. Lab Analytical: Total/dissolved TAL metals, total/dissolved Cr and Cr(VI), VOCs, SVOCs, TOC, sulfate/sulfide, dissolved iron, dissolved manganese, and methane.	Quarterly following system shutdown for up to 2 years

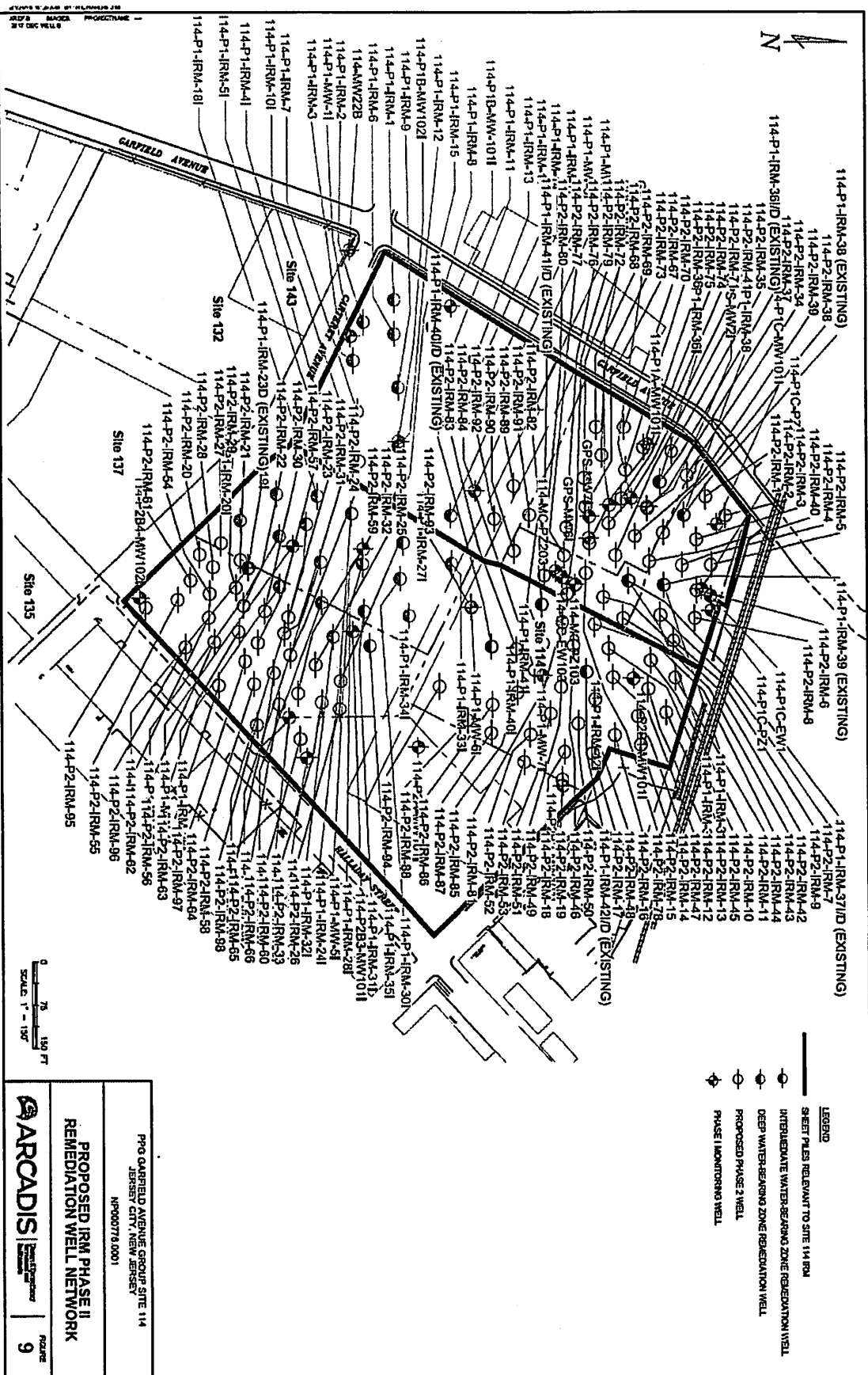
Notes:

- The monitoring locations, parameters, and frequencies provided in this table serve as a general guidance for IRM-related monitoring activities and may be adjusted or changed based on IRM Phase II performance, injection and extraction areas in operation, and observed monitoring results.
- Dissolved metal samples are to be field filtered prior to sample collection.

Cr - chromium
 Cr(VI) - hexavalent chromium
 DO - dissolved oxygen
 DTW - depth-to-water

IRM - Interim Remedial Measures
 ORP - oxidation-reduction potential
 PBR - Permit-by-Rule
 SVOCs - semi-volatile organic compounds

TAL - target analyte list
 TOC - total organic carbon
 VOCs - volatile organic compounds





NOTICE AND ORDER OF PENALTY

Permit/Control #: 0
Date Issued: 1/11/2002
Violation #: 20020035

IDENTIFICATION

Work Site Location: 900 GARFIELD AVE JERSEY CITY, NJ
Block: 21501 Lot: 20 Qualification Code: _____
Owner in Fee: 900 Garfield Ave. LLC
Owner Address: 15 maple avenue Morristown NJ 07960
Agent/Contractor: _____
Address: _____
To: ☐ Owner ☐ Other:
☐ Agent/Contractor

ACTION

- ☒ On 1/10/2002, you were found to be in violation of the State Uniform Construction Code Act and Regulations promulgated thereunder. A ☐ **Notice of Violation and Order to Terminate**, ☐ **Notice of Unsafe Structure**, ☐ **Notice of Imminent Hazard** was issued. Reinspection of the work site on _____ revealed the following violation(s) remain:
YOU ARE OCCUPYING AN ADDITION WITHOUT FIRST OBTAINING A CO IN VIOLATION OF NJAC 5:23-2.23
Subcode: B
Violation: Building stands vacant and in a state of deterioration, must be demolished or rehabed forthwith.
Violation Reg: OTHER
Official: MICHEAL J. REGAN
Immediate Penalty: \$500.00
Ongoing Penalty: \$500.00
Total Penalty: \$7,344,571.43
Agent:
Address:
City:
State:
Zip:
Phone:
Description:
Notes: bldg demoed in March 02 by owner fine waived
Abate Number: 0
Abate Date: 1/18/2005
Abate Comment: fine waived bldg demoed

REPAIR
20020034, Notice Date: 1/11/2002
- ☐ On _____, you were found to be in violation of the State Uniform Construction Code Act and Regulations promulgated thereunder, in that you ☐ **made a false or misleading written statement, or omitted required required information in an application or request for approval; or** ☐ **failed to obtain a construction permit; or** ☐ **failed to request required inspections; or** ☐ **allowed occupancy prior to receiving a certificate of occupancy.**
- ☐ On _____, you were found to be in violation of the State Uniform Construction Code Act and Regulations promulgated thereunder. A **Stop Construction Order** was issued. Reinspection of the work site on _____ revealed a failure to comply with that **Stop Construction Order**.

PENALTY

Therefore, you are hereby **ORDERED** to pay a penalty in the amount of \$0.00 for each violation for a total penalty of \$0.00.

Further, take **NOTICE** that for each ☐ week ☒ day that any of the said violations remain outstanding after _____ an additional penalty of \$0.00 per ☐ week ☒ day shall result

If you wish to contest this **ORDER**, you may request a hearing before the Construction Board of Appeals of the Jersey City Construction Board of Appeals within 15 days of receipt of this **ORDER** as provided by N.J.A.C. 5:23 A-2.1. The Application of the Construction Board of Appeals may be used for this purpose.



NOTICE AND ORDER OF PENALTY

Permit/Control #: 0
Date Issued: 1/11/2002
Violation #: 20020035

Your application for appeal must be in writing, setting forth your name and address, the address of the building or site in question, the permit number, the specific sections of the Regulations in question, and the extent and nature of your reliance on them. You may include a brief statement setting forth your position and the nature of the relief sought by you. You may also append any documents that you consider useful

The fee for an appeal is \$50.00 and should be forwarded with your application to the Construction Board of Appeals Office at: C/O Office of the Construction Official / City Hall Annex
1 Jackson Square, 2nd Floor
Jersey City, NJ 07305

If you have any questions concerning this matter, please call: (201) 547-5055

NOTICE and ORDER of PENALTY: _____ Date: _____
Construction Official



NOTICE AND ORDER OF PENALTY

Permit/Control #: 0
Date Issued: 1/11/2002
Violation #: 20020035

IDENTIFICATION

Work Site Location: 900 GARFIELD AVE JERSEY CITY, NJ
Block: 21501 Lot: 20 Qualification Code: _____
Owner in Fee: 900 Garfield Ave. LLC
Owner Address: 15 maple avenue Morristown NJ 07960
Agent/Contractor: _____
Address: _____
To: ☐ Owner ☐ Other:
☐ Agent/Contractor

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Violation Reg: OTHER
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Immediate Penalty: \$500.00
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Total Penalty: \$7,344,571.43
Agent:
Address:
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State:
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Description:
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Abate Date: 1/18/2005
Abate Comment: fine waived bldg demoed

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20020034, Notice Date: 1/11/2002
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1 Jackson Square, 2nd Floor
Jersey City, NJ 07305

If you have any questions concerning this matter, please call: (201) 547-5055

NOTICE and ORDER of PENALTY: _____ Date: _____
Construction Official



New Jersey Department of Environmental Protection
Site Remediation and Waste Management Program
**DISCHARGE TO GROUND WATER (DGW) PERMIT-BY-RULE
AUTHORIZATION REQUEST**

☐ LSRP ☐ Subsurface Evaluator (UHOT)

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Garfield Avenue Site 114 and Former Halladay Street Gas Works

AKAs: _____

Street Address: 900 Garfield Avenue

Municipality: Jersey City (Township, Borough or City)

County: Hudson Zip Code: 07305

Program Interest (PI) Number(s): G000005480

Case Tracking Number(s) for this submission: _____

Municipal block(s) and lot(s) where the **proposed discharge(s)** would occur:

Block # 21501 Lot #(s) 16, 17, 18, 19, 20

Block # _____ Lot #(s) _____

Block # _____ Lot #(s) _____

Block # _____ Lot #(s) _____

SECTION B. FEE AND DISCHARGE INFORMATION

DGW Proposal Review Fee \$350.00

Discharge Type (check all that apply)

☒ Discharge of Recovered Ground Water

Will the discharge be a result of dewatering only? ☐ Yes ☐ No

☒ Discharge that is part of an *In situ* Remediation

☐ Discharges other than those above (see instructions for more information)

Facility Type (check all that apply)

☒ Underground Injection Control (UIC) facility (i.e., any type of injection)

☐ Non-UIC (e.g., surface application) (see instructions for more information)

Attach a Discharge to Ground Water Proposal to this form (see instructions)

See attached CD

SECTION C. PUBLIC NOTICE PROVISIONS (Does not apply to residential heating oil tank cases)

Is the proposed discharge lasting greater than 180 days? ☒ Yes ☐ No

If "Yes," attach a copy of the public notice written as you intend it to be published. (see instructions) See attached CD, Appendix A

SECTION D. SITE USE AND GROUND WATER CLASSIFICATION

Current Site Use (check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Industrial | <input type="checkbox"/> Agricultural |
| <input type="checkbox"/> Residential | <input type="checkbox"/> Park or recreational use |
| <input type="checkbox"/> Commercial | <input checked="" type="checkbox"/> Vacant |
| <input type="checkbox"/> School or child care | <input type="checkbox"/> Government |
| <input type="checkbox"/> Other _____ | |

Intended Future Site Use (check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Industrial | <input type="checkbox"/> Park or recreational use |
| <input type="checkbox"/> Residential | <input type="checkbox"/> Vacant |
| <input type="checkbox"/> Commercial | <input type="checkbox"/> Government |
| <input type="checkbox"/> School or child care | <input checked="" type="checkbox"/> Future site use unknown |

What is the ground water classification for this site as per N.J.A.C. 7:9C? (check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> Class I-A | <input checked="" type="checkbox"/> Class II-A |
| <input type="checkbox"/> Class I-PL Pinelands Protection Area | <input type="checkbox"/> Class III-A |
| <input type="checkbox"/> Class I-PL Pinelands Preservation Area | <input type="checkbox"/> Class III-B |

SECTION E. RECEPTOR EVALUATION SUMMARY

Non-UHOT Cases

1. Have any of the following been identified on the site or within 200 feet of the site boundary?

Check all that apply.

- | | |
|--|--|
| <input checked="" type="checkbox"/> Residences | <input type="checkbox"/> Child care facilities |
| <input type="checkbox"/> Public and private schools (K-12) | <input type="checkbox"/> Surface water |
| <input checked="" type="checkbox"/> Other occupied buildings | <input checked="" type="checkbox"/> Public parks and playgrounds |

2. Did the well search conducted as a part of the receptor evaluation show any well use (potable, industrial, or irrigation)? ☐ Yes ☒ No

If "Yes," indicate the type of use and approximate distance (closest occurrence) from site: (Check all that apply)

- ☐ Potable Distance from site: _____ feet
☐ Industrial Distance from site: _____ feet
☐ Irrigation Distance from site: _____ feet

3. Have any of these receptors been impacted? ☐ Yes ☒ No

If "Yes," Do you have an NJDEP assigned Case Manager? ☐ Yes ☐ No

If "Yes," please list the Case Manager: _____

UHOT Cases

1. Is ground water contamination above the Ground Water Remediation Standards? ☐ Yes ☐ No
If "Yes," answer questions 2 and 3.

2. Has a potable well been identified within 100 feet of the contamination? ☐ Yes ☐ No

3. Have any potable wells been impacted? ☐ Yes ☐ No

If "Yes," has the NJDEP been notified? ☐ Yes ☐ No

SECTION F. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: PPG Industries, Inc.

Representative First Name: Mark

Representative Last Name: Terril

Title: Corporate Director Environmental Affairs

Telephone Number: (412) 434-2708

Ext.: _____

FAX: _____

Mailing Address: One PPG Place

City/Town: Pittsburgh

State: PA

Zip Code: 15222

Email Address: terril@ppg.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____

Date: 2/28/2019

Name/Title: Mark Terril / Corporate Director Environmental Affairs

☐ Check this box if the person above is also the property owner of the site or their representative. If this person is not the site property owner, please ensure the site property owner's name and address is included in the DGW Proposal, and also indicate that the property owner has been informed about the proposed discharge.

SECTION G. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: _____

First Name: _____ Last Name: _____

Phone Numbers: _____ Ext.: _____ Fax: _____

Mailing Address: _____

Municipality: _____ State: _____ Zip Code: _____

Email Address: _____

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

(1) *I certify, as a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C-1 et seq. to conduct business in New Jersey, that for the remediation described in this submission, and all attachments included in this submission, I personally: Managed, supervised, or performed the remediation conducted at this site that is described in this submission, and all attachments included in this submission; and/or periodically reviewed and evaluated the work performed by other persons that forms the basis for the information in this submission; and/or completed the work of another site remediation professional, licensed or not, after having: (1) reviewed all available documentation on which I relied; (2) conducted a site visit and observed the then-current conditions and verified the status of as much of the work as was reasonably observable; and (3) concluded, in the exercise of my independent professional judgment, that there was sufficient information upon which to complete any additional phase of remediation and prepare workplans and reports related thereto.*

(2) *I certify:*

- *That I have read this submission and all attachments to this submission;*
- *That in performing the professional services as the licensed site remediation professional for the entire site or each area of concern, I adhered to the professional conduct standards and requirements governing licensed site remediation professionals provided in N.J.S.A. 58:10C-16;*
- *That the remediation conducted at the entire site or each area of concern, that is described in this submission and all attachments to this submission, was conducted pursuant to and in compliance with the remediation requirements in N.J.S.A. 58:10C-14.c;*
- *That the remediation described in this submission, and all attachments to this submission, was conducted pursuant to and in compliance with the regulations of the Site Remediation Professional Licensing Board at N.J.A.C. 7:26l; and*
- *That the information contained in this submission and all attachments to this submission is true, accurate, and complete.*

(3) *I certify, when this submission includes a response action outcome, that the entire site or each area of concern has been remediated in compliance with all applicable statutes, rules, and regulations and is protective of public health and safety and the environment.*

(4) *I certify that no other person is authorized or able to use any password, encryption method, or electronic signature that the Board or the Department have provided to me.*

(5) *I certify that I understand and acknowledge that:*

- *If I knowingly make a false statement, representation, or certification in any document or information I submit to the Department I may be subject to civil and administrative enforcement pursuant to N.J.S.A. 58:10C-17.a.1(a) through (f) by the Board, including but not limited to license suspension, revocation, or denial of renewal; and*
- *If I purposely, knowingly, or recklessly make a false statement, representation, or certification in any application, form, record, document or other information submitted to the Department or required to be maintained pursuant to the Site Remediation Reform Act, I shall be guilty, upon conviction, of a crime of the third degree and shall, notwithstanding the provisions of subsection b. of N.J.S.2C:43-3, be subject to a fine of not less than \$5,000 nor more than \$75,000 per day of violation, or by imprisonment, or both.*

(6) *I certify that I have read this certification prior to signing, certifying, and making this submission.*

LSRP Signature: _____

Date: _____

LSRP Name: _____

Company Name: _____

SECTION G. SUBSURFACE EVALUATOR UST REPORT CERTIFICATION FORM

I certify under penalty of law that the work was performed under my oversight and I have reviewed the report and all attached documents, and the submitted information is true, accurate and complete in accordance with the requirements of N.J.A.C. 7:14B and N.J.A.C. 7:26E. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information including fines and/or imprisonment.

Name: _____ UST Cert. No.: _____
Firm: _____ Firm's UST Cert. Number: _____
Firm Address: _____
City/Town: _____ State: _____ Zip Code: _____
Phone Number: _____ Ext: _____ Fax: _____
Signature: _____ Date: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

TRANSMITTAL LETTER



To:
Office of the City Clerk
280 Grove Street
Jersey City, NJ 07302

Copies:
Dept. of Health and Human Service
199 Summit Avenue,
Unit F
Jersey City, NJ 07403

From:
Cullen Flanders

Date:
March 14, 2019

Subject:
PPG GAG Site PBR Request
PI Number: G000005480

Arcadis Project No.:
NP000775.0001

Arcadis U.S., Inc.
10 Friends Lane
Suite 200
Newtown
Pennsylvania 18940
Tel 267 685 1800
Fax 267 685 1801

We are sending you:

☒ Attached ☐ Under Separate Cover Via _____ the Following Items:

- | | | | |
|--|----------------------------------|---|---|
| <input type="checkbox"/> Shop Drawings | <input type="checkbox"/> Plans | <input type="checkbox"/> Specifications | <input type="checkbox"/> Change Order |
| <input type="checkbox"/> Prints | <input type="checkbox"/> Samples | <input type="checkbox"/> Copy of Letter | <input checked="" type="checkbox"/> Reports |
| <input type="checkbox"/> Other: _____ | | | |

Copies	Date	Drawing No.	Rev.	Description	Action*
1	2/28/19			DWG PBR Authorization Request Form	F
1	2/28/19			Groundwater IRM Phase II Design and PBR Authorization Request (CD)	F

Action*

- | | | |
|---|--|--|
| <input type="checkbox"/> A Approved | <input type="checkbox"/> CR Correct and Resubmit | <input type="checkbox"/> Resubmit _____ Copies |
| <input type="checkbox"/> AN Approved As Noted | <input checked="" type="checkbox"/> F File | <input type="checkbox"/> Return _____ Copies |
| <input type="checkbox"/> AS As Requested | <input type="checkbox"/> FA For Approval | <input type="checkbox"/> Review and Comment |
| <input type="checkbox"/> Other: _____ | | |

Mailing Method

- | | | | |
|--|--|---|---|
| <input type="checkbox"/> U.S. Postal Service 1 st Class | <input type="checkbox"/> Courier/Hand Delivery | <input type="checkbox"/> FedEx Priority Overnight | <input type="checkbox"/> FedEx 2-Day Delivery |
| <input checked="" type="checkbox"/> Certified/Registered Mail | <input type="checkbox"/> United Parcel Service (UPS) | <input type="checkbox"/> FedEx Standard Overnight | <input type="checkbox"/> FedEx Economy |
| <input type="checkbox"/> Other: _____ | | | |

Comments:

This is for a DWG PRB Authorization Request for the Garfield Avenue Site 114 and Former Halladay Street Gas Works (Site Name) and Program Interest Number of G000005480.

OWNERS NAME & ADDRESS
009324
795 LIDGEMOOD CORP
2520 POLK ST
UNION, N J
07083

BLDG: 1S-BLCB-IN-H
LAND: 3.099 ACRES

LAND: 137,000 BLDG: 333,000 TOTAL: 470,000

SIGNATURE:

100	02026	A	00001	OLD BLOCK	OLD LOT	QUALIFIER	010	NEW BLOCK	NEW LOT	QUALIFIER	CARD NO.	
104	4 B	105	106	107	108	110	900 GARFIELD AVE	NUMBER	SUF DIR	NAME	SUF	ADD'L NO
104	CLASS	105	106	107	108	110	900 GARFIELD AVE	NUMBER	SUF DIR	NAME	SUF	ADD'L NO
104	CLASS	105	106	107	108	110	900 GARFIELD AVE	NUMBER	SUF DIR	NAME	SUF	ADD'L NO
104	CLASS	105	106	107	108	110	900 GARFIELD AVE	NUMBER	SUF DIR	NAME	SUF	ADD'L NO

120	0519810	2	1	044	INTERIOR INSPECTION
DATE	TYPE	AMOUNT	SOURCE	VALIDITY	DELETE
250	---	---	---	---	---
251	---	---	---	---	---
252	---	---	---	---	---

LAND DATA & COMPUTATIONS

LOT	NONE	300	N	Actual Frontage	Effective Frontage	Effective Depth	Actual Unit Price	Depth Factor	Effective Unit Price	Influence Factor	Land Value
1 Regular Lot	301	E	---	---	---	---	---	---	---	[]	---
2 Minus Lot	302	E	---	---	---	---	---	---	---	[]	---
3 Apartment Site	303	E	---	---	---	---	---	---	---	[]	---
4 Waterfront	303	E	---	---	---	---	---	---	---	[]	---

450	TOPOGRAPHY	451	UTILITIES	452	ROADS
0 N/A	4 Rolling	1 All Public	5 Well	0 None	4 Proposed
1 Level	1 Low	2 Public Water	6 Septic	1 Dirt	5 Alley
3 High	3 High	3 Public Sewer	7 Gas	2 Gravel	6 Sidewalk
4 Gas	4 Gas	4 Gas	8 Parking	3 Paved	7 Rear Lot

SQUARE FEET		INFLUENCE FACTORS	
1 Primary Site	311	---	---
2 Secondary Site	S 1	---	---
3 Undeveloped	---	---	---
4 Recreational	---	---	---
5 Waterfront	312	---	---
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810	BUILDING NAME	815	E.C.F.	820	MODEL ADJ.	825	VAL. METHOD	830	VALUE OVRD.	835	INC. EFF. AGE OVRD.
1 Central Bus. Dist.	2 Perm. Cen. Bus. Dist.	3 Business Cluster	4 Major Strip	5 Secondary Strip	6 Private Road	7 On-Off Street	8 Parking Deck	1 All Public	2 Public Water	3 Public Sewer	4 Gas

ACREAGE		Soil Type	1	2	3	4	5	6
1 Waterfront	321	A	---	---	---	---	---	---
2 Tillable	322	A	---	---	---	---	---	---
3 Pasture	323	A	---	---	---	---	---	---
4 Woodland	323	A	---	---	---	---	---	---

840	OVERRIDES AVAILABLE ON EACH CARD	845	INC. EFF. AGE OVRD.
840	OVERRIDES AVAILABLE ON EACH CARD	845	INC. EFF. AGE OVRD.
840	OVERRIDES AVAILABLE ON EACH CARD	845	INC. EFF. AGE OVRD.
840	OVERRIDES AVAILABLE ON EACH CARD	845	INC. EFF. AGE OVRD.
840	OVERRIDES AVAILABLE ON EACH CARD	845	INC. EFF. AGE OVRD.

5	Westland	324	A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---</
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900	DEACTIVATE	905	EFF. DATE	910	REASON	915	LOTR	920	AMOUNT
900	DEACTIVATE	905	EFF. DATE	910	REASON	915	LOTR	920	AMOUNT
900	DEACTIVATE	905	EFF. DATE	910	REASON	915	LOTR	920	AMOUNT
900	DEACTIVATE	905	EFF. DATE	910	REASON	915	LOTR	920	AMOUNT
900	DEACTIVATE	905	EFF. DATE	910	REASON	915	LOTR	920	AMOUNT

GROSS		335	G		---	---	---	---	---	TOTAL VALUE LAND	
1	Irregular										
2	Site Value										
3	Residual										
4	Homeite										
5	Minus R. O. W.										
			NOTES							TOTAL VALUE BUILDINGS	
401	NO FILM PROCESSING - NOW LOANED										
402	---										FINAL VALUE

930	DEACTIVATE	935	EFF. DATE	940	REASON	945	LOTR	950	AMOUNT
930	DEACTIVATE	935	EFF. DATE	940	REASON	945	LOTR	950	AMOUNT
930	DEACTIVATE	935	EFF. DATE	940	REASON	945	LOTR	950	AMOUNT
930	DEACTIVATE	935	EFF. DATE	940	REASON	945	LOTR	950	AMOUNT
930	DEACTIVATE	935	EFF. DATE	940	REASON	945	LOTR	950	AMOUNT

BUILDING OTHER FEATURES - ATTACHED IMPROVEMENTS

NO	GENERAL BLDG. DATA	NO	LINE	STRUCT CODE	FLAT +/-	MEASUREMENT 1	MEASUREMENT 2	IDENT UNITS	COST	% GOOD	NO	LINE	STRUCT CODE	FLAT +/-	MEASUREMENT 1	MEASUREMENT 2	IDENT UNITS	COST	% GOOD	BLDG. OTHER FEATURES/ ATTACHED IMPROVEMENTS STRUCTURE CODES
01	1965000	601	1	551	-	077438	000.001	01			605									D11 Dock Level Floors
401	2-01	602	1	002	-	000008	00.0010	002			606									E11 Enclosed Entry
401	2-01	603	1	001	-	0000270	000.001	01			607									E12 Elevator, Electric Freight
401	2-01	604	1	001	-	071838	000.001	01			608									E13 Elevator, Elec. Passenger
																				E14 Elev., Hydraulic Freight
																				L01 Ldg. Dock, Steel or Conc.
																				L02 Loading Dock, Wood
																				L03 Loading Dock, Interior
																				L04 Truck or Train Well, Int.
																				OD1 OH Doors, Wd. or Metal
																				OD2 OH Doors, Rolling Steel
																				SF1 Store Front, Wood Frame
																				SF2 Store Front, Avar. Metal
																				SF3 Store Front, Elaborate
																				MS1 Miscellaneous Structure

INTERIOR - EXTERIOR DATA

TOTAL OTHER FEATURES & ATTACHED IMPROVEMENTS

NO	SEC NO	LEVELS FROM TO	DIMENSIONS SIZE	PERIM	USE TYPE	WL HT	EXT WLS	CONS TYPE	NO	INTER FINISH	PTNS	HTG AC	PLBG	SF RATE	PHYS COND	UTIL FACT	UNADJUSTED R C N	% GOOD	UNADJUSTED R C N L D	BLDG. OTHER FEATURES/ ATTACHED IMPROVEMENTS STRUCTURE CODES
611	1	10101	000.71838	1070	044	20	03	2	621	100	2	1	2		3	3				APARTMENT DATA UNITS BEDS BATHS
612	1	11111	000.04800	0140	044	10	13	0	622	100	2	1	2		3	3				
613	1	11112	000.01000	0120	045	10	13	0	623	100	2	0	2		3	3				
614									624											
615									625											
616									626											
617									627											
618									628											

STRUCTURE TYPE CODES

USE TYPE CODES

INTERIOR / EXTERIOR CODES

FROM - TO

SUB TOTAL

LOCAL MODIFIER

GRADE FACTOR

PARKING DATA

COV. UNCOV.

211. Agent, Garden	344. Strip Shopping Cen.	011. Apartment	053. Office Bldg.	00. None	06. Masonry & Frame	A. Airt. Enclosure	E. Enclosure													
212. Apartment Bldg.	345. Dir. Dept. Stores	012. Hotel	052. Cinema	01. Brick or Stone	07. Metal, Light	B. Basement	M. Mezzanine													
314. Hotel/Motel, H.R.	346. Dept. Stores	025. Dwelling Conv.	071. Ser. Sta. & Conv. Bldg.	02. Frame	08. Metal, Sandwich	C. Craw Space	P. Penthouse													
315. Hotel/Motel, L.R.	347. Supermarket	026. Dwelling Conv.	072. Ser. Sta. & Conv. Bldg.	03. Conc. Block	09. Conc., Load Bearing															
321. Restaurant	348. Conv. Food Market	027. Restaurant	073. Ser. Sta. no bays	04. Brick & C.B.	10. Conc., Non-Load Bearing															
325. Fast Food	351. Bank	031. Restaurant	074. Multi-Use Apert.	05. Tile	11. Glass															
331. Auto Dealer, F.S.	352. Savings Inst.	032. Dep. Store	075. Multi-Use Apert.																	
333. Ser. Station (Auto)	353. Office Building	033. Dir. Store/Mkt.	081. Multi-Use Office																	
334. Ser. Station (Auto)	353. Day Care Center	034. Retail Store	082. Multi-Use Office																	
338. Parking Gar/Deck	373. Retail - single occ.	043. Manufacturing	090. Parking Garage																	
341. Reg. Shop Mail	376. Mini Warehouse	044. Light Mfg.	100. Food Franchise																	
342. Cmty. Shop, Cen.	397. Office/Warehouse	045. Warehouse	(see detail)																	
343. Nigh. Shop, Cen.	398. Warehouse	052. Medical Cen.																		

YARD IMPROVEMENTS AND/OR SECONDARY BUILDINGS

CONSTRUCTION TYPES

PARTITIONS

PLUG/WATER

PHYSICAL CONDITION

FUNCTIONAL UTILITY

HEATING SYSTEM

AIR CONDITION

SKETCH CARD

NO	STRUCTURE FLAT	DIMENSIONS SIZE	IDENT UNITS	PHYS COND	FUNC UTIL	YEAR BUILT	% GOOD	R C N	R C N L D	CONSTRUCTION TYPES	PARTITIONS	PLUG/WATER	PHYSICAL CONDITION	FUNCTIONAL UTILITY	HEATING SYSTEM	AIR CONDITION	SKETCH CARD
701	APL	010.40650	01	3	3	25				1. Wood Joist (wd. & steel)	0. None	0. None	1. Poor	0. None	1. Hot Air	0. None	
702	PAL	000.56000	01	3	3	25				2. Fire resistant (steel frame)	1. Below Normal	2. Normal	2. Fair	1. Poor	2. Hot Water/Steam	3. Unit Heaters	
703										3. Fireproof (rein. conc. frame)	2. Normal	3. Above Normal	3. Normal	2. Fair	3. Unit Heaters	4. Electric	
704										4. Light Steel	3. Above Normal	6. Solar	4. Good	3. Normal	4. Good	5. Heat Pump	
705																	
706																	

TOTAL

YARD AND SECONDARY BUILDING STRUCTURE CODES

TOTAL

TOTAL

TOTAL

TOTAL

TOTAL

TOTAL

TOTAL

TOTAL

TOTAL

AP7 Fence, Chain Link	CP8 Canopy, Serv. Stat. Average	GS4 Serv. Stat. Attendant's Booth	L74 Lights, Inland, pole & btk.	PC1 Paving, Concrete Parking - Average
CP5 Canopy only	CP9 Canopy, Serv. Stat. Good	L71 Lights, Merc. Vap., Wall Mt. Fld.	L75 Lights, Merc. Vap., pole & btk.	PC2 Paving, Concrete Heavy Duty
CP6 Canopy, Roof/Slab	GS3 Serv. Stat. Attendant's Booth	L72 Lights, Inland, Wall Mt. Fld.	PA1 Paving, Asphalt Parking	PC3 Paving, Concrete Mat/Slab
CP7 Canopy, Serv. Stat. Econ.	Steel/Glass on Masonry	L73 Lights, Fluor., pole & btk. inc.	PA2 Paving, Service Station	RS1 Utility Building, Frame
				RS2 Utility Building, Metal
				RS3 Utility Building, Brick or Stone
				SH1 Shed, Machinery
				SH2 Shed, Automobile
				SH3 Shed, Finished Metal
				SH4 Shed, Quonset
				SH5 Lumber Shed, Frame, 2 sides open
				SH6 Lumber Shed, Frame, 4 sides open

CARD OF CARDS

ADDRESS

—

Garfield Ave.

PLOT DIAGRAM

This image shows a full page of blank graph paper. The grid consists of small squares formed by thin black lines. There are 20 columns and 20 rows of squares, creating a total of 400 square units. The paper is otherwise empty, with no text or markings other than the grid lines.

PHOTOGRAPH

RECORD OF OWNERSHIP

SALES DATA

DATE	CONSIDERATION

LAND VALUE COMPUTATIONS

LOT SIZE OR ACREAGE	UNIT FRONT FOOT PRICE	CORNER INFLUENCE	DEPTH FACTOR	% DEPR.	EFF. FR. FT.	VALUE
136,952 sq.ft.	70 /sq.ft.					95,866

NOTES

72050 2204 21

NOTES:

TOTAL**APPRAISED VALUE**

181,137,000	LAND	95,900
28,433,000	BUILDINGS	593,100
270,000	TOTAL VALUE	689,000

REALTY APPRAISAL CO., WEST NEW YORK, NEW JERSEY

Checked By: _____

[illegible]



CITY OF JERSEY CITY 2026.A 1

30 MONTGOMERY STREET-SUITE 411

JERSEY CITY, NJ 07302

201 - 547-5055

Permit Number: 20050113

Permit Date: 01/10/2005

Update Number:

Control Number: 39762

Application Date: 01/06/2005

CONSTRUCTION PERMIT**IDENTIFICATION****OWNER/PROPERTY DETAILS**

Block : 2026.A	Lot : 1	Qualifier :	
Work site Location:	900 GARFIELD AVE JERSEY CITY		Contractor: Larry Bisignano
Owner In Fee:	FISHBEIN FAMILY PTNSHP.		Address: 4 overlook ct
Address:	2520 POLK ST		bayville nj NJ 08121
	UNION, N J NJ 07083		Telephone: (732) - 363-9453
Telephone:	() -		Lic. No. / Bldrs. Reg. No.: 13576
Use Group(s):	R-3		Federal Emp. No.:

is hereby granted permission to perform the following work :

- | | | |
|--|--|-------------------------------------|
| <input type="checkbox"/> BUILDING | <input type="checkbox"/> PLUMBING | <input type="checkbox"/> DEMOLITION |
| <input checked="" type="checkbox"/> ELECTRICAL | <input type="checkbox"/> FIRE PROTECTION | <input type="checkbox"/> OTHER |
| <input type="checkbox"/> ELEVATOR DEVICES | <input type="checkbox"/> MECHANICAL | |
| <input type="checkbox"/> ASBESTOS ABATEMENT | <input type="checkbox"/> LEAD HAZARD ABATEMENT | |

(Subchapter 8 only)

DESCRIPTION OF WORK:

electrical renovation

ESTIMATED COST OF WORK:

Cost of Construction:	0.00
Cost of Alteration:	7,000.00
Cost of Demolition:	0.00

Total Cost:	\$7,000.00
-------------	------------

If construction does not commence within one year of date of issuance,
or if construction ceases for a period of six months, this permit is void.

MICHAEL J. REGAN

Date

Construction Official

:: Failure to obtain all required inspections may result in administrative action.
:: Final inspections are required before final payment is to be made to contractor.
:: An approved set of plans must be kept at the worksite at all times

Note:

PAYMENTS (Office Use Only)

Building	
Electrical	\$118.00
Plumbing	
Fire Protection	
Elevator Devices	
Mechanical	
VolFee (DCA)	
AltFee (DCA)	\$9.00
Other Fees	
CO Fee	
CCO Fee	
Minimum Fee	
Total	\$127.00
All Fees Waived :	No

Amount to be Paid:	\$127.00
Check Number:	6028/27
Check amount:	\$127.00

Collected by:	
Receipt No:	
Total Cash Amount	
Total Check Amount	\$127.00
Total CC Amount	
Grand Total	\$127.00

OFFICE OF THE CLERK
(609)292-5082

DIV. OF ASSESSMENTS
JUL 23 1990

COURT OF NEW JERSEY



CN 972
TRENTON, N.J.
08625-0972

July 9, 1990

JOSEPH HEALY ESQ.
CITY HALL-LAW DEPT.
280 GROVE ST.
JERSEY CITY NJ 07302

RE: Counterclaim: FISHBEIN FAMILY
PARTNERSHIP vs JERSEY CITY
Filing Date: 06/27/90
Block #: 2026.A
Lot #: 1

Counsel:

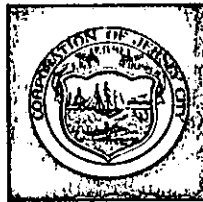
Your pleading in the above captioned case has been received. It is filed under docket number 09-06-2621-90. Kindly refer to this number when forwarding additional papers or correspondence.

Acceptance for filing shall not be deemed approval of validity or timeliness by the Tax Court.

Very truly yours,

Wesley R. LaBar, Clerk
Tax Court of New Jersey

cc: ☐ County Tax Administrator
☐ Deputy Attorney General
☒ Municipal Assessor
☐ Municipal Attorney
☐ Taxpayer:
☐ File



CITY OF
JERSEY CITY
CITY HALL • JERSEY CITY, N. J. 07302
(201) 434-3600

DEPARTMENT OF FINANCE
ASSESSMENT DIVISION

August 24, 1973

Mr. William Robertson, Jr.
777 Bergen Avenue
Jersey City, New Jersey

Block: 2026A Lot: 1 Location: 900 Garfield Avenue
Owner: *795 Ledgerwood Corp*
c/o Sidney Krieger, 11 Commerce St., Newark, N.J.

Attorney:

Dear Sir:

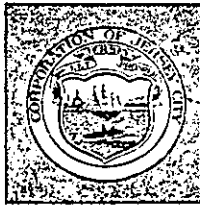
An appeal has been filed for 1973 with the Hudson County Board of Taxation upon the above property and you are hereby assigned to report upon form # 5 as soon as possible, together with a letter stating the value to which you are prepared to testify.

Copy of appeal attached.

Very truly yours,

Margaret Jeffers
Supervisor of Assessments
and Tax Collections

MJ
Enc.



CITY OF
JERSEY CITY
CITY HALL • JERSEY CITY, N. J. 07302
(201) 434-3600

DEPARTMENT OF FINANCE
ASSESSMENT DIVISION

August 18, 1977

Mr. Hugh McGuire, Jr.
855 Summit Avenue
Jersey City, New Jersey

BLOCK 2026-A LOT 1

LOCATION: 900 Garfield Avenue

OWNER: C/o David Mandelbaum, Esq.

ATTORNEY:

Dear Sir:

An appeal has been filed for the taxing year 1977 with the Hudson County Board of Taxation upon the above property and you are hereby assigned to report upon Form # 5 as soon as possible, together with a letter stating the value to which you are prepared to testify.

Copy of appeal attached.

Very truly yours,

Margaret Jeffers
Tax Assessor

JERSEY CITY NOW!

LAWRENCE CONSTRUCTION COMPANY

CUSTOM BUILT INDUSTRIAL PLANTS FROM SITE SELECTION TO FINANCING

2520 POLK STREET
UNION, NEW JERSEY 07083
TEL.: 379-2550

October 9, 1973

Mrs. Margaret Jeffers
Department of Finance
Assessment Division
City of Jersey City
City Hall
Jersey City, New Jersey 07302

Dear Mrs. Jeffers:

With reference to your letter of October 1, 1973, copy of which is enclosed, please be advised subject property was conveyed to Michael Harris Corporation.

Very truly yours,

LAWRENCE CONSTRUCTION CO.

BY: D. L. Molyneux
D. L. MOLYNEUX
(04)

Enc.

DLM:dh



CITY OF
JERSEY CITY
CITY HALL • JERSEY CITY, N. J. 07302
(201) 434-3600

DEPARTMENT OF FINANCE
ASSESSMENT DIVISION

October 1, 1973

Re: Block 2026A, Lot 1

Mrs. D. L. Molyneux
Lawrence Construction Company
2520 Polk Street
Union, New Jersey 07083

Dear Mrs. Molyneux:

Was the above property conveyed by deed to the Michael Harris Corporation or is Lawrence Construction Company still the title owner and Michael Harris Corporation the tenant?

Very truly yours,

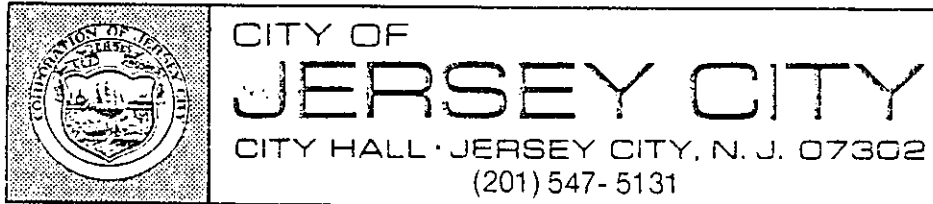
Margaret Jeffers
Margaret Jeffers
Supervisor of Assessments
and Tax Collections

MJ:McS

RECEIVED
OCT 2 1973

*M. W.
See if we have
deed*

By _____



DEPARTMENT OF FINANCE
ASSESSMENT DIVISION

February 7, 1980

Mr. Hugh A. McGuire
855 Summit Avenue
Jersey City, New Jersey

Re: Block 2026A Lot 1
Address: 900 Garfield Ave.
Permit No. 58864

Dear Mr. McGuire:

The above Permit is still open in our files.
In other words, we never received a completion date.

Will you kindly ascertain if the work involved
was ever done and if so file a full report.

Very truly yours,

Margaret Jeffers
Margaret Jeffers
Assessor

MJ:ad
Enc.



CITY OF
JERSEY CITY
CITY HALL · JERSEY CITY, N. J. 07302
(201) 547- 5131

DEPARTMENT OF FINANCE
ASSESSMENT DIVISION

September 21, 1982

Mr. Hugh McGuire
855 Summit Avenue
Jersey City, New Jersey

402200
70
332200
137000

1982 = Settled @ 470,000. Ld
Ld. 437000 137000
470000 333000
470000 470000.0

BLOCK 2026A LOT 1

LOCATION 900 Garfield Avenue

OWNER 795 Lidgewood Corp.

ATTORNEY David Mandelbaum, Esq.
80 Main Street
West Orange, N.J. 07052

Dear Sir:

An appeal has been filed for the taxing year 1982 with the Hudson County Board of Taxation upon the above property and you are hereby assigned to report upon Form #5 as soon as possible, together with a letter stating the value to which you are prepared to testify.

Copy of appeal attached.

Very truly yours,

Margaret Jeffers
Margaret Jeffers
Assessor

MJ:jg
Enc. (Appeal attached)

TAX COURT OF NEW JERSEY

*File
in Tax
Appeals*



OFFICE OF THE CLERK

CN 972
TRENTON, NJ
08625

August 4, 1983

Mandelbaum & Mandelbaum
80 Main Street,
West Orange, New Jersey 07052

Re: Docket No. 09-06013A-83D
795 Lidgewood Corp. v.
City of Jersey City
Block 2026A, Lot 1
Filing Date: Aug. 1, 1983
Filing Fee: \$75.00

Gentlemen:

We are in receipt of the above named pleading and requisite filing fee. The pleading has been filed and assigned a docket number. Kindly refer to this docket number when forwarding additional papers or correspondence concerning this case.

Acceptance for filing shall not be deemed approval of validity or timeliness by the Tax Court.

Very truly yours,

Blaine B. Goldsmith
Blaine B. Goldsmith, Clerk
Tax Court of New Jersey

EBG: lfm
cc: County Tax Administrator
Municipal Attorney
Municipal Assessor

103 103-2 10 10 20
103 103-2 10 10 20

TAX COURT OF NEW JERSEY

OFFICE OF THE CLERK



CN 972
TRENTON, NJ
08625

December 16, 1982

David Mandelbaum, Esq.
Mandelbaum & Mandelbaum, Esqs.
A Professional Corporation
80 Main Street
West Orange, NJ 07052

Re:

Docket No. 09-06092A-82
796 Lidgewood Corp. vs. City of
Jersey City
Block 2026.A Lot 1
900 Garfield Avenue
Filing Date: Dec. 14, 1982
Filing Fee: \$60.00

Dear Mr. Mandelbaum:

We are in receipt of the above named pleading and requisite filing fee. The pleading has been filed and assigned a docket number. Kindly refer to this docket number when forwarding additional papers or correspondence concerning this case.

Acceptance for filing shall not be deemed approval of validity or timeliness by the Tax Court.

Very truly yours,

Elaine B. Goldsmith
Clerk of the Tax Court of New Jersey

EBG: rab
cc: County Tax Administrator
Municipal Attorney
Municipal Assessor

TAX COURT OF NEW JERSEY

OFFICE OF THE CLERK
(609)292-5082



CITY OF JERSEY CITY

'91 JUL 11 AM 11:00

DIV. OF ASSESSMENTS

CN 972
TRENTON, N.J.
08625-0972

July 2, 1991

WATERS, MCPHERSON, MCNEILL, ESQS.
300 LIGHTING WAY
SECAUCUS, NJ 07096

Re: Complaint:
FISHBEIN FAMILY PARTNERSHIP
vs. JERSEY CITY
Filing Date: 04/26/91
Block #: 2026.A
Lot #: 1

Counsel:

Your pleading in the above captioned case has been received. It is filed under docket number 09-06-4812-91. Kindly refer to this number when forwarding additional papers or correspondence.

Acceptance for filing shall not be deemed approval of validity or timeliness by the Tax Court.

Very truly yours,

Wesley R. LaBar, Clerk
Tax Court of New Jersey

NOTE:

All communications from the Court to the attorney for the municipality will be to the Municipal Attorney to whom a copy of this letter is being sent unless the Clerk of the Court is notified in writing of a change in attorney for the municipality.

cc: County Tax Administrator
Municipal Assessor /
Attorney for Defendant
JOSEPH HEALY, ESQ.
File

Municipal Assessor's Copy

WATERS, McPHERSON, McNEILL

A PROFESSIONAL CORPORATION

ATTORNEYS AT LAW

SECAUCUS-JERSEY CITY-FAIRFIELD-TRENTON-CALDWELL

MEADOWLANDS OFFICE

300 LIGHTING WAY

P.O. Box 1560

SECAUCUS, NEW JERSEY 07096

201-863-4400

DANIEL J. POLLAK

TELEX 129162

TELECOPIER
(201) 863-2866

June 2, 1992

VIA HAND DELIVERY

Mary Ann Murphy, Esq.
Jersey City Corporation Counsel
Law Department
280 Grove Street
Jersey City, New Jersey 07302

Re: **1991 Jersey City Tax Appeals**
Fishbein v. Jersey City

Dear Ms. Murphy:

Enclosed please find signed Stipulations of Settlement and Withdrawal forms for the following 1991 tax appeals which were marked Stipulation to follow at the County Board hearing on April 23, 1992:

- (1) Block 2026.A Lot 1
900 Garfield Avenue
- (2) Block 2026.A Lot 3.A
2 Dakota Street
- (3) Block 2006.A Lot 1
800 Garfield Avenue
- (4) Block 2006.A Lot 2
Carteret & Garfield Avenues
- (5) Block 1510 Lot Y
East Linden Avenue
- (6) Block 1497 Lot 2.L
Caven Point Road
- (7) Block 2026.A Lot 4A
2 Dakota Street

Mary Ann Murphy, Esq.
June 2, 1992
Page 2

- (8) Block 2006.A Lot 3
East of Linden Avenue
- (9) Block 2007 Lot 2.A
800 Garfield Avenue
- (10) Block 2026.A Lot 2.A
880 Garfield Avenue

Withdrawal of the above matters numbered 7-10 are conditioned on the execution of Stipulations of Settlement for appeals numbered 1-6.


Kindly execute the Stipulations and return them to our waiting messenger for filing with the County Board of Taxation.

Thank you for your cooperation.

Very truly yours,

WATERS, MCPHERSON, MCNEILL, P.C.

BY: _____


DANIEL J. POLLAK

DJP/crr
Encl.

cc: Stanley Kosakowski (Via Facsimile)
William J. Stack, II
Brian Lynch



NOTICE AND ORDER OF PENALTY

Permit/Control #: 0
Date Issued: 1/11/2002
Violation #: 20020034

IDENTIFICATION

Work Site Location: 900 GARFIELD AVE JERSEY CITY, NJ
Block: 21501 Lot: 20 Qualification Code: _____
Owner in Fee: 900 Garfield Ave. LLC
Owner Address: 900 Garfield Jersey City NJ 07305
Agent/Contractor: _____
Address: _____
To: ☐ Owner ☐ Other:
☐ Agent/Contractor

ACTION

- ☒ On 1/10/2002, you were found to be in violation of the State Uniform Construction Code Act and Regulations promulgated thereunder. A ☐ **Notice of Violation and Order to Terminate**, ☐ **Notice of Unsafe Structure**, ☐ **Notice of Imminent Hazard** was issued. Reinspection of the work site on _____ revealed the following violation(s) remain:
YOU ARE OCCUPING AN ADDITION WITHOUT FIRST OBTAINING A CO IN VIOLATION OF NJAC 5:23-2.23
Subcode: B
Violation: Building stands vacant and in a state of deterioration, must be demolished or rehabed forthwith,
Violation Reg: OTHER
Official: MICHEAL J. REGAN
Immediate Penalty: \$500.00
Ongoing Penalty: \$500.00
Total Penalty: \$500.00
Agent:
Address:
City:
State:
Zip:
Phone:
Description:
Notes:
Abate Number: 0
Abate Date: 1/11/2002
Abate Comment:

REPAIR
20020035, Notice Date: 1/11/2002 YOU ARE OCCUPING AN ADDITION WITHOUT FIRST OBTAINING A CO IN VIOLATION OF NJAC 5:23-2.23
- ☐ On _____, you were found to be in violation of the State Uniform Construction Code Act and Regulations promulgated thereunder, in that you ☐ **made a false or misleading written statement, or omitted required required information in an application or request for approval; or** ☐ **failed to obtain a construction permit; or** ☐ **failed to request required inspections; or** ☐ **allowed occupancy prior to receiving a certificate of occupancy.**
- ☐ On _____, you were found to be in violation of the State Uniform Construction Code Act and Regulations promulgated thereunder. A **Stop Construction Order** was issued. Reinspection of the work site on _____ revealed a failure to comply with that **Stop Construction Order**.

PENALTY

Therefore, you are hereby **ORDERED** to pay a penalty in the amount of \$0.00 for each violation for a total penalty of \$0.00.

Further, take **NOTICE** that for each ☐ week ☒ day that any of the said violations remain outstanding after _____ an additional penalty of \$0.00 per ☐ week ☒ day shall result

If you wish to contest this **ORDER**, you may request a hearing before the Construction Board of Appeals of the Jersey City Construction Board of Appeals within 15 days of receipt of this **ORDER**



NOTICE AND ORDER OF PENALTY

Permit/Control #: 0
Date Issued: 1/11/2002
Violation #: 20020034

as provided by N.J.A.C. 5:23 A-2.1. The Application of the Construction Board of Appeals may be used for this purpose.

Your application for appeal must be in writing, setting forth your name and address, the address of the building or site in question, the permit number, the specific sections of the Regulations in question, and the extent and nature of your reliance on them. You may include a brief statement setting forth your position and the nature of the relief sought by you. You may also append any documents that you consider useful

The fee for an appeal is \$50.00 and should be forwarded with your application to the Construction

Board of Appeals Office at: C/O Office of the Construction Official / City Hall Annex
1 Jackson Square, 2nd Floor
Jersey City, NJ 07305

If you have any questions concerning this matter, please call: (201) 547-5055

NOTICE and ORDER of PENALTY:

Construction Official

Date: _____

JERSEY CITY

(ENGINEERING DEPT.)



LDS JC-E 10506410

Garfield Avenue

Betty K.

RECEIVED



89 DEC -6 AM 10:30

CITY OF JERSEY CITY
ENGINEERING

State of New Jersey

DEPARTMENT OF HEALTH
CN 360, TRENTON, N.J. 08625-0360

MOLLY JOEL COYE, M.D., M.P.H.
COMMISSIONER

December 1, 1989

Dear Employer and Employees,

The New Jersey Department of Health (NJDOH) recently completed a preliminary survey of your facility:

Talerico Used Cars
846 Garfield Avenue
Jersey City, New Jersey 07305

Your facility was included in this survey because the New Jersey Department of Environmental Protection (NJDEP) has identified your facility as either built on or adjacent to one of the known chromium-contaminated sites in Hudson County.

These preliminary surveys are being conducted for the following purposes:

- * To identify areas in your facility where chromium-contaminated material is present.
- * To evaluate the potential for exposure to chromium contamination by employees and management personnel in your facility.
- * To give you some background information about the potential health effects of exposure to chromium and ways to avoid or reduce exposure.
- * To give you information regarding the remediation (clean up) efforts initiated by NJDEP.
- * To obtain information that will help consultants who will conduct a comprehensive industrial hygiene survey of your facility during the next year.

Please make the enclosed preliminary report on the above site available to all personnel on site.

For your information we have also enclosed copies of the following:

NJDOH Preliminary Workplace Survey Report
Results of Investigations Contaminant Study and Hydrogeologic
Investigations, Garfield Avenue Site, D'Appolonia Waste
Management Services, Pittsburgh, PA
NJDOH Factsheet - Chromium in the Workplace
NJDOH Factsheet - Chromium and Your Health

Through a contract between the New Jersey Department of Environmental Protection and a private consultant, a comprehensive industrial hygiene evaluation will take place at your facility in the future. It is our understanding that this evaluation will include comprehensive industrial hygiene sampling and that a report with specific recommendations for remedial measures will be prepared and provided to you.

Please confirm in writing that you have made the enclosed preliminary report available to all personnel at your facility.

If you have questions concerning your workplace, please call Carol Lamond at (609) 984-1863.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Raja Iglewicz".

Raja Iglewicz
Industrial Hygienist
Health Hazard Evaluation Program
Occupational Health Service

NEW JERSEY DEPARTMENT OF HEALTH - OCCUPATIONAL HEALTH SERVICE

PRELIMINARY WORKPLACE SURVEY REPORT - HUDSON COUNTY CHROMIUM PROJECT

Site Name: Garfield Avenue Site DEP Site No. 114
Business Name: Talerico Used Cars
Address: 846 Garfield Avenue, Jersey City, NJ 07305
Type of Business: Used Car Dealer
Date of Workplace Survey: 11-15-89 Phone: (201) 333-9608

OBSERVATIONS:

At the time of the inspection there was visual evidence of possible chromium contamination observed outside this facility. Yellow crystals were noted in the surface soil in an area that had recently been excavated in order to install sewer lines. Yellow puddled water was observed on the street in front of the dealership (Carteret Street).

There was no visible evidence of structural damage to the building at the time of the inspection.

Note that this workplace is built near the former site of the PPG plant which is listed by NJDEP as a known chromium-contaminated site. (See attached Results of Investigations Contaminant Study and Hydrogeologic Investigations, Garfield Avenue Site, D'Appolonia Waste Management Services, Pittsburgh, PA.)

The possibility of employee exposure to chromium-contaminated material exists at your facility through inhalation and tracking of the material into the workplace. See the attached recommendations to limit personal exposure.

Send Report To: Fred Talerico, Jr., Manager, Talerico Used Cars
Fred Talerico, Sr., Owner, Talerico Used Cars
Walter Lezynski, Jersey City Div. of Health
Robert Ferraiuolo, Director, Hudson Regional Health Comm.
Diana Crowder, Hudson Regional Health Comm.
Ron Corcory, NJDEP
Betty Kearns, Env. Planner, Jersey City Chromium Task Force

INTERIM STEPS TO CONTROL YOUR PERSONAL EXPOSURE:

- * Learn to recognize chromium. It may appear as yellow, white or green crystals on walls and other surfaces. It may be yellow or green in water. It may be reddish-orange or green in the soil.
- * Avoid known areas of contamination wherever possible.
- * Do not raise dust or track it into work areas.
- * Change your work clothing to street clothing at the end of the shift.
- * Change your work shoes to street shoes at the end of the shift. Do not track dust into your car or home.
- * Keep work and eating areas free of dust and accumulated dirt.
- * Wash your hands before eating or drinking.
- * Wash eating utensils before eating or drinking.
- * Maintenance personnel should wet-wipe or mop, do not sweep or vacuum.
- * Many times you cannot see the chromium contamination. If the area has been identified as containing chromium by the New Jersey Department of Environmental Protection (NJDEP) and/or the New Jersey Department of Health (NJDOH), please use caution and avoid those areas.

Report

Results of Investigations Contaminant Survey and Hydrogeologic Investigations Garfield Avenue Site

D'APPOLONIA

WASTE MANAGEMENT SERVICES

January 13, 1984

Project No. 83-1690

Mr. R. J. Samelson
Manager of Environmental Programs
PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272

Results of Investigations
Contaminant Survey and Hydrogeologic Investigations
Garfield Avenue Site
Jersey City, New Jersey

Dear Mr. Samelson:

D'Appolonia Waste Management Services, Inc. (D'Appolonia), was retained by PPG Industries, Inc. (PPG), to conduct a contaminant survey and hydrogeologic assessment at the Garfield Avenue site to evaluate the vertical and horizontal extent of chromium contamination and its impact on ground water encountered at the site. The investigation plan was proposed in a letter to Mr. R. J. Samelson of PPG. On October 13, 1983, the New Jersey Department of Environmental Protection (DEP) confirmed its concurrence with the plan.

The Garfield Avenue site was the site of chromium ore processing by PPG from 1954 to 1964, at which time the property was sold. The property has been subsequently transferred to others and developed for light industrial use. A portion of the property remains undeveloped. Initial soil samples from these undeveloped areas contained 50 to 200 parts per million (ppm) hexavalent chromium. This letter report contains the results of D'Appolonia's investigations at the Garfield Avenue site, including a description of methodologies utilized, field observations, and results of laboratory analyses.

FIELD EXPLORATION AND SAMPLING PROGRAM

The major objective of this task was to determine the areal extent of chromium present at the site as well as the hydrogeologic setting. As used in this report, the site is defined as the area within the limits of the original PPG property lines as shown in Figure 1. Due to the presence of the existing buildings and pavement, the investigation was limited to vacant lands and primarily conducted upon the 4.5-acre vacant lot bordering Halladay Street.

The field exploration program consisted of test pit excavations, shallow borings, and observation well installations. The existence of chromium in soil was primarily determined by visual observation of samples taken from these sites. Laboratory analyses were conducted on individually selected soil samples to quantify the concentration of hexavalent and total chromium in various materials found throughout the site. Ground water samples were also collected and tested during the investigation.

Test Pit Excavations

Thirteen test pits were excavated in the vacant lot area to determine the vertical extent of the chromium ore residue, the nature of the underlying soil, and extent of chromium migration. Test pits were excavated with a backhoe to depths ranging from 3.1 to 8.1 feet below ground surface. Excavation was halted whenever ground water was reached; whenever equipment refusal was encountered due to very dense materials (i.e., coarse fill); or whenever all fill materials had been penetrated and several feet of natural soil material was evident. For purposes of this report, "fill" will refer to both chromium ore residues and other backfill materials.

Descriptions of visual observations of the excavated test pits were prepared, with special effort made to record the presence of chromium salts, ground water, fill materials, or other noteworthy items. Soil samples were selected during test pit excavation from nearly every visually distinct layer (generally no greater than two feet in thickness), sealed in airtight plastic bags, and returned to D'Appolonia's laboratories. Locations of test pit excavations are shown in Figure 2, and test pits logs are included as Appendix A.

Shallow Borings

Eight shallow borings were drilled on parcels of open land to identify the possible presence of chromium around several of the existing buildings. These borings were drilled using rotary drilling techniques and split-spoon samples collected at 2.5-foot intervals, with the deepest sample collected from 10 to 11.5 feet in each of these borings. The borings were backfilled immediately upon completion of sampling. No water samples were obtained. The locations of shallow borings are shown in Figure 2.

Observation Well Installations

Three clusters of observation wells were installed at locations shown in Figure 2. The purpose of these wells was to establish site hydrogeologic setting and obtain soil and water quality samples from deeper strata. Each cluster consists of two wells; one deep well installed 60 feet or

greater below ground surface and a second shallow well installed approximately 18 feet below ground surface. The wells were installed in borings which were drilled using rotary drilling methods. Soil samples were obtained from the deep borings at five-foot intervals (distances between the tops of sampling drives) by driving a standard split-spoon sampler with a 140-pound hammer falling 30 inches. The number of hammer blows required to drive the sampler per each six-inch interval and a description of visual observation of each sample were recorded on the field boring logs. These are provided in Appendix B. Deep soil borings were terminated after encountering a substantial thickness of fine-grained materials (i.e., clay-silty clay). This was done with the knowledge and approval of DEP personnel on site at the time, as it was felt these deep clayey materials would provide a substantial barrier to downward chromium migration. This was later verified by soil sample analyses.

Observation wells were constructed of threaded, flush-joint Schedule 40 polyvinyl chloride (PVC) pipe with a two-inch inside diameter (ID). A ten-foot section of slotted PVC screen with a slot size of 0.020 inch was placed in the bottom of each well. The annulus of the boring was then gravel packed around the slotted screen to act as the sensing zone. The gravel pack was normally extended somewhat above the screen and the sensing zone then sealed off from the overlying portion of the boring by use of a bentonite seal. The seal was extended for several feet and the remainder of the annulus then filled with a cement grout to ground surface. A metal protective casing with locking cap was installed to protect the aboveground portion of the PVC riser pipe at each observation well. The construction details for each observation well are presented in Appendix C.

After the grout had been allowed to "cure" approximately two days, the wells were developed by forcing standing water out of the riser pipe through the use of compressed air. This procedure was repeated several times at each well, allowing sufficient recharge time between each attempt.

Water Sampling Program

Prior to water sampling of the six observation wells, water levels were measured and each well was purged of at least three well volumes of water. Field measurements of pH and specific conductance were made periodically during this purging process. When pH and specific conductance levels stabilized, the well was sampled using a Kemmerer-type sampler.

Additionally, when water was encountered in sufficient quantity, water samples were collected from the test pits and one surface water sample was collected from the on-site ditch (Figure 2). Samples for dissolved

metals analyses were filtered through a 0.45-micron membrane filter, although certain samples could not be filtered due to the presence of a thick organic liquid. All water samples were properly preserved according to Environmental Protection Agency (EPA) procedures. Water samples were analyzed for total and hexavalent chromium, and ground water samples were further analyzed for EPA primary and secondary inorganic drinking water parameters.

RESULTS OF INVESTIGATIONS

Site Hydrogeologic Setting

Figure 3 presents a generalized depiction of site stratigraphy prepared from the logs of the three deep borings drilled for observation well installation. As shown, approximately 15 feet of fill materials were encountered across the site, underlain by sand deposits approximately 30 to 40 feet thick. This layer contained coarse to very fine sand, indicating differing permeabilities could be expected in the three borings which penetrated this layer. Beneath the sand, a layer of clay or silty clay materials was encountered. This layer was found to be at least 25 feet thick at Boring W-1A. In Boring W-2A, this clayey layer was approximately 15 feet thick and was underlain by a small lense or layer of sand and gravel which, in turn, was underlain by more fine-grained materials. Not enough information is available to determine if the sand and gravel encountered within the clay layer in W-2A is continuous over a substantial portion of the site.

Ground water elevations encountered in the observation wells are presented in Table 1. The ground water levels in the three deep observation wells are also shown in Figure 3. These levels indicate ground water flow is generally to the southeast beneath the site. Ground water elevations were similar in the shallow well and deep well at W-1 and W-2, indicating these wells are in proper communication with the ground water table. At Observation Well W-3, the water table elevation in the shallow well was more than five feet higher than that observed in the deep well. This indicates the presence of less pervious materials in this area.

Soil Quality

Visual evidence of chromium presence was noted on the site surface, in several test pits, several of the shallow borings, and in the upper portion of W-1A. Greenish-yellow salts, characteristic of the presence of chromium, were visible over a large portion of the site, in quantities ranging from small pockets or clumps to patches a few square feet in size.

Chromium on the site was found to be unevenly distributed. Chromium in excess of five ppm was detected in some locations as deep as 41.5 feet. It is probable that chromium at this depth is waterborne and not due to the direct presence of chromium ore residues. Table 2 indicates that soil chromium concentrations generally decrease with depth, with the highest levels detected near the surface and virtually no chromium detected below 45 feet. However, some surface samples showed little or no chromium. In nearly all instances where chromium was detected, it consisted primarily of hexavalent chromium, except for those samples analyzed from the 20- to 40-foot range. At those depths, it appears that reducing conditions have been encountered, giving rise to the existence of the divalent and trivalent forms of chromium.

Figure 3 shows concentrations of total and hexavalent chromium in soil samples obtained from the three deep borings. This figure shows that chromium concentrations generally decrease with depth. No detectable chromium contamination was found within or below the clay layer. It is expected this layer will mitigate further downward migration.

Figure 4 shows those locations where chromium was found by visual observations or where laboratory analysis showed a concentration greater than five ppm.

Water Quality

Table 3 presents the results of analysis of water samples collected from test pits and from the surface drainage ditch. As can be seen, chromium is present in water samples from those test pits where chromium ore residues or salts were visible. The surface water sample also contained chromium, indicating at-surface chromium materials may be contaminating infiltration. These samples contained primarily (if not exclusively) hexavalent chromium.

The ground water samples collected from the observation wells contained varying amounts of total and hexavalent chromium, as shown in Table 3. The greatest amounts of chromium were found in the samples obtained from W-1A and W-1B, with the deeper well (W-1A) showing a relatively high amount of total chromium. The wells at W-1A and W-1B are the furthest downgradient of the three on site, as indicated by general ground water flow direction. Wells W-2 and W-3 are located in a more upgradient direction and contain substantially less chromium than W-1.

It should be noted that during drilling and test pit excavation, a dark, oily organic liquid with a strong naphthalene-like odor was frequently encountered on site. This material is of unknown origin, but was generally encountered between the depths of 5 and 25 feet. Its odor was generally quite strong and its presence as a second phase oftentimes hindered sample filtration. It was observed that, in most of the test

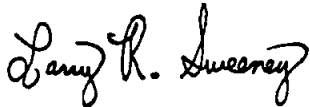
pits and borings, the organic material was generally below the bulk of the waste chrome ore. Figure 5 shows those test pits and borings where hydrocarbon liquids were encountered.

Table 4 presents the results of ground water sample analyses for primary and secondary drinking water standards. Many of these constituents were detected in elevated concentrations in some or all samples. These analyses, coupled with the presence of the hydrocarbons, indicate that ground water beneath the site is of poor quality regardless of the presence of chromium.

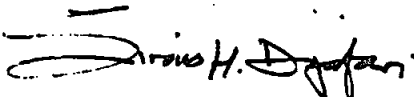
SUMMARY

Chromium was observed or detected in most site soil samples taken during the testing program and appears to be quite unevenly distributed over the site. Chromium levels in the soil generally decreased with depth, and soil samples obtained from the deep clay layer beneath the site showed no detectable chromium concentrations. Hexavalent chromium was the predominant form found on site, although divalent and trivalent forms became more common with depth. Ground water beneath the site was found to be flowing to the southeast and of poor quality. An odoriferous brown hydrocarbon liquid was commonly encountered with ground water across the site. Additionally, ground water samples contained concentrations of several inorganic constituents other than chromium in excess of EPA drinking water standards.

Respectfully submitted,



Larry R. Sweeney
Assistant Project Scientist



Sirous Haji-Djafari, Ph.D., P.E.
Director of Technology Applications

SHD:LRS:rs

TABLE 1
CHROMIUM CONCENTRATION OF
GROUND WATER SAMPLES

BORING	DEPTH ⁽¹⁾ (ft)	SCREENED INTERVAL ⁽¹⁾ (ft)	WATER LEVEL		TOTAL CHROMIUM (mg/l)	HEXAVALENT CHROMIUM (mg/l)
			DEPTH ⁽¹⁾	RELATIVE ELEVATION ⁽²⁾		
W-1A	81.5	45-55 ⁽³⁾	7.0	89.0	1080	124
W-1B	19.0	8-18	5.0	90.7	233	224
W-2A	76.5	65-75	6.3	90.4	0.6	0.6
W-2B	18.0	8-18	5.5	90.9	12	2
W-3A	60.0	49-59	8.2	90.3	0.05	0.04
W-3B	17.0	7-17	3.1	95.7	2.16	1.80

(1) Feet below ground surface.

(2) Elevation of 100.0 arbitrarily assigned to top of hydrant at end of Dakota Avenue. All site elevations are relative to this benchmark. Surveying conducted by Warren George, Inc., Jersey City, New Jersey.

(3) Hole backfilled to 55 feet prior to well construction.

TABLE 2
CHROMIUM CONTENT OF SITE SOILS AS RELATED TO DEPTH

SAMPLING DEPTH (ft)	TEST PIT/BORING NUMBER; SAMPLE NUMBER	TOTAL CHROMIUM (mg/l)	HEXAVALENT CHROMIUM (mg/l)
1.0-3.0	P-3; S-2	1.1	0.32
1.5-2.7	P-5; S-2	20	18
1.4-3.1	P-9; S-2	0.45	<0.05
1.7-3.0	P-6; S-3	180	180
2.1-3.9	P-12; S-3	38	38
2.2-4.2	P-2; S-2	84	72
2.6-5.2	P-11; S-3	0.25	0.08
3.0-5.0	P-13; S-4	0.14	0.12
3.3-4.5	P-1; S-3	0.7	<0.05
3.3-5.3	P-4; S-3	28	28
3.6-5.6	P-8; S-3	0.45	0.44
4.2-6.0	P-10; S-4	0.14	<0.05
4.6-7.6	P-7; S-3	1.2	0.72
5.0-6.5	W-3; S-2 ⁽¹⁾	<0.1	<0.05
5.0-6.5	SB-7; S-3	1.4	<0.05
7.5-9.0	SB-2; S-4	19	19
7.5-9.0	SB-5; S-4	<0.1	<0.05
7.5-9.0	SB-8; S-4	58	48
10-11.5	SB-3; S-5	38	38
10-11.5	SB-4; S-5	<0.1	<0.05
10-11.5	SB-9; S-5	<0.1	<0.05
10-11.5	SB-10; S-5	68	67
10-11.5	W-1; S-3	28	28
15-17	W-2; S-4	<0.1	<0.05
20-21.5	W-1; S-5	27	3.6
20-22	W-2; S-5	19	1.6

See footnote at end of table.

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TABLE 2
(Continued)

SAMPLING DEPTH (ft)	TEST PIT/BORING NUMBER; SAMPLE NUMBER	TOTAL CHROMIUM (mg/l)	HEXAVALENT CHROMIUM (mg/l)
20-21.5	W-3; S-5	27	2.1
30-31.5	W-1; S-7	26	3.1
30-33	W-2; S-7	23	1.6
30-31.5	W-3; S-7	20	1.0
35-36.5	W-3; S-8	13	0.5
40-41.5	W-1; S-9	7.9	1.0
40-43	W-2; S-9	4.0	3.5
45-46.5	W-1; S-10	2.8	2.8
45-46.5	W-3; S-10	<0.1	<0.05
55-57	W-2; S-12	<0.1	<0.05
60-61.5	W-3; S-13	<0.1	<0.05
65-67	W-2; S-14	<0.1	<0.05
80-81.5	W-1; S-15	<0.1	<0.05

(1) Soil samples were obtained from deep borings only at observation well installation locations.

TABLE 3
CHROMIUM CONCENTRATION OF
TEST PIT WATER SAMPLES⁽¹⁾

TEST PIT NUMBER ⁽²⁾	WATER LEVEL ⁽³⁾ (ft)	TOTAL CHROMIUM (mg/l)	HEXAVALENT CHROMIUM (mg/l)	COMMENTS
P-3	4.3	102	98	Chromium waste visible to 4.3 feet.
P-5	3.8	104	108	Chromate salts visible to 3.8 feet.
P-6	4.0	20	18	Chromate salts visible to 3.0 feet.
P-11	5.2	0.90	0.20	No salts visible.
P-12	5.6	1.01	0.28	No salts visible.
P-13	5.5	3.22	<0.05	No salts visible.
-	Surface ⁽⁴⁾	12	10	Sample collected from drainage ditch near center of site.

(1) Refer to Figure 2 for test pit locations.

(2) No significant amounts of water encountered in the remainder of the test pits.

(3) Feet below ground surface.

(4) See Figure 2 for surface water sampling location.

ANALYSIS FOR U.S. EPA PRIMARY AND SECONDARY INORGANIC DRINKING WATER PARAMETERS

TABLE 4

PARAMETER	UNITS	GROUND WATER SAMPLING LOCATION						STANDARD LEVELS (1)
		W-1A	W-1B	W-2A	W-2B	W-3A	W-3B	
pH	-	8.85	12.20	10.00	9.45	7.70	7.20	6.5-8.5
Color (true)	APHA	44,500	14,500	27	1,400	17	270	15
Turbidity	NTU	80	870	30	174	22	102	5
Total Dissolved Solids	mg/l	6,696	2,930	470	3,269	578	3,884	500
Foaming Agents	mg/l	4.4	5.6	0.24	2.4	0.16	1.6	0.5
Arsenic	mg/l	0.034	0.016	0.002	0.068	0.010	0.022	0.05
Barium	mg/l	0.03	<0.01	0.09	0.77	0.18	0.29	1.0
Cadmium	mg/l	<0.001	<0.001	<0.001	0.002	0.001	<0.001	0.01
Chloride	mg/l	535	78	200	37	78	1,220	250
Total Chromium	mg/l	1,080	233	0.6	12	0.05	2.16	170(2)
Hexavalent Chromium	mg/l	124	224	0.6	2	0.04	1.8	0.05
Copper	mg/l	0.31	0.10	<0.01	0.02	0.02	0.04	1.0

See footnotes at end of table.

TABLE 4
(Continued)

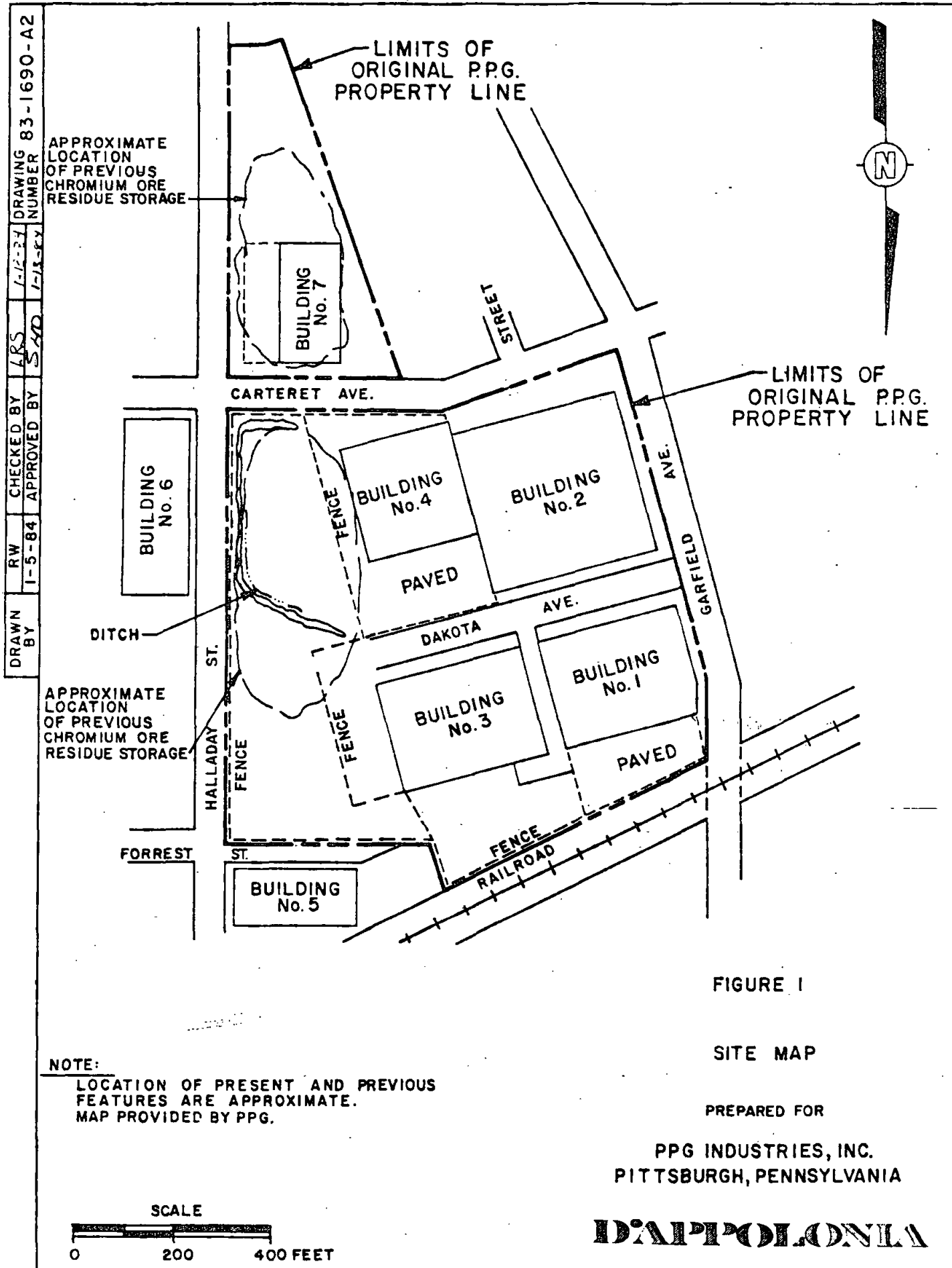
PARAMETER	UNITS	GROUND WATER SAMPLING LOCATION					STANDARD LEVELS (1)
		W-1A	W-1B	W-2A	W-2B	W-3A	W-3B
Fluoride	mg/l	0.17	0.07	0.11	0.53	0.14	0.27
Iron	mg/l	1.8	0.2	<0.1	79	0.8	110
Lead	mg/l	<0.01	<0.01	<0.01	0.41	<0.01	0.13
Manganese	mg/l	0.25	0.02	<0.01	1.42	0.33	2.18
Mercury	mg/l	0.0071	0.0020	0.0005	0.0081	0.0013	0.0116
Nitrate	mg/l	30	10	1.0	1.4	0.2	0.5
Selenium	mg/l	0.005	0.004	<0.001	<0.001	<0.001	0.020
Silver	mg/l	0.001	<0.001	<0.001	0.001	<0.001	<0.001
Sulfate	mg/l	500	300	100	190	210	390
Zinc	mg/l	0.08	0.04	0.01	2.45	0.02	1.50

(1) As established under one or more of the following:

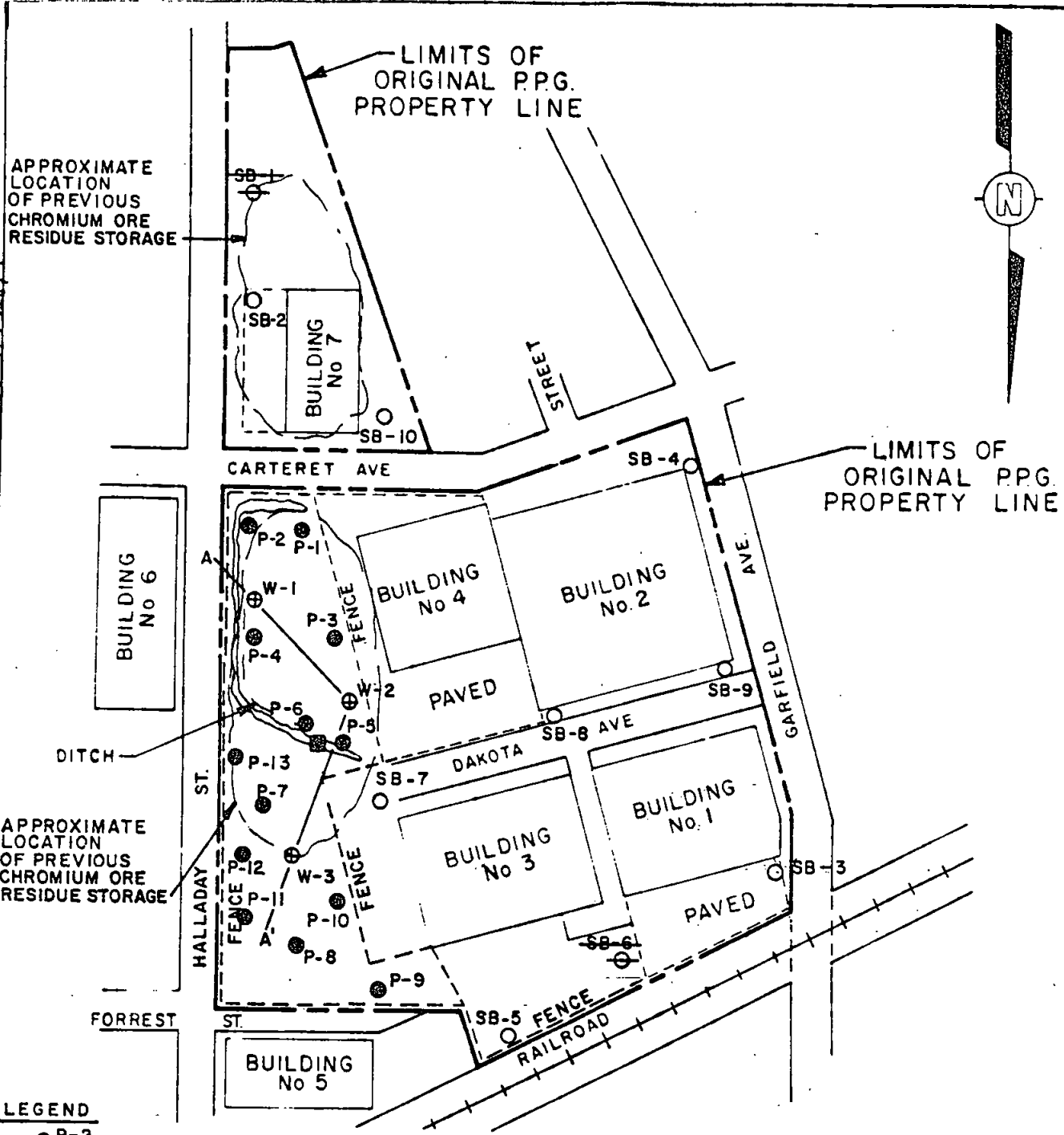
- U.S. EPA National Interim Primary Drinking Water Standards; 40 CFR, Part 141 (1975).
- U.S. EPA Proposed Secondary Drinking Water Standards; 40 CFR, Part 143 (1979).
- U.S. EPA Toxic Pollutants Water Quality Criteria for the Maximum Protection of Human Health; Federal Register, Vol. 45, No. 231, pp. 79318-79379 (1980).

(2) For trivalent chromium.

IDA:MPD:JON:TA



DRAWN BY: [blank]
 1-5-84
 CHECKED BY: LRS
 1-12-84
 APPROVED BY: [signature]
 1-13-84
 DRAWING NUMBER: 83-1690-A3



- LEGEND**
- P-2 TEST PIT
 - SB-8 SHALLOW BORING
 - ⊕ W2 OBSERVATION WELL CLUSTER
 - A—A' CROSS SECTION LOCATION
 - SURFACE WATER SAMPLING LOCATION
- NOTES:**
1. LOCATION OF PRESENT AND PREVIOUS FEATURES ARE APPROXIMATE.
 2. NO DRILLING CONDUCTED AT SB-1 AND SB-6 (PAVED AREAS).

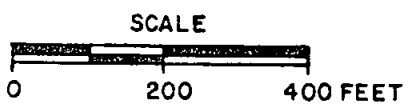
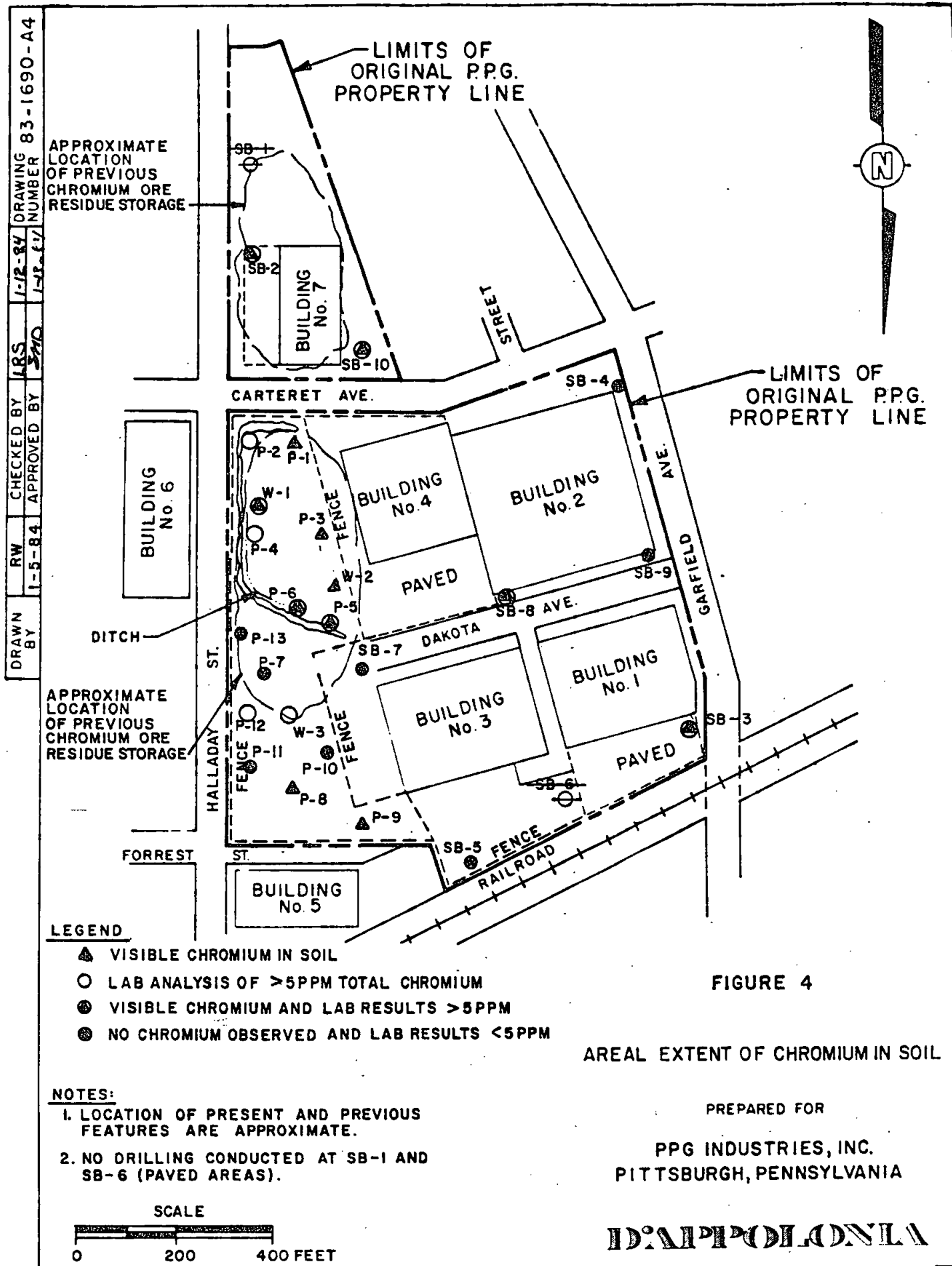


FIGURE 2
BORING AND TEST PIT LOCATIONS

PREPARED FOR
PPG INDUSTRIES, INC.
PITTSBURGH, PENNSYLVANIA

IDA/PT/CD/AD/NA



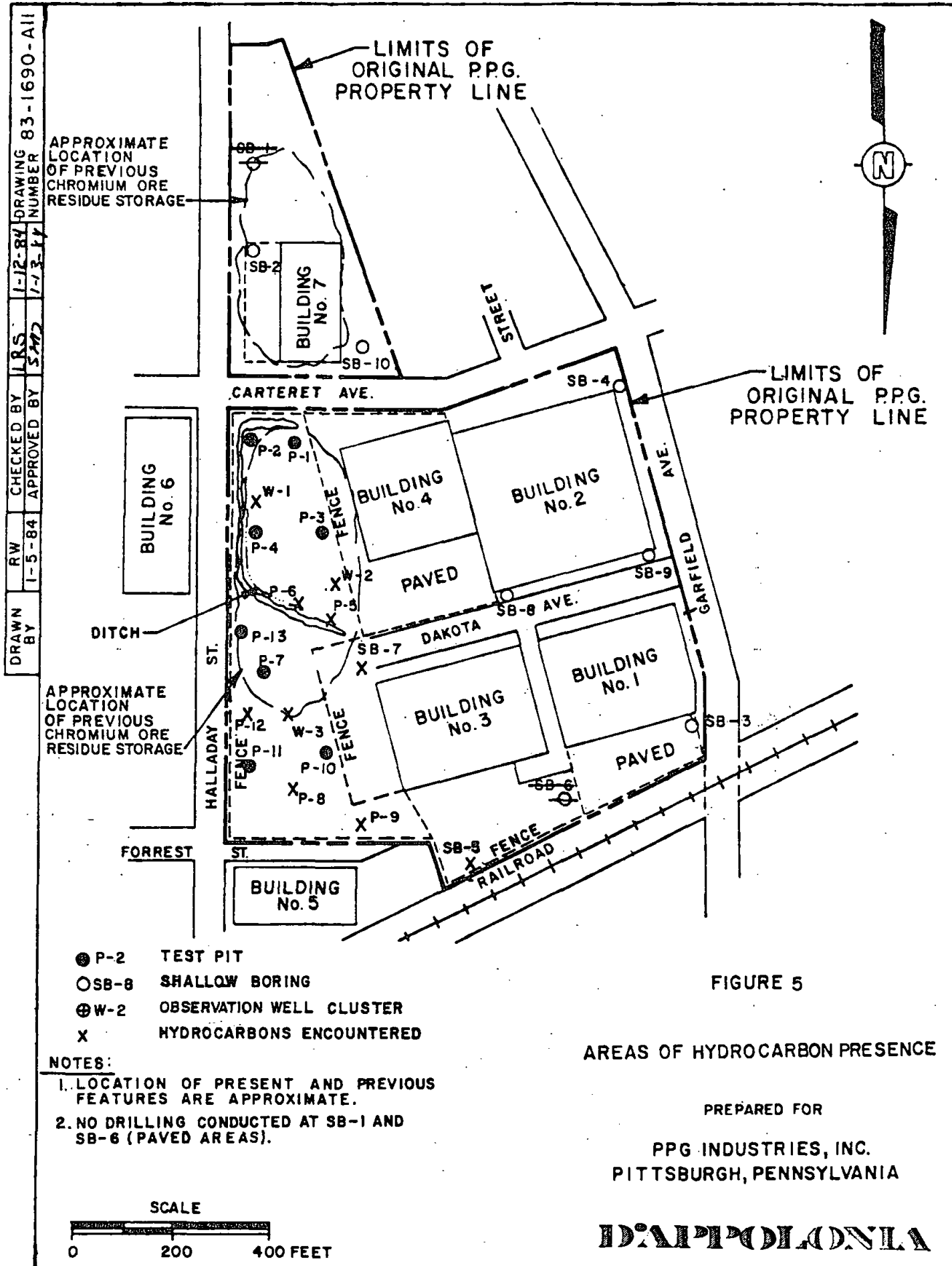


FIGURE 3



CHROMIUM IN THE WORKPLACE

Division of Occupational and Environmental Health

This is a general notice to inform you that this property has been identified by the New Jersey Department of Environmental Protection (NJDEP) as either built on or adjacent to one of the known chromate contaminated sites in Hudson County.

WHAT ARE THE SITES AND HOW DID THEY GET THERE?

There are more than 100 sites in Hudson County known to be contaminated with elevated levels of chromium. There are 77 sites in Jersey City, 26 sites in Kearny and 1 site in Secaucus. Three chromate processing facilities operating in Hudson County, generated a chromium contaminated slag waste material. This slag waste material was used as landfill and diking materials in many areas. The three generators of the waste, Allied Signal Inc., PPG Industries and Maxus Industries (formerly Diamond Shamrock), operated chromate processing facilities for approximately 70 years, from 1900 until 1970. It is estimated that these chromium operations have resulted in the generation of approximately two million tons of waste residue containing from 2% to 5% chromium. Approximately 1,850,000 cubic yards of this material is now present in public, commercial, industrial and residential areas of Hudson County.

WHAT HAS BEEN DONE SO FAR?

To date, the NJDEP has taken soil samples to identify the chromium contaminated sites. Limited clean up actions have taken place at some locations throughout the County, and will continue to take place during the next several months. Under a Directive from the NJDEP these clean up measures have been undertaken by those companies responsible for dumping the waste. Other clean ups will be undertaken by a contractor hired by NJDEP with monies from the New Jersey Spill Fund.

IS CHROMIUM HARMFUL TO MY HEALTH?

A small amount of chromium is found in all people and is essential for good health. However, an excess of chromium can cause illness. Some forms of chromium and some ways you can come in contact with it are more harmful than others.

Information to date about high exposures to chromium in workplace settings has demonstrated that breathing in, eating or having skin contact with large amounts of chromium can cause injury. Some symptoms of injury can occur shortly after exposure. These include injury to the skin, lungs, kidneys, and liver. Your body can repair some of the damage once exposure to chromium has stopped. Although the body can handle small amounts of chromium, a dose too large to tolerate and continued over a long period of time may lead to damage that cannot be repaired. Long term exposure to some forms of chromium may increase the risk of lung cancer, which may not develop for many years.

The New Jersey Department of Health (NJDOH) is providing medical information on chromium exposure to all physicians in Hudson County. If your doctor has not received this information, please have him or her contact your local

health department. In Kearny the telephone number is (201) 997-0600. In Jersey City the telephone number is (201) 547-5168.

WHAT ARE THE PLANS FOR THE FUTURE?

In order to determine if exposures are taking place and to prioritize the sites for cleanup actions, several activities will take place during the next several months at your worksite.

A preliminary workplace survey will be completed by NJDOH and local health department industrial hygienists for all the workplaces on the NJDEP list. This survey will be used to determine the presence of the chromium contamination within your workplace. The survey will also be used to gather background information for a full industrial hygiene evaluation which is planned to take place during the coming year. The full industrial hygiene evaluation will include air monitoring to see if the chromium dust has become airborne and therefore more easily inhaled.

A report containing the results of this survey and the results of the detailed industrial hygiene evaluation will be made available to you, your employer and your labor union. In these reports, we will be making recommendations to your employer regarding cleanup and protective measures. The reports will also be on file at your local health department.

HOW DO I AVOID CHROMIUM HAZARDS?

Contact with chromium on the skin, swallowing food contaminated with chromium, breathing in chromium contaminated dust or accidentally swallowing chromium contaminated soil can be harmful to adults and children.

* LEARN TO RECOGNIZE CHROMIUM WASTE:

-LITTLE OR NO VEGETATION GROWS IN CHROMIUM FILLED SOIL CONTAMINATED WITH CHROMIUM.

-IN SOME FORMS CHROMIUM MAY APPEAR RED, ORANGE, YELLOW OR GREEN.

* WHERE POSSIBLE, AVOID KNOWN CHROMIUM CONTAMINATED AREAS.

* ASK YOUR EMPLOYER TO TELL YOU WHERE THE CHROMIUM CONTAMINATION AREAS ARE IN YOUR WORKPLACE.

WHAT IF I HAVE MORE QUESTIONS ABOUT CHROMIUM?

If you have questions concerning chromium, contact your local health department. Kearny, (201) 997-0600 or Jersey City, (201) 547-5168.

NEW JERSEY DEPARTMENT OF HEALTH
OCCUPATIONAL HEALTH SERVICE
CN 360
TRENTON, NEW JERSEY 08625
(609) 984-1863

3/17/89



CHROMIUM AND YOUR HEALTH

Division of Occupational and Environmental Health

March 1989

WHAT IS CHROMIUM?

Chromium is used in paint, stainless steel, chrome plating, photographic chemicals, leather tanning, and wood preservatives. Its chemical makeup varies and it occurs in several forms including a metal solid or dust. Some of these solids can be dissolved in water. Chromium waste in some forms may appear red, orange or yellow. Chromium in this discussion means all the forms of chromium.

IS CHROMIUM HARMFUL TO MY HEALTH?

A small amount of chromium is found in all people and is essential for good health. However, an excess of chromium can cause illness. Some forms of chromium and some ways you can come in contact with it are more harmful than others. Exposure to a more harmful type of chromium for a longer period of time increases the possibility of health problems.

From what we know about high exposures to chromium in work place settings, breathing in, eating or having skin contact with large amounts of chromium can cause symptoms. Some symptoms can occur shortly after exposure. These include injury to the skin, lungs, kidneys, and liver. Your body can repair some of the damage once exposure to chromium has stopped. Although the body can handle small amounts of chromium, a dose too large to tolerate and continued over a long period of time may lead to damage that cannot be repaired. Long term exposure to some forms of chromium may increase the risk of lung cancer, which would not develop for many years.

WHAT ARE SOME OF THE WAYS I CAN BE EXPOSED TO CHROMIUM?

If you live or work near or have walked on chromium sites you may have been exposed. Exposure can occur through the air by breathing in contaminated dust. It can enter the body by swallowing contaminated water, soil and food. You can also be exposed to chromium by direct contact with the skin.

HOW DO I KNOW IF MY HEALTH HAS BEEN AFFECTED?

Chromium can be an irritant to the skin, eyes, nose and throat. Other health effects may include coughing, wheezing, shortness of breath, fever and weight loss. Rashes, sores, blistering or peeling of the skin, and skin ulcers that do not heal are also possible reactions to chromium exposure. If you are concerned about any symptoms that you have, you should see your doctor or go to your local health clinic.

The New Jersey Department of Health is providing medical information on chromium exposure to doctors in Hudson County. If your doctor or local health clinic has not received this information have them contact the local health department.

HOW DO I GET TREATMENT IF I NEED IT?

Your doctor or local health clinic will be able to advise you should you need treatment.

HOW DO I AVOID CHROMIUM HAZARDS?

Contact of chromium with the skin, swallowing food contaminated with chromium, breathing in chromium contaminated dust or accidentally swallowing chromium contaminated soil can be harmful to adults and children. DO NOT ALLOW CHILDREN OR ADULTS INTO KNOWN CHROMIUM CONTAMINATED SITES. Be suspicious of dust or water from identified or suspected waste sites. Do not try to clean chromium contamination. If you come in contact with chromium, wash off your skin in cool water.

WHICH SITES ARE IDENTIFIED AS PROBLEMS?

Your local health department can provide you with a list of known contaminated sites in your area. Call your local health department if you suspect contamination.

WHAT IF I HAVE MORE QUESTIONS ABOUT CHROMIUM?

If you have further questions, contact your local health department. If you still have questions, your local health department may refer you to the correct state agencies for your particular concern.

Prepared by: New Jersey Department of Health
Division of Occupational and Environmental Health
CN-360 Trenton, N.J. 08625

GUTKIN, MILLER, SHAPIRO, SELESNER & SHOOBE

A PROFESSIONAL CORPORATION
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MARK P. DUGAN

"THE COMMON"
225 MILLBURN AVENUE
MILLBURN, NEW JERSEY 07041
(201) 467-8000
TELECOPIER: 467-5868

1200 ROUTE 46
CLIFTON, NJ 07013
(201) 467-8000

1300 NORTH FEDERAL HIGHWAY
BOCA RATON, FLORIDA 33432
(305) 392-1405
TELECOPIER: (305) 394-9077

April 29, 1987

* FLORIDA BAR
** FLORIDA BAR ONLY
* NJ CERTIFIED TRIAL ATTORNEY
* FL BOARD CERTIFIED TAX ATTORNEY

Millburn
PLEASE REPLY TO Suite 208
FILE NO. 3452-32

Mr. Thomas McKee
Case Manager
Hazardous Waste Management
Department of Environmental Protection
401 E. State Street
CN-028
Trenton, NJ 08625

Re: Lawrence Construction Company/Garfield Avenue Site
Jersey City, New Jersey

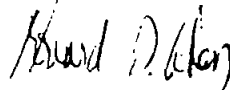
Dear Tom:

This will confirm our telephone conversation on April 24, 1987 wherein you advised that the completion of certain paving at the above site taking place on April 24, 1987 would not create any aggravating condition with respect to alleged contamination of the sewers in that area.

On the basis of the above, we instructed our clients to complete the paving operations.

Thank you for your kind cooperation.

Very truly yours,



HOWARD D. COHEN

HDC:ck

cc: John P. Beyel, Esq.
Ms. Iris E. Buchman
Mrs. Claire Fishbein
Mr. Lawrence Fishbein
Ms. Barbara Maurer

May 4 3 21 PM '87
HAZARDOUS WASTE
MANAGEMENT
PROGRAMS

RECEIVED



State of New Jersey

DEPARTMENT OF HEALTH
CN 360, TRENTON, N.J. 08625-0360

MOLLY JOEL COYE, M.D., M.P.H.
COMMISSIONER

November 29, 1989

Dear Employer and Employees,

The New Jersey Department of Health (NJDOH) recently completed a preliminary survey of your facility:

Qualex, Inc.
900 Garfield Avenue
Jersey City, New Jersey 07305

Your facility was included in this survey because the New Jersey Department of Environmental Protection (NJDEP) has identified your facility as either built on or adjacent to one of the known chromium-contaminated sites in Hudson County.

These preliminary surveys are being conducted for the following purposes:

- * To identify areas in your facility where chromium-contaminated material is present.
- * To evaluate the potential for exposure to chromium contamination by employees and management personnel in your facility.
- * To give you some background information about the potential health effects of exposure to chromium and ways to avoid or reduce exposure.
- * To give you information regarding the remediation (clean up) efforts initiated by NJDEP.
- * To obtain information that will help consultants who will conduct a comprehensive industrial hygiene survey of your facility during the next year.

Please make the enclosed preliminary report on the above site available to all personnel on site.

For your information we have also enclosed copies of the following:

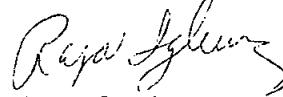
NJDOH Preliminary Workplace Survey Report
Results of Investigations Contaminant Study and Hydrogeologic
Investigations, Garfield Avenue Site, D'Appolonia Waste
Management Services, Pittsburgh, PA
NJDOH Factsheet - Chromium in the Workplace
NJDOH Factsheet - Chromium and Your Health

Through a contract between the New Jersey Department of Environmental Protection and a private consultant, a comprehensive industrial hygiene evaluation will take place at your facility in the future. It is our understanding that this evaluation will include comprehensive industrial hygiene sampling and that a report with specific recommendations for remedial measures will be prepared and provided to you.

Please confirm in writing that you have made the enclosed preliminary report available to all personnel at your facility.

If you have questions concerning your workplace, please call Carol Lamond at (609) 984-1863.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Raja Iglewicz".

Raja Iglewicz
Industrial Hygienist
Health Hazard Evaluation Program
Occupational Health Service

NEW JERSEY DEPARTMENT OF HEALTH - OCCUPATIONAL HEALTH SERVICE

PRELIMINARY WORKPLACE SURVEY REPORT - HUDSON COUNTY CHROMIUM PROJECT

Site Name: Garfield Avenue Site DEP Site No. 114
Business Name: Qualex, Inc.
Address: 900 Garfield Avenue, Jersey City, NJ 07305
Type of Business: Photoprocessing
Date of Workplace Survey: 11-9-89 Phone: (201) 434-0800

OBSERVATIONS:

At the time of the inspection there was visual evidence of possible chromium contamination observed at this facility. Yellow chromium-like crystals were noted in the surface soil along the recently paved sidewalk outside the building facing Garfield Avenue. It was reported by the maintenance manager at the time of the inspection that yellow crystals had recently been observed in a crack in the floor in the Film and Wholesale Room. At the time of the inspection the area had already been cemented and painted.

There was visible evidence of structural damage to the building at the time of the inspection. The floor in the Stock Room was buckled and numerous cracks were noted in the cement floor. Cracks were observed in the Boiler Room floor and a two-inch wide crack approximately 12-15 feet in length was noted in the wall between the Boiler Room and the Ladies Room.

Note that this workplace is built near the former site of the PPG plant which is listed by NJDEP as a known chromium-contaminated site. (See attached Results of Investigations Contaminant Study and Hydrogeologic Investigations, Garfield Avenue Site, D'Appolonia Waste Management Services, Pittsburgh, PA.)

The possibility of employee exposure to chromium-contaminated material exists at your facility through inhalation and tracking of the material into the workplace. See the attached recommendations to limit personal exposure.

Send Report To: John Maloney, Maintenance Manager, Qualex, Inc.
Pres., Lawrence Construction Company (Owner)
Pres., Teamsters Local 966
Walter Lezynski, Jersey City Div. of Health
Robert Ferraiuolo, Director, Hudson Regional Health Comm.
Diana Crowder, Hudson Regional Health Comm.
Ron Corcory, NJDEP
Betty Kearns, Env. Planner, Jersey City Chromium Task Force

INTERIM STEPS TO CONTROL YOUR PERSONAL EXPOSURE:

- * Learn to recognize chromium. It may appear as yellow, white or green crystals on walls and other surfaces. It may be yellow or green in water. It may be reddish-orange or green in the soil.
- * Avoid known areas of contamination wherever possible.
- * Do not raise dust or track it into work areas.
- * Change your work clothing to street clothing at the end of the shift.
- * Change your work shoes to street shoes at the end of the shift. Do not track dust into your car or home.
- * Keep work and eating areas free of dust and accumulated dirt.
- * Wash your hands before eating or drinking.
- * Wash eating utensils before eating or drinking.
- * Maintenance personnel should wet-wipe or mop, do not sweep or vacuum.
- * Many times you cannot see the chromium contamination. If the area has been identified as containing chromium by the New Jersey Department of Environmental Protection (NJDEP) and/or the New Jersey Department of Health (NJDOH), please use caution and avoid those areas.

Report

Results of Investigations Contaminant Survey and Hydrogeologic Investigations Garfield Avenue Site

D'APPOLONIA

WASTE MANAGEMENT SERVICES

January 13, 1984

Project No. 83-1690

Mr. R. J. Samelson
Manager of Environmental Programs
PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272

Results of Investigations
Contaminant Survey and Hydrogeologic Investigations
Garfield Avenue Site
Jersey City, New Jersey

Dear Mr. Samelson:

D'Appolonia Waste Management Services, Inc. (D'Appolonia), was retained by PPG Industries, Inc. (PPG), to conduct a contaminant survey and hydrogeologic assessment at the Garfield Avenue site to evaluate the vertical and horizontal extent of chromium contamination and its impact on ground water encountered at the site. The investigation plan was proposed in a letter to Mr. R. J. Samelson of PPG. On October 3, 1983, the New Jersey Department of Environmental Protection (DEP) confirmed its concurrence with the plan.

The Garfield Avenue site was the site of chromium ore processing by PPG from 1954 to 1964, at which time the property was sold. The property has been subsequently transferred to others and developed for light industrial use. A portion of the property remains undeveloped. Initial soil samples from these undeveloped areas contained 50 to 200 parts per million (ppm) hexavalent chromium. This letter report contains the results of D'Appolonia's investigations at the Garfield Avenue site, including a description of methodologies utilized, field observations, and results of laboratory analyses.

FIELD EXPLORATION AND SAMPLING PROGRAM

The major objective of this task was to determine the areal extent of chromium present at the site as well as the hydrogeologic setting. As used in this report, the site is defined as the area within the limits of the original PPG property lines as shown in Figure 1. Due to the presence of the existing buildings and pavement, the investigation was limited to vacant lands and primarily conducted upon the 4.5-acre vacant lot bordering Halladay Street.

The field exploration program consisted of test pit excavations, shallow borings, and observation well installations. The existence of chromium in soil was primarily determined by visual observation of samples taken from these sites. Laboratory analyses were conducted on individually selected soil samples to quantify the concentration of hexavalent and total chromium in various materials found throughout the site. Ground water samples were also collected and tested during the investigation.

Test Pit Excavations

Thirteen test pits were excavated in the vacant lot area to determine the vertical extent of the chromium ore residue, the nature of the underlying soil, and extent of chromium migration. Test pits were excavated with a backhoe to depths ranging from 3.1 to 8.1 feet below ground surface. Excavation was halted whenever ground water was reached; whenever equipment refusal was encountered due to very dense materials (i.e., coarse fill); or whenever all fill materials had been penetrated and several feet of natural soil material was evident. For purposes of this report, "fill" will refer to both chromium ore residues and other backfill materials.

Descriptions of visual observations of the excavated test pits were prepared, with special effort made to record the presence of chromium salts, ground water, fill materials, or other noteworthy items. Soil samples were selected during test pit excavation from nearly every visually distinct layer (generally no greater than two feet in thickness), sealed in airtight plastic bags, and returned to D'Appolonia's laboratories. Locations of test pit excavations are shown in Figure 2, and test pits logs are included as Appendix A.

Shallow Borings

Eight shallow borings were drilled on parcels of open land to identify the possible presence of chromium around several of the existing buildings. These borings were drilled using rotary drilling techniques and split-spoon samples collected at 2.5-foot intervals, with the deepest sample collected from 10 to 11.5 feet in each of these borings. The borings were backfilled immediately upon completion of sampling. No water samples were obtained. The locations of shallow borings are shown in Figure 2.

Observation Well Installations

Three clusters of observation wells were installed at locations shown in Figure 2. The purpose of these wells was to establish site hydrogeologic setting and obtain soil and water quality samples from deeper strata. Each cluster consists of two wells; one deep well installed 60 feet or

greater below ground surface and a second shallow well installed approximately 18 feet below ground surface. The wells were installed in borings which were drilled using rotary drilling methods. Soil samples were obtained from the deep borings at five-foot intervals (distances between the tops of sampling drives) by driving a standard split-spoon sampler with a 140-pound hammer falling 30 inches. The number of hammer blows required to drive the sampler per each six-inch interval and a description of visual observation of each sample were recorded on the field boring logs. These are provided in Appendix B. Deep soil borings were terminated after encountering a substantial thickness of fine-grained materials (i.e., clay-silty clay). This was done with the knowledge and approval of DEP personnel on site at the time, as it was felt these deep clayey materials would provide a substantial barrier to downward chromium migration. This was later verified by soil sample analyses.

Observation wells were constructed of threaded, flush-joint Schedule 40 polyvinyl chloride (PVC) pipe with a two-inch inside diameter (ID). A ten-foot section of slotted PVC screen with a slot size of 0.020 inch was placed in the bottom of each well. The annulus of the boring was then gravel packed around the slotted screen to act as the sensing zone. The gravel pack was normally extended somewhat above the screen and the sensing zone then sealed off from the overlying portion of the boring by use of a bentonite seal. The seal was extended for several feet and the remainder of the annulus then filled with a cement grout to ground surface. A metal protective casing with locking cap was installed to protect the aboveground portion of the PVC riser pipe at each observation well. The construction details for each observation well are presented in Appendix C.

After the grout had been allowed to "cure" approximately two days, the wells were developed by forcing standing water out of the riser pipe through the use of compressed air. This procedure was repeated several times at each well, allowing sufficient recharge time between each attempt.

Water Sampling Program

Prior to water sampling of the six observation wells, water levels were measured and each well was purged of at least three well volumes of water. Field measurements of pH and specific conductance were made periodically during this purging process. When pH and specific conductance levels stabilized, the well was sampled using a Kemmerer-type sampler.

Additionally, when water was encountered in sufficient quantity, water samples were collected from the test pits and one surface water sample was collected from the on-site ditch (Figure 2). Samples for dissolved

metals analyses were filtered through a 0.45-micron membrane filter, although certain samples could not be filtered due to the presence of a thick organic liquid. All water samples were properly preserved according to Environmental Protection Agency (EPA) procedures. Water samples were analyzed for total and hexavalent chromium, and ground water samples were further analyzed for EPA primary and secondary inorganic drinking water parameters.

RESULTS OF INVESTIGATIONS

Site Hydrogeologic Setting

Figure 3 presents a generalized depiction of site stratigraphy prepared from the logs of the three deep borings drilled for observation well installation. As shown, approximately 15 feet of fill materials were encountered across the site, underlain by sand deposits approximately 30 to 40 feet thick. This layer contained coarse to very fine sand, indicating differing permeabilities could be expected in the three borings which penetrated this layer. Beneath the sand, a layer of clay or silty clay materials was encountered. This layer was found to be at least 25 feet thick at Boring W-1A. In Boring W-2A, this clayey layer was approximately 15 feet thick and was underlain by a small lense or layer of sand and gravel which, in turn, was underlain by more fine-grained materials. Not enough information is available to determine if the sand and gravel encountered within the clay layer in W-2A is continuous over a substantial portion of the site.

Ground water elevations encountered in the observation wells are presented in Table 1. The ground water levels in the three deep observation wells are also shown in Figure 3. These levels indicate ground water flow is generally to the southeast beneath the site. Ground water elevations were similar in the shallow well and deep well at W-1 and W-2, indicating these wells are in proper communication with the ground water table. At Observation Well W-3, the water table elevation in the shallow well was more than five feet higher than that observed in the deep well. This indicates the presence of less pervious materials in this area.

Soil Quality

Visual evidence of chromium presence was noted on the site surface, in several test pits, several of the shallow borings, and in the upper portion of W-1A. Greenish-yellow salts, characteristic of the presence of chromium, were visible over a large portion of the site, in quantities ranging from small pockets or clumps to patches a few square feet in size.

Chromium on the site was found to be unevenly distributed. Chromium in excess of five ppm was detected in some locations as deep as 41.5 feet. It is probable that chromium at this depth is waterborne and not due to the direct presence of chromium ore residues. Table 2 indicates that soil chromium concentrations generally decrease with depth, with the highest levels detected near the surface and virtually no chromium detected below 45 feet. However, some surface samples showed little or no chromium. In nearly all instances where chromium was detected, it consisted primarily of hexavalent chromium, except for those samples analyzed from the 20- to 40-foot range. At those depths, it appears that reducing conditions have been encountered, giving rise to the existence of the divalent and trivalent forms of chromium.

Figure 3 shows concentrations of total and hexavalent chromium in soil samples obtained from the three deep borings. This figure shows that chromium concentrations generally decrease with depth. No detectable chromium contamination was found within or below the clay layer. It is expected this layer will mitigate further downward migration.

Figure 4 shows those locations where chromium was found by visual observations or where laboratory analysis showed a concentration greater than five ppm.

Water Quality

Table 3 presents the results of analysis of water samples collected from test pits and from the surface drainage ditch. As can be seen, chromium is present in water samples from those test pits where chromium ore residues or salts were visible. The surface water sample also contained chromium, indicating at-surface chromium materials may be contaminating infiltration. These samples contained primarily (if not exclusively) hexavalent chromium.

The ground water samples collected from the observation wells contained varying amounts of total and hexavalent chromium, as shown in Table 3. The greatest amounts of chromium were found in the samples obtained from W-1A and W-1B, with the deeper well (W-1A) showing a relatively high amount of total chromium. The wells at W-1A and W-1B are the furthest downgradient of the three on site, as indicated by general ground water flow direction. Wells W-2 and W-3 are located in a more upgradient direction and contain substantially less chromium than W-1.

It should be noted that during drilling and test pit excavation, a dark, oily organic liquid with a strong naphthalene-like odor was frequently encountered on site. This material is of unknown origin, but was generally encountered between the depths of 5 and 25 feet. Its odor was generally quite strong and its presence as a second phase oftentimes hindered sample filtration. It was observed that, in most of the test

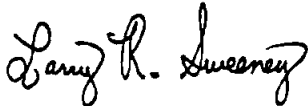
pits and borings, the organic material was generally below the bulk of the waste chrome ore. Figure 5 shows those test pits and borings where hydrocarbon liquids were encountered.

Table 4 presents the results of ground water sample analyses for primary and secondary drinking water standards. Many of these constituents were detected in elevated concentrations in some or all samples. These analyses, coupled with the presence of the hydrocarbons, indicate that ground water beneath the site is of poor quality regardless of the presence of chromium.

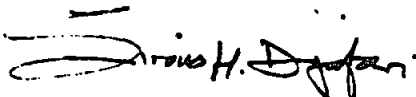
SUMMARY

Chromium was observed or detected in most site soil samples taken during the testing program and appears to be quite unevenly distributed over the site. Chromium levels in the soil generally decreased with depth, and soil samples obtained from the deep clay layer beneath the site showed no detectable chromium concentrations. Hexavalent chromium was the predominant form found on site, although divalent and trivalent forms became more common with depth. Ground water beneath the site was found to be flowing to the southeast and of poor quality. An odoriferous brown hydrocarbon liquid was commonly encountered with ground water across the site. Additionally, ground water samples contained concentrations of several inorganic constituents other than chromium in excess of EPA drinking water standards.

Respectfully submitted,



Larry R. Sweeney
Assistant Project Scientist



Sirous Haji-Djafari, Ph.D., P.E.
Director of Technology Applications

SHD:LRS:rs

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TABLE 1
CHROMIUM CONCENTRATION OF
GROUND WATER SAMPLES

BORING	DEPTH ⁽¹⁾ (ft)	SCREENED INTERVAL ⁽¹⁾ (ft)	WATER LEVEL		TOTAL CHROMIUM (mg/l)	HEXAVALENT CHROMIUM (mg/l)
			DEPTH ⁽¹⁾	RELATIVE ELEVATION ⁽²⁾		
W-1A	81.5	45-55 ⁽³⁾	7.0	89.0	1080	124
W-1B	19.0	8-18	5.0	90.7	233	224
W-2A	76.5	65-75	6.3	90.4	0.6	0.6
W-2B	18.0	8-18	5.5	90.9	12	2
W-3A	60.0	49-59	8.2	90.3	0.05	0.04
W-3B	17.0	7-17	3.1	95.7	2.16	1.80

(1) Feet below ground surface.

(2) Elevation of 100.0 arbitrarily assigned to top of hydrant at end of Dakota Avenue. All site elevations are relative to this benchmark. Surveying conducted by Warren George, Inc., Jersey City, New Jersey.

(3) Hole backfilled to 55 feet prior to well construction.

TABLE 2
CHROMIUM CONTENT OF SITE SOILS AS RELATED TO DEPTH

SAMPLING DEPTH (ft)	TEST PIT/BORING NUMBER; SAMPLE NUMBER	TOTAL CHROMIUM (mg/l)	HEXAVALENT CHROMIUM (mg/l)
1.0-3.0	P-3; S-2	1.1	0.32
1.5-2.7	P-5; S-2	20	18
1.4-3.1	P-9; S-2	0.45	<0.05
1.7-3.0	P-6; S-3	180	180
2.1-3.9	P-12; S-3	38	38
2.2-4.2	P-2; S-2	84	72
2.6-5.2	P-11; S-3	0.25	0.08
3.0-5.0	P-13; S-4	0.14	0.12
3.3-4.5	P-1; S-3	0.7	<0.05
3.3-5.3	P-4; S-3	28	28
3.6-5.6	P-8; S-3	0.45	0.44
4.2-6.0	P-10; S-4	0.14	<0.05
4.6-7.6	P-7; S-3	1.2	0.72
5.0-6.5	W-3; S-2 ⁽¹⁾	<0.1	<0.05
5.0-6.5	SB-7; S-3	1.4	<0.05
7.5-9.0	SB-2; S-4	19	19
7.5-9.0	SB-5; S-4	<0.1	<0.05
7.5-9.0	SB-8; S-4	58	48
10-11.5	SB-3; S-5	38	38
10-11.5	SB-4; S-5	<0.1	<0.05
10-11.5	SB-9; S-5	<0.1	<0.05
10-11.5	SB-10; S-5	68	67
10-11.5	W-1; S-3	28	28
15-17	W-2; S-4	<0.1	<0.05
20-21.5	W-1; S-5	27	3.6
20-22	W-2; S-5	19	1.6

See footnote at end of table.

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TABLE 2
(Continued)

SAMPLING DEPTH (ft)	TEST PIT/BORING NUMBER; SAMPLE NUMBER	TOTAL CHROMIUM (mg/l)	HEXAVALENT CHROMIUM (mg/l)
20-21.5	W-3; S-5	27	2.1
30-31.5	W-1; S-7	26	3.1
30-33	W-2; S-7	23	1.6
30-31.5	W-3; S-7	20	1.0
35-36.5	W-3; S-8	13	0.5
40-41.5	W-1; S-9	7.9	1.0
40-43	W-2; S-9	4.0	3.5
45-46.5	W-1; S-10	2.8	2.8
45-46.5	W-3; S-10	<0.1	<0.05
55-57	W-2; S-12	<0.1	<0.05
60-61.5	W-3; S-13	<0.1	<0.05
65-67	W-2; S-14	<0.1	<0.05
80-81.5	W-1; S-15	<0.1	<0.05

(1) Soil samples were obtained from deep borings only at observation well installation locations.

TABLE 3
CHROMIUM CONCENTRATION OF
TEST PIT WATER SAMPLES⁽¹⁾

TEST PIT NUMBER ⁽²⁾	WATER LEVEL ⁽³⁾ (ft)	TOTAL CHROMIUM (mg/l)	HEXAVALENT CHROMIUM (mg/l)	COMMENTS
P-3	4.3	102	98	Chromium waste visible to 4.3 feet.
P-5	3.8	104	108	Chromate salts visible to 3.8 feet.
P-6	4.0	20	18	Chromate salts visible to 3.0 feet.
P-11	5.2	0.90	0.20	No salts visible.
P-12	5.6	1.01	0.28	No salts visible.
P-13	5.5	3.22	<0.05	No salts visible.
-	Surface ⁽⁴⁾	12	10	Sample collected from drainage ditch near center of site.

(1) Refer to Figure 2 for test pit locations.

(2) No significant amounts of water encountered in the remainder of the test pits.

(3) Feet below ground surface.

(4) See Figure 2 for surface water sampling location.

TABLE 4

ANALYSIS FOR U.S. EPA PRIMARY AND SECONDARY INORGANIC DRINKING WATER PARAMETERS

PARAMETER	UNITS	GROUND WATER SAMPLING LOCATION						STANDARD LEVELS (1)
		W-1A	W-1B	W-2A	W-2B	W-3A	W-3B	
pH	-	8.85	12.20	10.00	9.45	7.70	7.20	6.5-8.5
Color (true)	APHA	44,500	14,500	27	1,400	17	270	15
Turbidity	NTU	80	870	30	174	22	102	5
Total Dissolved Solids	mg/l	6,696	2,930	470	3,269	578	3,884	500
Foaming Agents	mg/l	4.4	5.6	0.24	2.4	0.16	1.6	0.5
Arsenic	mg/l	0.034	0.016	0.002	0.068	0.010	0.022	0.05
Barium	mg/l	0.03	<0.01	0.09	0.77	0.18	0.29	1.0
Cadmium	mg/l	<0.001	<0.001	<0.001	0.002	0.001	<0.001	0.01
Chloride	mg/l	535	78	200	37	78	1,220	250
Total Chromium	mg/l	1,080	233	0.6	12	0.05	2.16	170(2)
Hexavalent Chromium	mg/l	124	224	0.6	2	0.04	1.8	0.05
Copper	mg/l	0.31	0.10	<0.01	0.02	0.02	0.04	1.0

See footnotes at end of table.

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TABLE 4
(Continued)

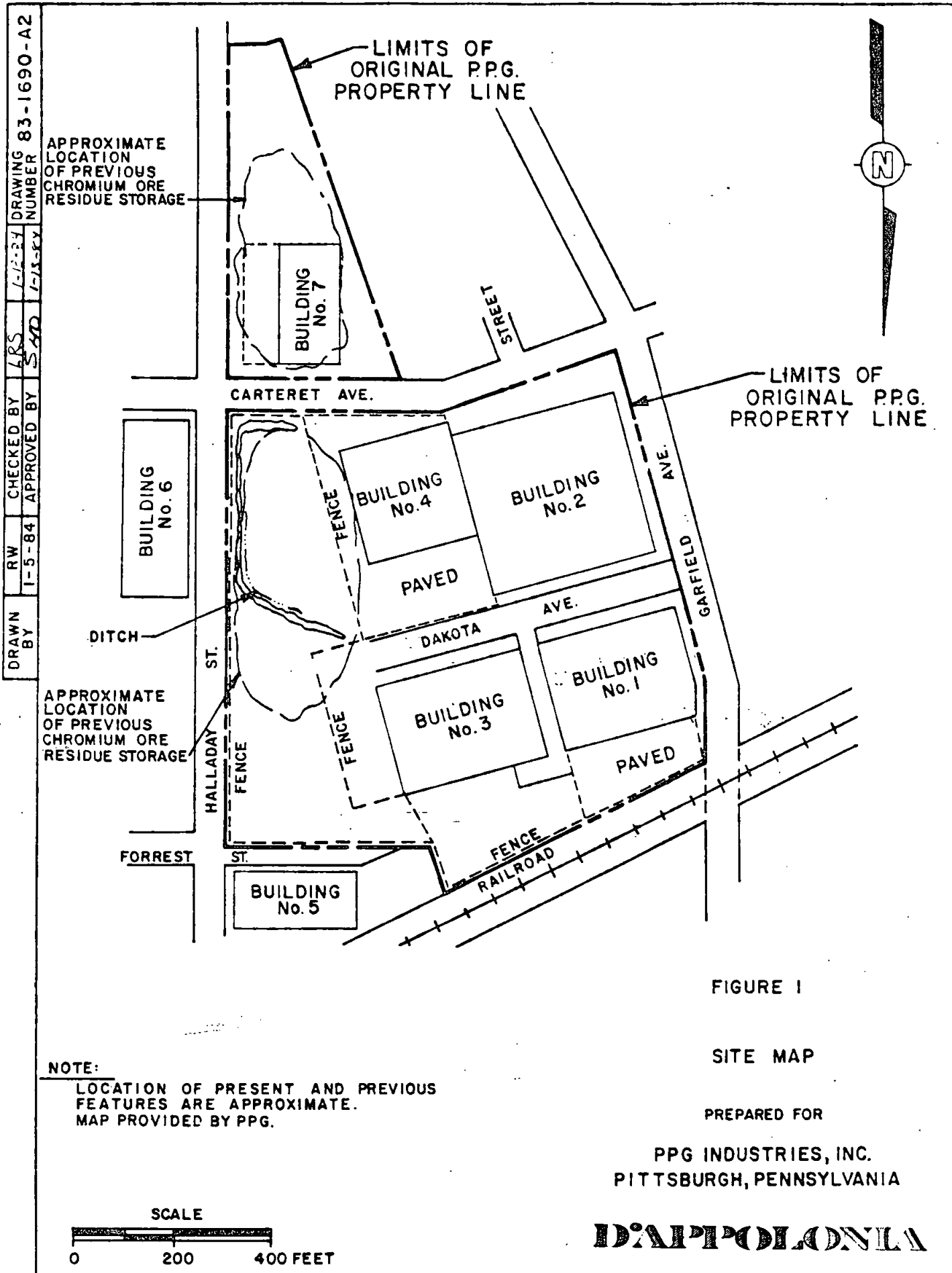
PARAMETER	UNITS	GROUND WATER SAMPLING LOCATION						STANDARD LEVELS (1)
		W-1A	W-1B	W-2A	W-2B	W-3A	W-3B	
Fluoride	mg/l	0.17	0.07	0.11	0.53	0.14	0.27	2.4
Iron	mg/l	1.8	0.2	<0.1	79	0.8	110	0.3
Lead	mg/l	<0.01	<0.01	<0.01	0.41	<0.01	0.13	0.05
Manganese	mg/l	0.25	0.02	<0.01	1.42	0.33	2.18	0.05
Mercury	mg/l	0.0071	0.0020	0.0005	0.0081	0.0013	0.0116	0.002
Nitrate	mg/l	30	10	1.0	1.4	0.2	0.5	10.0
Selenium	mg/l	0.005	0.004	<0.001	<0.001	<0.001	0.020	0.01
Silver	mg/l	0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.05
Sulfate	mg/l	500	300	100	190	210	390	250
Zinc	mg/l	0.08	0.04	0.01	2.45	0.02	1.50	5.0

(1) As established under one or more of the following:

- U.S. EPA National Interim Primary Drinking Water Standards; 40 CFR, Part 141 (1975).
- U.S. EPA Proposed Secondary Drinking Water Standards; 40 CFR, Part 143 (1979).
- U.S. EPA Toxic Pollutants Water Quality Criteria for the Maximum Protection of Human Health; Federal Register, Vol. 45, No. 231, pp. 79318-79379 (1980).

(2) For trivalent chromium.

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DRAWING NUMBER 83-1690-A3
 1-12-84
 1-13-84
 LRS
 CHECKED BY
 1-5-84
 APPROVED BY
 RW
 DRAWN BY

APPROXIMATE
 LOCATION
 OF PREVIOUS
 CHROMIUM ORE
 RESIDUE STORAGE

LIMITS OF
 ORIGINAL PPG.
 PROPERTY LINE



LIMITS OF
 ORIGINAL PPG.
 PROPERTY LINE

APPROXIMATE
 LOCATION
 OF PREVIOUS
 CHROMIUM ORE
 RESIDUE STORAGE

LEGEND

- P-2 TEST PIT
- SB-8 SHALLOW BORING
- ⊕ W2 OBSERVATION WELL CLUSTER
- A—A' CROSS SECTION LOCATION
- SURFACE WATER SAMPLING LOCATION

NOTES:

1. LOCATION OF PRESENT AND PREVIOUS FEATURES ARE APPROXIMATE.
2. NO DRILLING CONDUCTED AT SB-1 AND SB-6 (PAVED AREAS).

SCALE

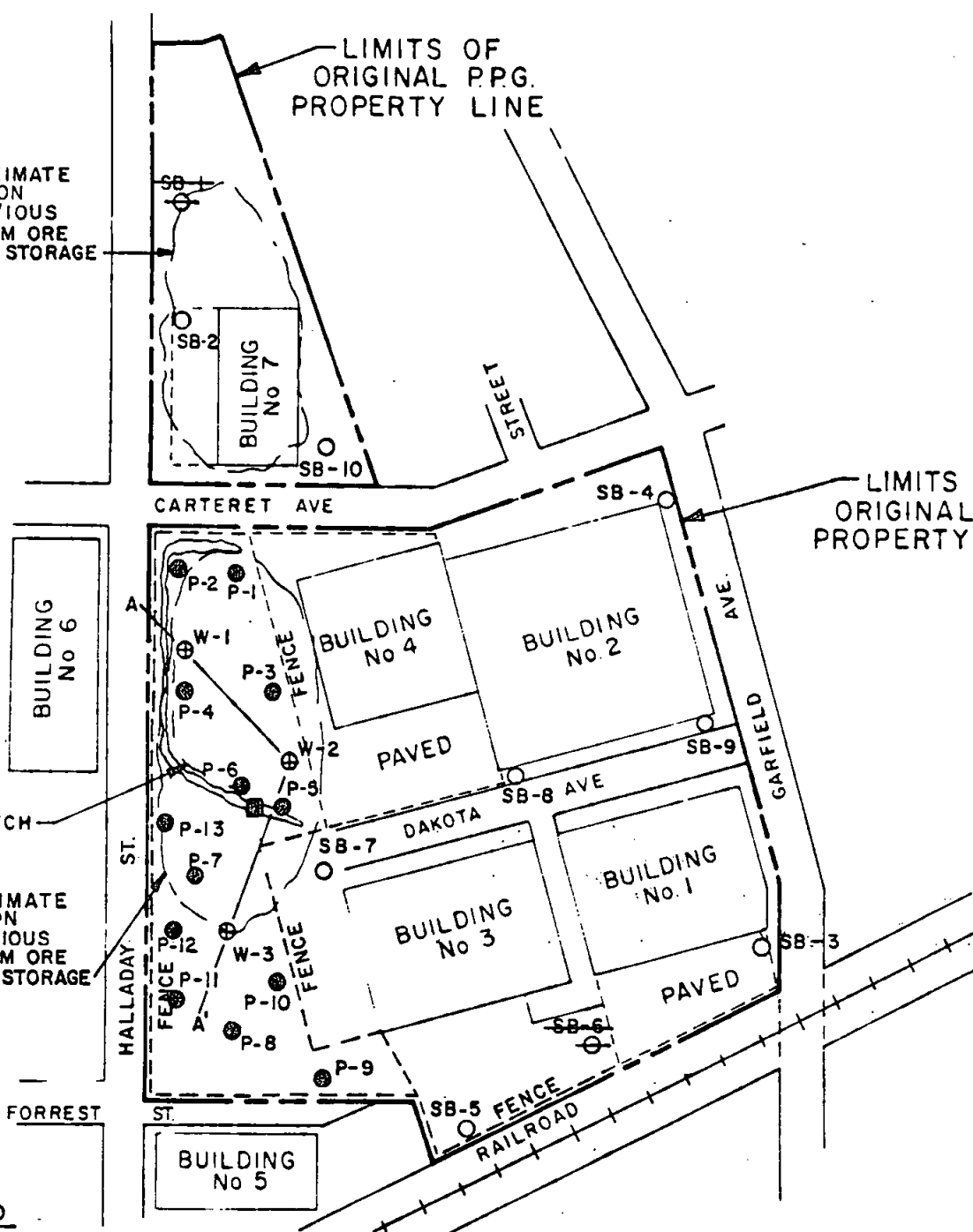
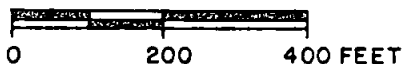


FIGURE 2

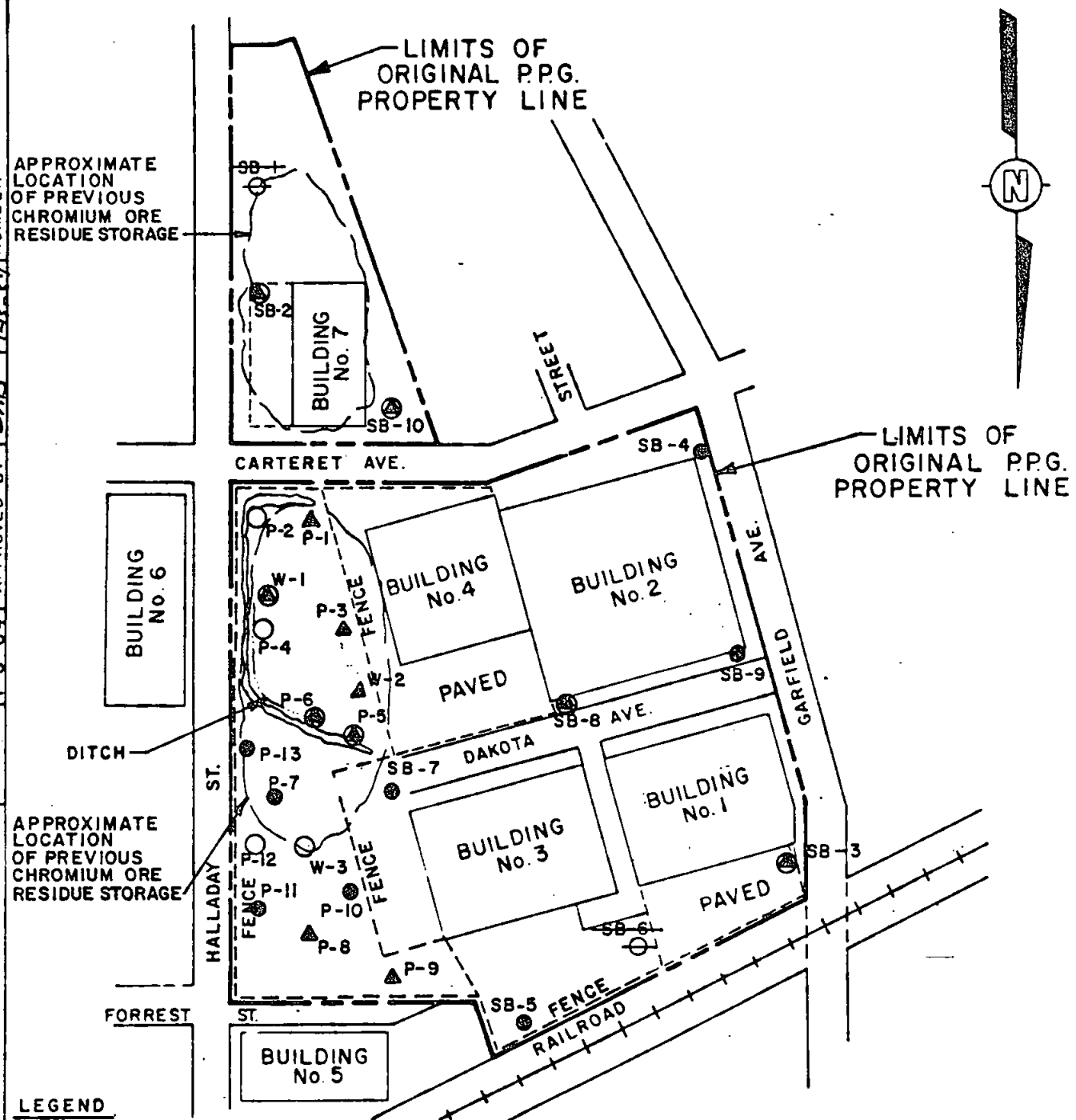
BORING AND TEST PIT LOCATIONS

PREPARED FOR

PPG INDUSTRIES, INC.
 PITTSBURGH, PENNSYLVANIA

DAMPOLONA

DRAWN BY: []
 1-5-84
 CHECKED BY: []
 1-12-84
 APPROVED BY: []
 1-15-84
 DRAWING NUMBER: 83-1690-A4



LEGEND

- ▲ VISIBLE CHROMIUM IN SOIL
- LAB ANALYSIS OF >5PPM TOTAL CHROMIUM
- VISIBLE CHROMIUM AND LAB RESULTS >5PPM
- NO CHROMIUM OBSERVED AND LAB RESULTS <5PPM

NOTES:

1. LOCATION OF PRESENT AND PREVIOUS FEATURES ARE APPROXIMATE.
2. NO DRILLING CONDUCTED AT SB-1 AND SB-6 (PAVED AREAS).



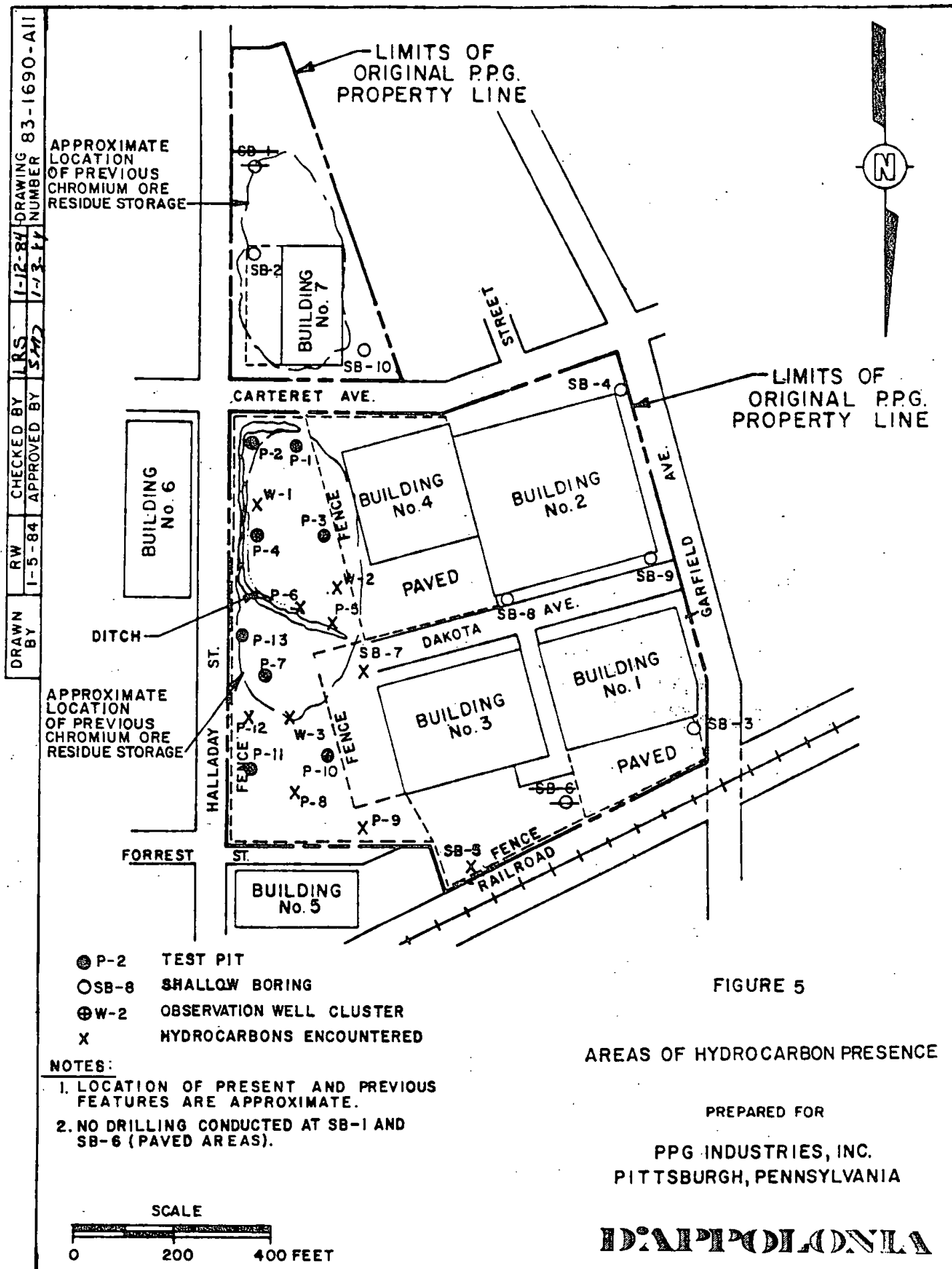
FIGURE 4

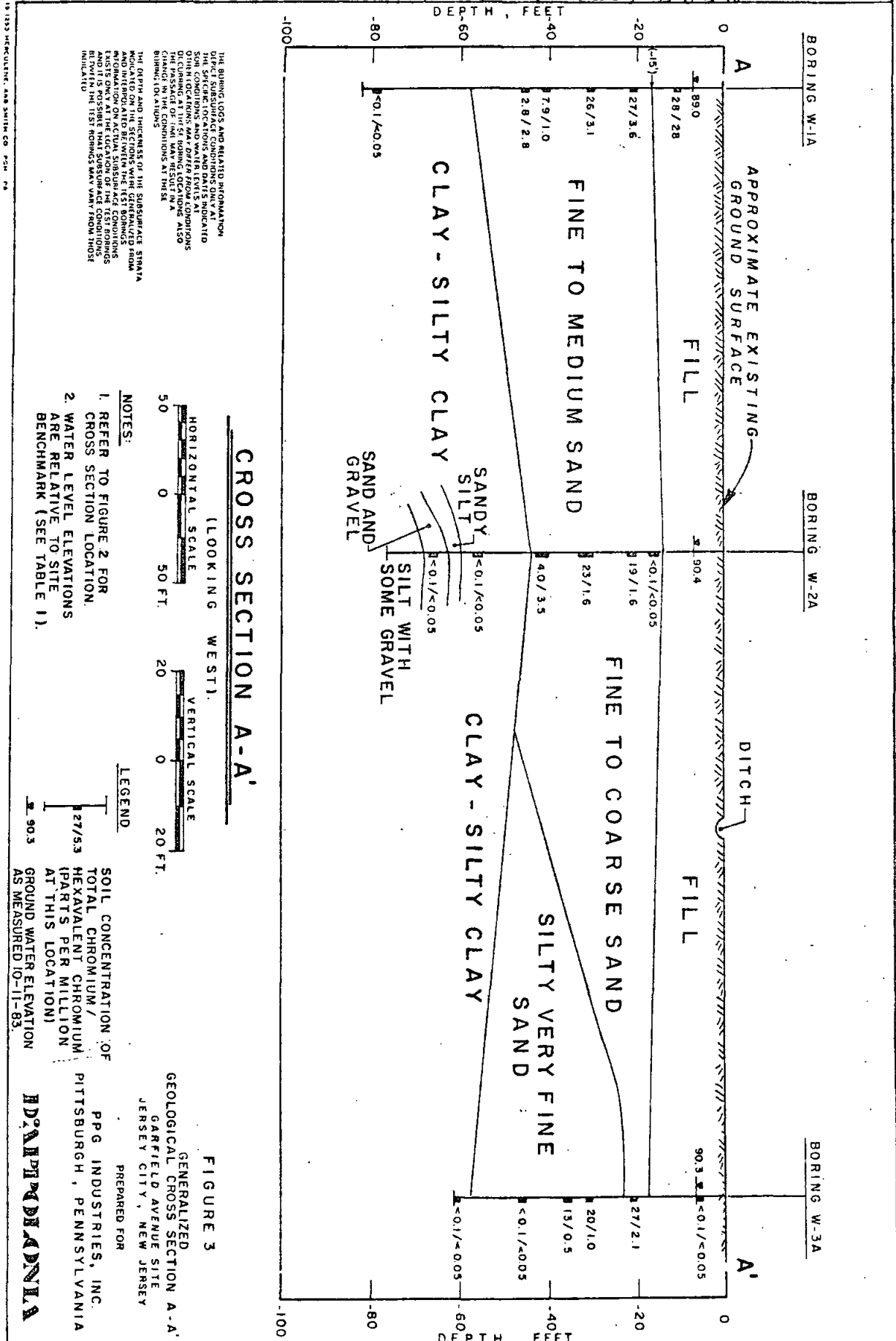
AREAL EXTENT OF CHROMIUM IN SOIL

PREPARED FOR

PPG INDUSTRIES, INC.
 PITTSBURGH, PENNSYLVANIA

IDAIRPOLONA







CHROMIUM IN THE WORKPLACE

Division of Occupational and Environmental Health

This is a general notice to inform you that this property has been identified by the New Jersey Department of Environmental Protection (NJDEP) as either built on or adjacent to one of the known chromate contaminated sites in Hudson County.

WHAT ARE THE SITES AND HOW DID THEY GET THERE?

There are more than 100 sites in Hudson County known to be contaminated with elevated levels of chromium. There are 77 sites in Jersey City, 26 sites in Kearny and 1 site in Secaucus. Three chromate processing facilities operating in Hudson County, generated a chromium contaminated slag waste material. This slag waste material was used as landfill and diking materials in many areas. The three generators of the waste, Allied Signal Inc., PPG Industries and Maxus Industries (formerly Diamond Shamrock), operated chromate processing facilities for approximately 70 years, from 1900 until 1970. It is estimated that these chromium operations have resulted in the generation of approximately two million tons of waste residue containing from 2% to 5% chromium. Approximately 1,850,000 cubic yards of this material is now present in public, commercial, industrial and residential areas of Hudson County.

WHAT HAS BEEN DONE SO FAR?

To date, the NJDEP has taken soil samples to identify the chromium contaminated sites. Limited clean up actions have taken place at some locations throughout the County, and will continue to take place during the next several months. Under a Directive from the NJDEP these clean up measures have been undertaken by those companies responsible for dumping the waste. Other clean ups will be undertaken by a contractor hired by NJDEP with monies from the New Jersey Spill Fund.

IS CHROMIUM HARMFUL TO MY HEALTH?

A small amount of chromium is found in all people and is essential for good health. However, an excess of chromium can cause illness. Some forms of chromium and some ways you can come in contact with it are more harmful than others.

Information to date about high exposures to chromium in workplace settings has demonstrated that breathing in, eating or having skin contact with large amounts of chromium can cause injury. Some symptoms of injury can occur shortly after exposure. These include injury to the skin, lungs, kidneys, and liver. Your body can repair some of the damage once exposure to chromium has stopped. Although the body can handle small amounts of chromium, a dose too large to tolerate and continued over a long period of time may lead to damage that cannot be repaired. Long term exposure to some forms of chromium may increase the risk of lung cancer, which may not develop for many years.

The New Jersey Department of Health (NJDOH) is providing medical information on chromium exposure to all physicians in Hudson County. If your doctor has not received this information, please have him or her contact your local

health department. In Kearny the telephone number is (201) 997-0600. In Jersey City the telephone number is (201) 547-5168.

WHAT ARE THE PLANS FOR THE FUTURE?

In order to determine if exposures are taking place and to prioritize the sites for cleanup actions, several activities will take place during the next several months at your worksite.

A preliminary workplace survey will be completed by NJDOH and local health department industrial hygienists for all the workplaces on the NJDEP list. This survey will be used to determine the presence of the chromium contamination within your workplace. The survey will also be used to gather background information for a full industrial hygiene evaluation which is planned to take place during the coming year. The full industrial hygiene evaluation will include air monitoring to see if the chromium dust has become airborne and therefore more easily inhaled.

A report containing the results of this survey and the results of the detailed industrial hygiene evaluation will be made available to you, your employer and your labor union. In these reports, we will be making recommendations to your employer regarding cleanup and protective measures. The reports will also be on file at your local health department.

HOW DO I AVOID CHROMIUM HAZARDS?

Contact with chromium on the skin, swallowing food contaminated with chromium, breathing in chromium contaminated dust or accidentally swallowing chromium contaminated soil can be harmful to adults and children.

* LEARN TO RECOGNIZE CHROMIUM WASTE:

-LITTLE OR NO VEGETATION GROWS IN CHROMIUM FILLED SOIL CONTAMINATED WITH CHROMIUM.

-IN SOME FORMS CHROMIUM MAY APPEAR RED, ORANGE, YELLOW OR GREEN.

* WHERE POSSIBLE, AVOID KNOWN CHROMIUM CONTAMINATED AREAS.

* ASK YOUR EMPLOYER TO TELL YOU WHERE THE CHROMIUM CONTAMINATION AREAS ARE IN YOUR WORKPLACE.

WHAT IF I HAVE MORE QUESTIONS ABOUT CHROMIUM?

If you have questions concerning chromium, contact your local health department. Kearny, (201) 997-0600 or Jersey City, (201) 547-5168.

NEW JERSEY DEPARTMENT OF HEALTH
OCCUPATIONAL HEALTH SERVICE
CN 360
TRENTON, NEW JERSEY 08625
(609) 984-1863

3/17/89



CHROMIUM AND YOUR HEALTH

Division of Occupational and Environmental Health

March 1989

WHAT IS CHROMIUM?

Chromium is used in paint, stainless steel, chrome plating, photographic chemicals, leather tanning, and wood preservatives. Its chemical makeup varies and it occurs in several forms including a metal solid or dust. Some of these solids can be dissolved in water. Chromium waste in some forms may appear red, orange or yellow. Chromium in this discussion means all the forms of chromium.

IS CHROMIUM HARMFUL TO MY HEALTH?

A small amount of chromium is found in all people and is essential for good health. However, an excess of chromium can cause illness. Some forms of chromium and some ways you can come in contact with it are more harmful than others. Exposure to a more harmful type of chromium for a longer period of time increases the possibility of health problems.

From what we know about high exposures to chromium in work place settings, breathing in, eating or having skin contact with large amounts of chromium can cause symptoms. Some symptoms can occur shortly after exposure. These include injury to the skin, lungs, kidneys, and liver. Your body can repair some of the damage once exposure to chromium has stopped. Although the body can handle small amounts of chromium, a dose too large to tolerate and continued over a long period of time may lead to damage that cannot be repaired. Long term exposure to some forms of chromium may increase the risk of lung cancer, which would not develop for many years.

WHAT ARE SOME OF THE WAYS I CAN BE EXPOSED TO CHROMIUM?

If you live or work near or have walked on chromium sites you may have been exposed. Exposure can occur through the air by breathing in contaminated dust. It can enter the body by swallowing contaminated water, soil and food. You can also be exposed to chromium by direct contact with the skin.

HOW DO I KNOW IF MY HEALTH HAS BEEN AFFECTED?

Chromium can be an irritant to the skin, eyes, nose and throat. Other health effects may include coughing, wheezing, shortness of breath, fever and weight loss. Rashes, sores, blistering or peeling of the skin, and skin ulcers that do not heal are also possible reactions to chromium exposure. If you are concerned about any symptoms that you have, you should see your doctor or go to your local health clinic.

The New Jersey Department of Health is providing medical information on chromium exposure to doctors in Hudson County. If your doctor or local health clinic has not received this information have them contact the local health department.

HOW DO I GET TREATMENT IF I NEED IT?

Your doctor or local health clinic will be able to advise you should you need treatment.

HOW DO I AVOID CHROMIUM HAZARDS?

Contact of chromium with the skin, swallowing food contaminated with chromium, breathing in chromium contaminated dust or accidentally swallowing chromium contaminated soil can be harmful to adults and children. DO NOT ALLOW CHILDREN OR ADULTS INTO KNOWN CHROMIUM CONTAMINATED SITES. Be suspicious of dust or water from identified or suspected waste sites. Do not try to clean chromium contamination. If you come in contact with chromium, wash off your skin in cool water.

WHICH SITES ARE IDENTIFIED AS PROBLEMS?

Your local health department can provide you with a list of known contaminated sites in your area. Call your local health department if you suspect contamination.

WHAT IF I HAVE MORE QUESTIONS ABOUT CHROMIUM?

If you have further questions, contact your local health department. If you still have questions, your local health department may refer you to the correct state agencies for your particular concern.

Prepared by: New Jersey Department of Health
Division of Occupational and Environmental Health
CN-360 Trenton, N.J. 08625



State of New Jersey

**DEPARTMENT OF HEALTH
CN 360, TRENTON, N.J. 08625-0360**

MOLLY JOEL COYE, M.D., M.P.H.
COMMISSIONER

November 2, 1989

Dear Employer and Employees,

The New Jersey Department of Health (NJDOH) recently completed a preliminary survey of your facility:

Stevens Distribution Center
800 Garfield Avenue
Jersey City, NJ 07305

Your facility was included in this survey because the New Jersey Department of Environmental Protection (NJDEP) has identified your facility as either built on or adjacent to one of the known chromium-contaminated sites in Hudson County.

These preliminary surveys are being conducted for the following purposes:

- * To identify areas in your facility where chromium-contaminated material is present.
- * To evaluate the potential for exposure to chromium contamination by employees and management personnel in your facility.
- * To give you some background information about the potential health effects of exposure to chromium and ways to avoid or reduce exposure.
- * To give you information regarding the remediation (clean up) efforts initiated by NJDEP.
- * To obtain information that will help consultants who will conduct a comprehensive industrial hygiene survey of your facility during the next year.

Please make the enclosed preliminary report on the above site available to all personnel on site.

For your information we have also enclosed copies of the following:

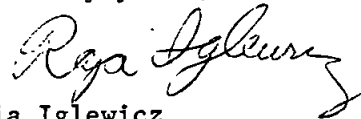
NJDOH Preliminary Workplace Survey Report
Results of Investigations Contaminant Study
and Hydrogeologic Investigations, Garfield
Avenue Site, D'Appolonia Waste Management
Services, Pittsburgh, PA
NJDOH Factsheet - Chromium in the Workplace
NJDOH Factsheet - Chromium and Your Health

Through a contract between the New Jersey Department of Environmental Protection and a private consultant, a comprehensive industrial hygiene evaluation will take place at your facility in the future. It is our understanding that this evaluation will include comprehensive industrial hygiene sampling and that a report with specific recommendations for remedial measures will be prepared and provided to you.

Please confirm in writing that you have made the enclosed preliminary report available to all personnel at your facility.

If you have questions concerning your workplace, please call Carol Lamond at (609) 984-1863.

Sincerely yours,



Raja Iglewicz
Industrial Hygienist
Health Hazard Evaluation Program
Occupational Health Service

NEW JERSEY DEPARTMENT OF HEALTH - OCCUPATIONAL HEALTH SERVICE

PRELIMINARY WORKPLACE SURVEY REPORT - HUDSON COUNTY CHROMIUM PROJECT

Site Name: Garfield Avenue Site DEP Site Number: 114
Business Name: Stevens Distribution Center
Address: 800 Garfield Avenue, Jersey City, NJ 07305 Phone: (201) 432-1190
Type of Business: Handbag Distributor
Date of Workplace Survey: 4/11/89
Date of Sampling: 8/10/89

OBSERVATIONS:

At the time of the initial inspection indications of possible chromium contamination were not observed in this workplace.

There was visible evidence of structural damage to the building at the time of the inspection in the following areas: outside brick damaged (bolt 8 feet up on wall of building), outside structural cracks, inside wall bulging in 2nd room of warehouse, inside walls bolted and cracked.

FINDINGS/CONCLUSIONS

Bulk samples taken from inside this workplace were analyzed by NJDOH Laboratory. (See attached Sampling Results Table.) Although the results were not unusually high, note that this workplace is built on or near the former site of the PPG plant which is listed by NJDEP as a known chromium contaminated site. (See attached Results of Investigations Contaminant Study and Hydrogeologic Investigations, Garfield Avenue Site, D'Appolonia Waste Management Services, Pittsburgh, PA.)

The possibility of employee exposure to chromium-contaminated material exists at your facility through inhalation and tracking of the material into the workplace. See the attached recommendations to limit personal exposure.

Send Report To:

Sol Betsh, Pres., Stevens Distribution Center
Hugh O'Reilly, Mgr., Stevens Distribution Center
Walter Lezynski, Jersey City Div. of Health
Robert Ferraiuolo, Director, Hudson Regional Hlth. Comm.
Diana Crowder, Hudson Regional Hlth. Commission
Ron Corcory, NJDEP

INTERIM STEPS TO CONTROL YOUR PERSONAL EXPOSURE:

- * Learn to recognize chromium. It may appear as yellow, white or green crystals on walls and other surfaces. It may be yellow or green in water. It may be reddish-orange or green in the soil.
- * Avoid known areas of contamination wherever possible.
- * Do not raise dust or track it into work areas.
- * Change your work clothing to street clothing at the end of the shift.
- * Change your work shoes to street shoes at the end of the shift. Do not track dust into your car or home.
- * Keep work and eating areas free of dust and accumulated dirt.
- * Wash your hands before eating or drinking.
- * Wash eating utensils before eating or drinking.
- * Maintenance personnel should wet-wipe or mop, do not sweep or vacuum.
- * Many times you cannot see the chromium contamination. If the area has been identified as containing chromium by the New Jersey Department of Environmental Protection (NJDEP) and/or the New Jersey Department of Health (NJDOH), please use caution and avoid those areas.

SAMPLING RESULTS TABLE

Stevens Distribution Center
80 Garfield Avenue
Jersey City, NJ 07305

August 10, 1989

<u>Sampling Location</u>	<u>Results- parts per million (ppm)</u> *	
Dirt taken near N. wall adjacent to loading dock (inside warehouse)	Total Chromium	20.2
	Hexavalent Chromium**	0.67
Dirt taken from stairwell (east side)	Total Chromium	50.0
	Hexavalent Chromium**	1.08
Surface scrapings from base of S. wall inside warehouse about 20 ft. from E. wall. (Dirt from floor also included)	Total Chromium	22.3
	Hexavalent Chromium **	0.76
Dirt taken from floor near S. wall (old warehouse), near loading dock inside building.	Total Chromium	96.2
	Hexavalent Chromium**	2.89
Surface scrapings from wall (inside the room off the main warehouse)	Total Chromium	4.26
	Hexavalent Chromium**	2.92

* Samples were analyzed by NJDOH Laboratory using EPA methods #SW846, 2nd Edition, Digestion Method 3050, ICP analysis for Total Chromium and #SW846, 2nd Edition, Digestion method 3060, Separation method 7195, ICP analysis for Hexavalent Chromium.

** Due to matrix effects exhibited by the spiked samples, these values should be viewed as approximate.

In interpreting these results it must be emphasized that there is virtually no information available on naturally occurring or background levels of chromium in the indoor environment. A reasonable estimation of natural background levels of chromium in soils ranges from 5 to 60 mg/kg (ATSDR, 1988; WHO, 1988).

Report

Results of Investigations Contaminant Survey and Hydrogeologic Investigations Garfield Avenue Site

D'APPOLONIA

WASTE MANAGEMENT SERVICES

January 13, 1984

Project No. 83-1690

Mr. R. J. Samelson
Manager of Environmental Programs
PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272

Results of Investigations
Contaminant Survey and Hydrogeologic Investigations
Garfield Avenue Site
Jersey City, New Jersey

Dear Mr. Samelson:

D'Appolonia Waste Management Services, Inc. (D'Appolonia), was retained by PPG Industries, Inc. (PPG), to conduct a contaminant survey and hydrogeologic assessment at the Garfield Avenue site to evaluate the vertical and horizontal extent of chromium contamination and its impact on ground water encountered at the site. The investigation plan was proposed in a letter to Mr. R. J. Samelson of PPG. On October 3, 1983, the New Jersey Department of Environmental Protection (DEP) confirmed its concurrence with the plan.

The Garfield Avenue site was the site of chromium ore processing by PPG from 1954 to 1964, at which time the property was sold. The property has been subsequently transferred to others and developed for light industrial use. A portion of the property remains undeveloped. Initial soil samples from these undeveloped areas contained 50 to 200 parts per million (ppm) hexavalent chromium. This letter report contains the results of D'Appolonia's investigations at the Garfield Avenue site, including a description of methodologies utilized, field observations, and results of laboratory analyses.

FIELD EXPLORATION AND SAMPLING PROGRAM

The major objective of this task was to determine the areal extent of chromium present at the site as well as the hydrogeologic setting. As used in this report, the site is defined as the area within the limits of the original PPG property lines as shown in Figure 1. Due to the presence of the existing buildings and pavement, the investigation was limited to vacant lands and primarily conducted upon the 4.5-acre vacant lot bordering Halladay Street.

The field exploration program consisted of test pit excavations, shallow borings, and observation well installations. The existence of chromium in soil was primarily determined by visual observation of samples taken from these sites. Laboratory analyses were conducted on individually selected soil samples to quantify the concentration of hexavalent and total chromium in various materials found throughout the site. Ground water samples were also collected and tested during the investigation.

Test Pit Excavations

Thirteen test pits were excavated in the vacant lot area to determine the vertical extent of the chromium ore residue, the nature of the underlying soil, and extent of chromium migration. Test pits were excavated with a backhoe to depths ranging from 3.1 to 8.1 feet below ground surface. Excavation was halted whenever ground water was reached; whenever equipment refusal was encountered due to very dense materials (i.e., coarse fill); or whenever all fill materials had been penetrated and several feet of natural soil material was evident. For purposes of this report, "fill" will refer to both chromium ore residues and other backfill materials.

Descriptions of visual observations of the excavated test pits were prepared, with special effort made to record the presence of chromium salts, ground water, fill materials, or other noteworthy items. Soil samples were selected during test pit excavation from nearly every visually distinct layer (generally no greater than two feet in thickness), sealed in airtight plastic bags, and returned to D'Appolonia's laboratories. Locations of test pit excavations are shown in Figure 2, and test pits logs are included as Appendix A.

Shallow Borings

Eight shallow borings were drilled on parcels of open land to identify the possible presence of chromium around several of the existing buildings. These borings were drilled using rotary drilling techniques and split-spoon samples collected at 2.5-foot intervals, with the deepest sample collected from 10 to 11.5 feet in each of these borings. The borings were backfilled immediately upon completion of sampling. No water samples were obtained. The locations of shallow borings are shown in Figure 2.

Observation Well Installations

Three clusters of observation wells were installed at locations shown in Figure 2. The purpose of these wells was to establish site hydrogeologic setting and obtain soil and water quality samples from deeper strata. Each cluster consists of two wells; one deep well installed 60 feet or

greater below ground surface and a second shallow well installed approximately 18 feet below ground surface. The wells were installed in borings which were drilled using rotary drilling methods. Soil samples were obtained from the deep borings at five-foot intervals (distances between the tops of sampling drives) by driving a standard split-spoon sampler with a 140-pound hammer falling 30 inches. The number of hammer blows required to drive the sampler per each six-inch interval and a description of visual observation of each sample were recorded on the field boring logs. These are provided in Appendix B. Deep soil borings were terminated after encountering a substantial thickness of fine-grained materials (i.e., clay-silty clay). This was done with the knowledge and approval of DEP personnel on site at the time, as it was felt these deep clayey materials would provide a substantial barrier to downward chromium migration. This was later verified by soil sample analyses.

Observation wells were constructed of threaded, flush-joint Schedule 40 polyvinyl chloride (PVC) pipe with a two-inch inside diameter (ID). A ten-foot section of slotted PVC screen with a slot size of 0.020 inch was placed in the bottom of each well. The annulus of the boring was then gravel packed around the slotted screen to act as the sensing zone. The gravel pack was normally extended somewhat above the screen and the sensing zone then sealed off from the overlying portion of the boring by use of a bentonite seal. The seal was extended for several feet and the remainder of the annulus then filled with a cement grout to ground surface. A metal protective casing with locking cap was installed to protect the aboveground portion of the PVC riser pipe at each observation well. The construction details for each observation well are presented in Appendix C.

After the grout had been allowed to "cure" approximately two days, the wells were developed by forcing standing water out of the riser pipe through the use of compressed air. This procedure was repeated several times at each well, allowing sufficient recharge time between each attempt.

Water Sampling Program

Prior to water sampling of the six observation wells, water levels were measured and each well was purged of at least three well volumes of water. Field measurements of pH and specific conductance were made periodically during this purging process. When pH and specific conductance levels stabilized, the well was sampled using a Kemmerer-type sampler.

Additionally, when water was encountered in sufficient quantity, water samples were collected from the test pits and one surface water sample was collected from the on-site ditch (Figure 2). Samples for dissolved

metals analyses were filtered through a 0.45-micron membrane filter, although certain samples could not be filtered due to the presence of a thick organic liquid. All water samples were properly preserved according to Environmental Protection Agency (EPA) procedures. Water samples were analyzed for total and hexavalent chromium, and ground water samples were further analyzed for EPA primary and secondary inorganic drinking water parameters.

RESULTS OF INVESTIGATIONS

Site Hydrogeologic Setting

Figure 3 presents a generalized depiction of site stratigraphy prepared from the logs of the three deep borings drilled for observation well installation. As shown, approximately 15 feet of fill materials were encountered across the site, underlain by sand deposits approximately 30 to 40 feet thick. This layer contained coarse to very fine sand, indicating differing permeabilities could be expected in the three borings which penetrated this layer. Beneath the sand, a layer of clay or silty clay materials was encountered. This layer was found to be at least 25 feet thick at Boring W-1A. In Boring W-2A, this clayey layer was approximately 15 feet thick and was underlain by a small lense or layer of sand and gravel which, in turn, was underlain by more fine-grained materials. Not enough information is available to determine if the sand and gravel encountered within the clay layer in W-2A is continuous over a substantial portion of the site.

Ground water elevations encountered in the observation wells are presented in Table 1. The ground water levels in the three deep observation wells are also shown in Figure 3. These levels indicate ground water flow is generally to the southeast beneath the site. Ground water elevations were similar in the shallow well and deep well at W-1 and W-2, indicating these wells are in proper communication with the ground water table. At Observation Well W-3, the water table elevation in the shallow well was more than five feet higher than that observed in the deep well. This indicates the presence of less pervious materials in this area.

Soil Quality

Visual evidence of chromium presence was noted on the site surface, in several test pits, several of the shallow borings, and in the upper portion of W-1A. Greenish-yellow salts, characteristic of the presence of chromium, were visible over a large portion of the site, in quantities ranging from small pockets or clumps to patches a few square feet in size.

Chromium on the site was found to be unevenly distributed. Chromium in excess of five ppm was detected in some locations as deep as 41.5 feet. It is probable that chromium at this depth is waterborne and not due to the direct presence of chromium ore residues. Table 2 indicates that soil chromium concentrations generally decrease with depth, with the highest levels detected near the surface and virtually no chromium detected below 45 feet. However, some surface samples showed little or no chromium. In nearly all instances where chromium was detected, it consisted primarily of hexavalent chromium, except for those samples analyzed from the 20- to 40-foot range. At those depths, it appears that reducing conditions have been encountered, giving rise to the existence of the divalent and trivalent forms of chromium.

Figure 3 shows concentrations of total and hexavalent chromium in soil samples obtained from the three deep borings. This figure shows that chromium concentrations generally decrease with depth. No detectable chromium contamination was found within or below the clay layer. It is expected this layer will mitigate further downward migration.

Figure 4 shows those locations where chromium was found by visual observations or where laboratory analysis showed a concentration greater than five ppm.

Water Quality

Table 3 presents the results of analysis of water samples collected from test pits and from the surface drainage ditch. As can be seen, chromium is present in water samples from those test pits where chromium ore residues or salts were visible. The surface water sample also contained chromium, indicating at-surface chromium materials may be contaminating infiltration. These samples contained primarily (if not exclusively) hexavalent chromium.

The ground water samples collected from the observation wells contained varying amounts of total and hexavalent chromium, as shown in Table 3. The greatest amounts of chromium were found in the samples obtained from W-1A and W-1B, with the deeper well (W-1A) showing a relatively high amount of total chromium. The wells at W-1A and W-1B are the furthest downgradient of the three on site, as indicated by general ground water flow direction. Wells W-2 and W-3 are located in a more upgradient direction and contain substantially less chromium than W-1.

It should be noted that during drilling and test pit excavation, a dark, oily organic liquid with a strong naphthalene-like odor was frequently encountered on site. This material is of unknown origin, but was generally encountered between the depths of 5 and 25 feet. Its odor was generally quite strong and its presence as a second phase oftentimes hindered sample filtration. It was observed that, in most of the test

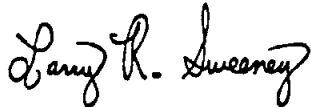
pits and borings, the organic material was generally below the bulk of the waste chrome ore. Figure 5 shows those test pits and borings where hydrocarbon liquids were encountered.

Table 4 presents the results of ground water sample analyses for primary and secondary drinking water standards. Many of these constituents were detected in elevated concentrations in some or all samples. These analyses, coupled with the presence of the hydrocarbons, indicate that ground water beneath the site is of poor quality regardless of the presence of chromium.

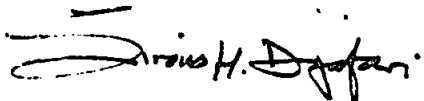
SUMMARY

Chromium was observed or detected in most site soil samples taken during the testing program and appears to be quite unevenly distributed over the site. Chromium levels in the soil generally decreased with depth, and soil samples obtained from the deep clay layer beneath the site showed no detectable chromium concentrations. Hexavalent chromium was the predominant form found on site, although divalent and trivalent forms became more common with depth. Ground water beneath the site was found to be flowing to the southeast and of poor quality. An odoriferous brown hydrocarbon liquid was commonly encountered with ground water across the site. Additionally, ground water samples contained concentrations of several inorganic constituents other than chromium in excess of EPA drinking water standards.

Respectfully submitted,



Larry R. Sweeney
Assistant Project Scientist



Sirous Haji-Djafari, Ph.D., P.E.
Director of Technology Applications

SHD:LRS:rs

TABLE 1
CHROMIUM CONCENTRATION OF
GROUND WATER SAMPLES

BORING	DEPTH ⁽¹⁾ (ft)	SCREENED INTERVAL ⁽¹⁾ (ft)	WATER LEVEL		TOTAL CHROMIUM (mg/l)	HEXAVALENT CHROMIUM (mg/l)
			DEPTH ⁽¹⁾	RELATIVE ELEVATION ⁽²⁾		
W-1A	81.5	45-55 ⁽³⁾	7.0	89.0	1080	124
W-1B	19.0	8-18	5.0	90.7	233	224
W-2A	76.5	65-75	6.3	90.4	0.6	0.6
W-2B	18.0	8-18	5.5	90.9	12	2
W-3A	60.0	49-59	8.2	90.3	0.05	0.04
W-3B	17.0	7-17	3.1	95.7	2.16	1.80

(1) Feet below ground surface.

(2) Elevation of 100.0 arbitrarily assigned to top of hydrant at end of Dakota Avenue. All site elevations are relative to this benchmark. Surveying conducted by Warren George, Inc., Jersey City, New Jersey.

(3) Hole backfilled to 55 feet prior to well construction.

TABLE 2
CHROMIUM CONTENT OF SITE SOILS AS RELATED TO DEPTH

SAMPLING DEPTH (ft)	TEST PIT/BORING NUMBER; SAMPLE NUMBER	TOTAL CHROMIUM (mg/l)	HEXAVALENT CHROMIUM (mg/l)
1.0-3.0	P-3; S-2	1.1	0.32
1.5-2.7	P-5; S-2	20	18
1.4-3.1	P-9; S-2	0.45	<0.05
1.7-3.0	P-6; S-3	180	180
2.1-3.9	P-12; S-3	38	38
2.2-4.2	P-2; S-2	84	72
2.6-5.2	P-11; S-3	0.25	0.08
3.0-5.0	P-13; S-4	0.14	0.12
3.3-4.5	P-1; S-3	0.7	<0.05
3.3-5.3	P-4; S-3	28	28
3.6-5.6	P-8; S-3	0.45	0.44
4.2-6.0	P-10; S-4	0.14	<0.05
4.6-7.6	P-7; S-3	1.2	0.72
5.0-6.5	W-3; S-2 ⁽¹⁾	<0.1	<0.05
5.0-6.5	SB-7; S-3	1.4	<0.05
7.5-9.0	SB-2; S-4	19	19
7.5-9.0	SB-5; S-4	<0.1	<0.05
7.5-9.0	SB-8; S-4	58	48
10-11.5	SB-3; S-5	38	38
10-11.5	SB-4; S-5	<0.1	<0.05
10-11.5	SB-9; S-5	<0.1	<0.05
10-11.5	SB-10; S-5	68	67
10-11.5	W-1; S-3	28	28
15-17	W-2; S-4	<0.1	<0.05
20-21.5	W-1; S-5	27	3.6
20-22	W-2; S-5	19	1.6

See footnote at end of table.

IDAIRPOLKONLA

TABLE 2
(Continued)

SAMPLING DEPTH (ft)	TEST PIT/BORING NUMBER; SAMPLE NUMBER	TOTAL CHROMIUM (mg/l)	HEXAVALENT CHROMIUM (mg/l)
20-21.5	W-3; S-5	27	2.1
30-31.5	W-1; S-7	26	3.1
30-33	W-2; S-7	23	1.6
30-31.5	W-3; S-7	20	1.0
35-36.5	W-3; S-8	13	0.5
40-41.5	W-1; S-9	7.9	1.0
40-43	W-2; S-9	4.0	3.5
45-46.5	W-1; S-10	2.8	2.8
45-46.5	W-3; S-10	<0.1	<0.05
55-57	W-2; S-12	<0.1	<0.05
60-61.5	W-3; S-13	<0.1	<0.05
65-67	W-2; S-14	<0.1	<0.05
80-81.5	W-1; S-15	<0.1	<0.05

(1) Soil samples were obtained from deep borings only at observation well installation locations.

TABLE 3
CHROMIUM CONCENTRATION OF
TEST PIT WATER SAMPLES⁽¹⁾

TEST PIT NUMBER ⁽²⁾	WATER LEVEL ⁽³⁾ (ft)	TOTAL CHROMIUM (mg/l)	HEXAVALENT CHROMIUM (mg/l)	COMMENTS
P-3	4.3	102	98	Chromium waste visible to 4.3 feet.
P-5	3.8	104	108	Chromate salts visible to 3.8 feet.
P-6	4.0	20	18	Chromate salts visible to 3.0 feet.
P-11	5.2	0.90	0.20	No salts visible.
P-12	5.6	1.01	0.28	No salts visible.
P-13	5.5	3.22	<0.05	No salts visible.
-	Surface ⁽⁴⁾	12	10	Sample collected from drainage ditch near center of site.

(1) Refer to Figure 2 for test pit locations.

(2) No significant amounts of water encountered in the remainder of the test pits.

(3) Feet below ground surface.

(4) See Figure 2 for surface water sampling location.

TABLE 4
ANALYSIS FOR U.S. EPA PRIMARY AND SECONDARY INORGANIC DRINKING WATER PARAMETERS

PARAMETER	UNITS	GROUND WATER SAMPLING LOCATION						STANDARD LEVELS (1)
		W-1A	W-1B	W-2A	W-2B	W-3A	W-3B	
pH	-	8.85	12.20	10.00	9.45	7.70	7.20	6.5-8.5
Color (true)	APHA	44,500	14,500	27	1,400	17	270	15
Turbidity	NTU	80	870	30	174	22	102	5
Total Dissolved Solids	mg/l	6,696	2,930	470	3,269	578	3,884	500
Foaming Agents	mg/l	4.4	5.6	0.24	2.4	0.16	1.6	0.5
Arsenic	mg/l	0.034	0.016	0.002	0.068	0.010	0.022	0.05
Barium	mg/l	0.03	<0.01	0.09	0.77	0.18	0.29	1.0
Cadmium	mg/l	<0.001	<0.001	<0.001	0.002	0.001	<0.001	0.01
Chloride	mg/l	535	78	200	37	78	1,220	250
Total Chromium	mg/l	1,080	233	0.6	12	0.05	2.16	170(2)
Hexavalent Chromium	mg/l	124	224	0.6	2	0.04	1.8	0.05
Copper	mg/l	0.31	0.10	<0.01	0.02	0.02	0.04	1.0

See footnotes at end of table.

DATA CONT.

TABLE 4
(Continued)

PARAMETER	UNITS	GROUND WATER SAMPLING LOCATION						STANDARD LEVELS (1)
		W-1A	W-1B	W-2A	W-2B	W-3A	W-3B	
Fluoride	mg/l	0.17	0.07	0.11	0.53	0.14	0.27	2.4
Iron	mg/l	1.8	0.2	<0.1	79	0.8	110	0.3
Lead	mg/l	<0.01	<0.01	<0.01	0.41	<0.01	0.13	0.05
Manganese	mg/l	0.25	0.02	<0.01	1.42	0.33	2.18	0.05
Mercury	mg/l	0.0071	0.0020	0.0005	0.0081	0.0013	0.0116	0.002
Nitrate	mg/l	30	10	1.0	1.4	0.2	0.5	10.0
Selenium	mg/l	0.005	0.004	<0.001	<0.001	<0.001	0.020	0.01
Silver	mg/l	0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.05
Sulfate	mg/l	500	300	100	190	210	390	250
Zinc	mg/l	0.08	0.04	0.01	2.45	0.02	1.50	5.0

(1) As established under one or more of the following:

- U.S. EPA National Interim Primary Drinking Water Standards; 40 CFR, Part 141 (1975).
- U.S. EPA Proposed Secondary Drinking Water Standards; 40 CFR, Part 143 (1979).
- U.S. EPA Toxic Pollutants Water Quality Criteria for the Maximum Protection of Human Health; Federal Register, Vol. 45, No. 231, pp. 79318-79379 (1980).

(2) For trivalent chromium.

DRAWN BY: []
 CHECKED BY: LRS
 1-5-84
 APPROVED BY: SMD
 1-12-84
 DRAWING NUMBER: 83-1690-A2
 1-13-84

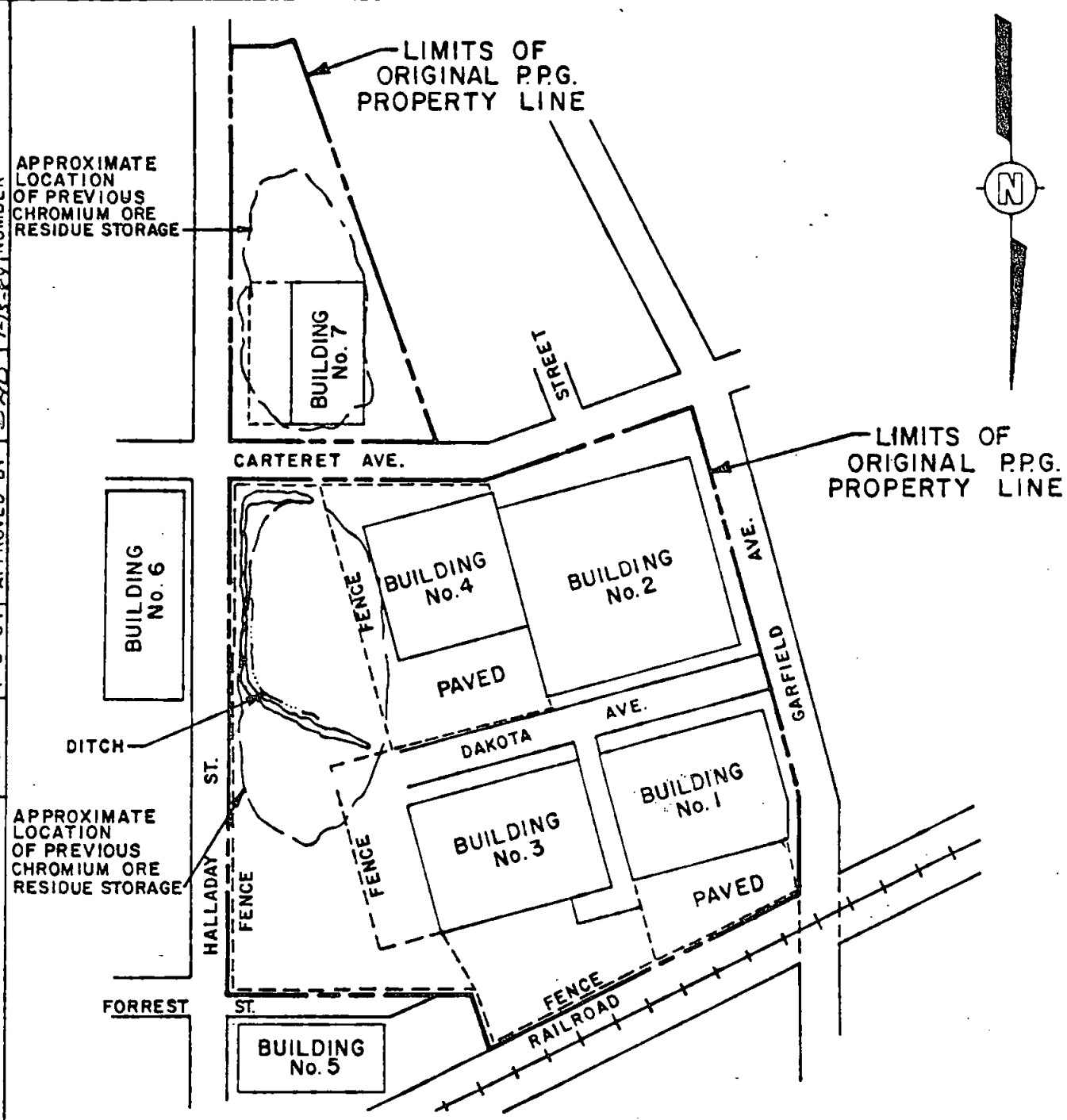


FIGURE 1

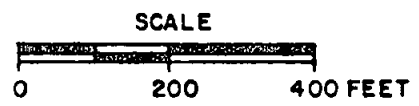
SITE MAP

PREPARED FOR

PPG INDUSTRIES, INC.
 PITTSBURGH, PENNSYLVANIA

DIAPIPOLONIA

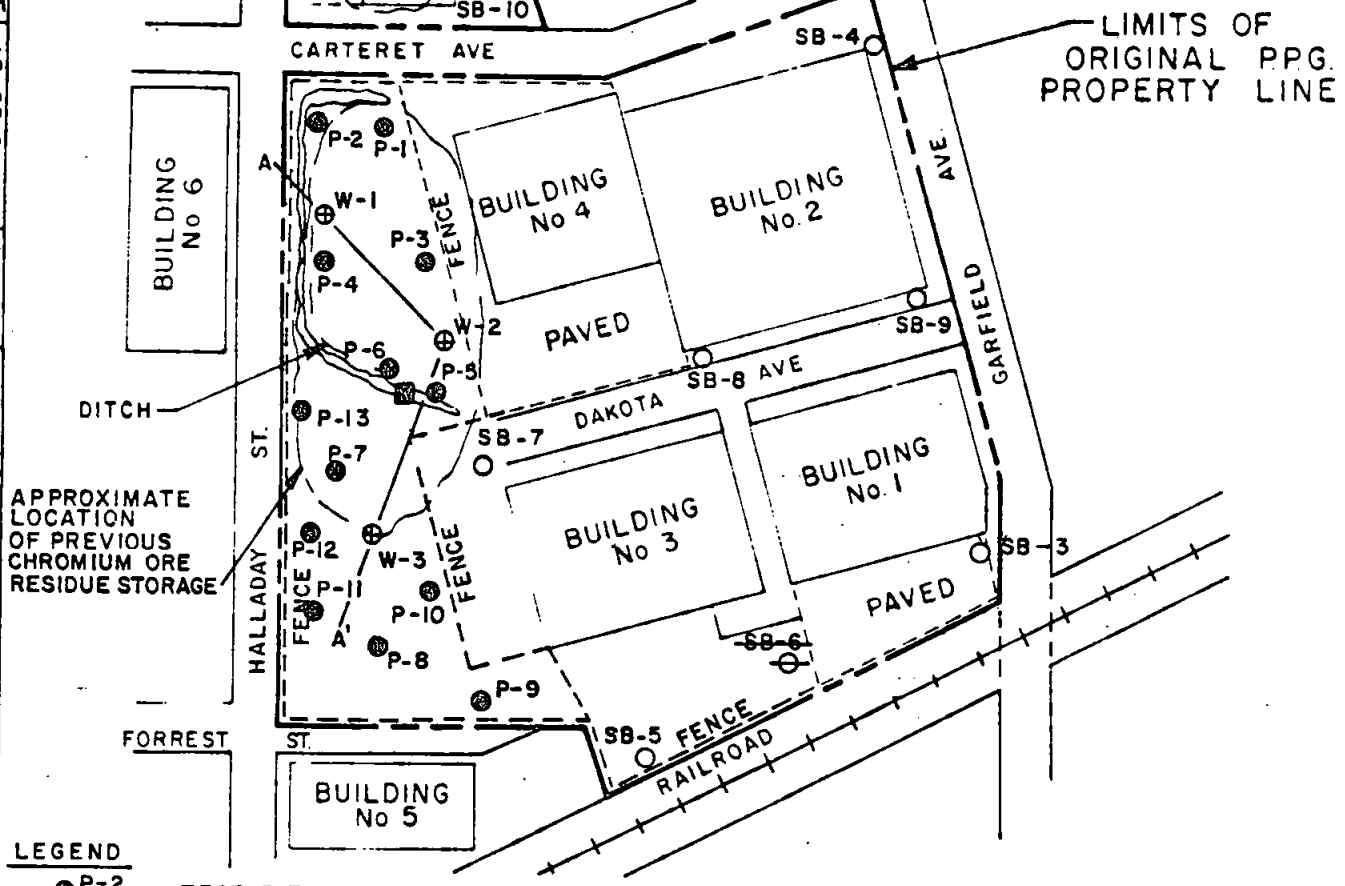
NOTE:
 LOCATION OF PRESENT AND PREVIOUS
 FEATURES ARE APPROXIMATE.
 MAP PROVIDED BY PPG.



DRAWING 83-1690-A3
 1-12-84
 1-13-84
 LRS
 1-5-84
 APPROVED BY
 DRAWN BY

APPROXIMATE
 LOCATION
 OF PREVIOUS
 CHROMIUM ORE
 RESIDUE STORAGE

LIMITS OF
 ORIGINAL PPG.
 PROPERTY LINE



LIMITS OF
 ORIGINAL PPG.
 PROPERTY LINE

LEGEND

- P-2 TEST PIT
- SB-8 SHALLOW BORING
- ⊕ W2 OBSERVATION WELL CLUSTER
- A—A' CROSS SECTION LOCATION
- SURFACE WATER SAMPLING LOCATION

NOTES:

1. LOCATION OF PRESENT AND PREVIOUS FEATURES ARE APPROXIMATE.
2. NO DRILLING CONDUCTED AT SB-1 AND SB-6 (PAVED AREAS).

FIGURE 2

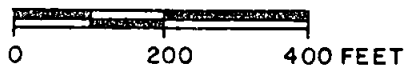
BORING AND TEST PIT LOCATIONS

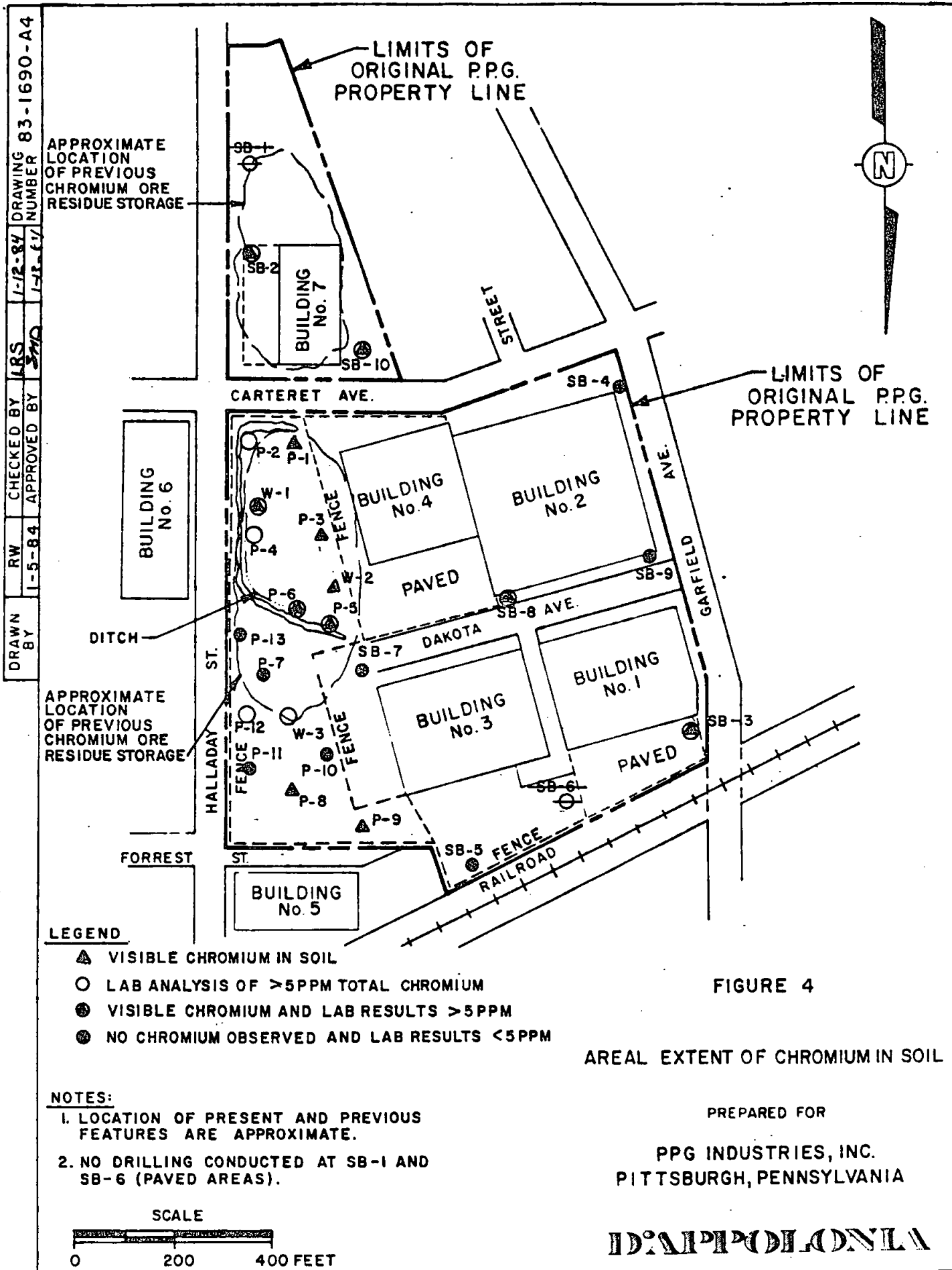
PREPARED FOR

PPG INDUSTRIES, INC.
 PITTSBURGH, PENNSYLVANIA

IDA/PPG/DA/DA/DA

SCALE





DRAWN BY
1-5-84
CHECKED BY
1-12-84
APPROVED BY
1-12-84
DRAWING NUMBER
83-1690-ALL

APPROXIMATE
LOCATION
OF PREVIOUS
CHROMIUM ORE
RESIDUE STORAGE

APPROXIMATE
LOCATION
OF PREVIOUS
CHROMIUM ORE
RESIDUE STORAGE

- ⊙ P-2 TEST PIT
- SB-8 SHALLOW BORING
- ⊕ W-2 OBSERVATION WELL CLUSTER
- X HYDROCARBONS ENCOUNTERED

NOTES:

1. LOCATION OF PRESENT AND PREVIOUS FEATURES ARE APPROXIMATE.
2. NO DRILLING CONDUCTED AT SB-1 AND SB-6 (PAVED AREAS).

SCALE

0 200 400 FEET

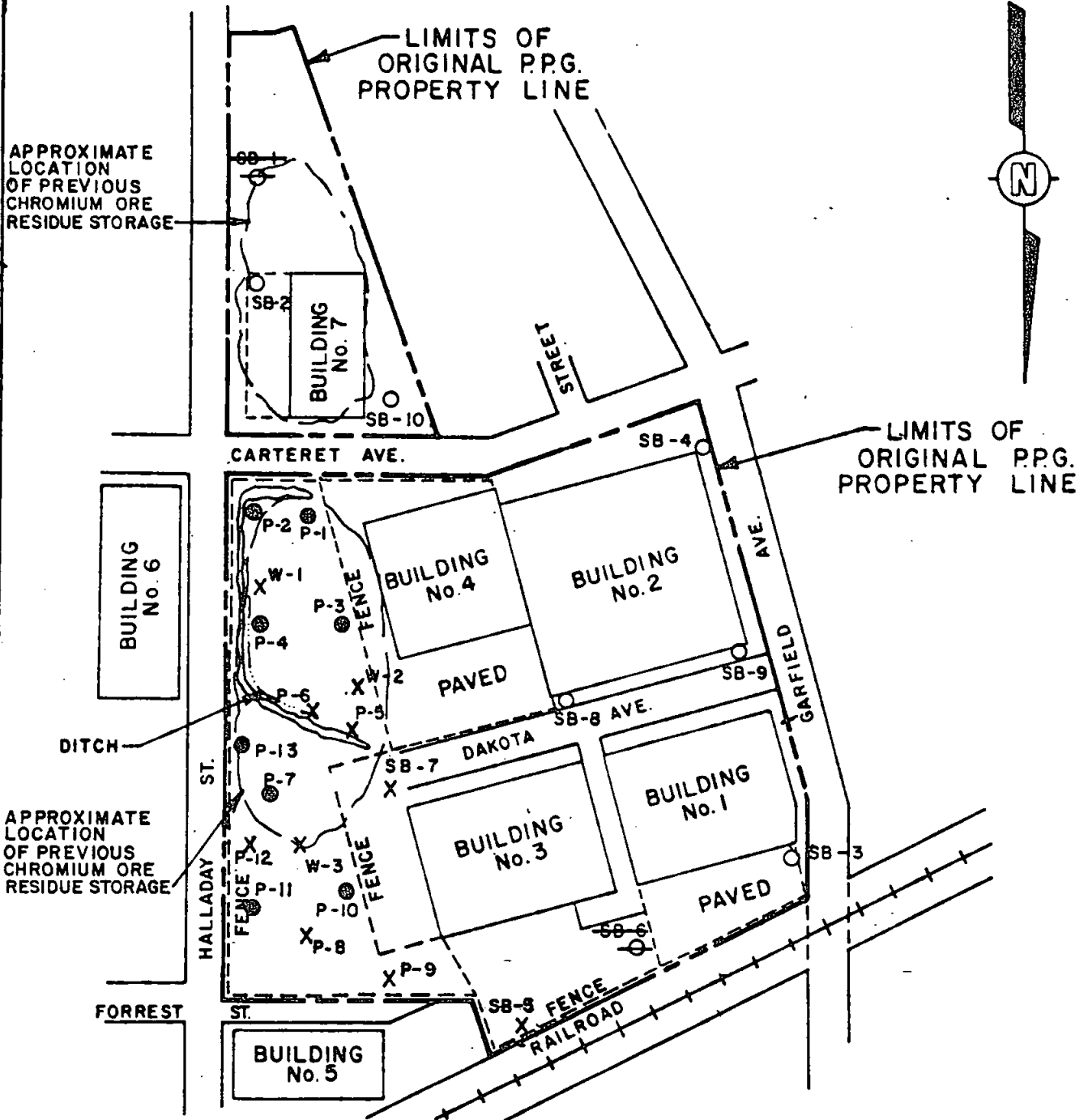


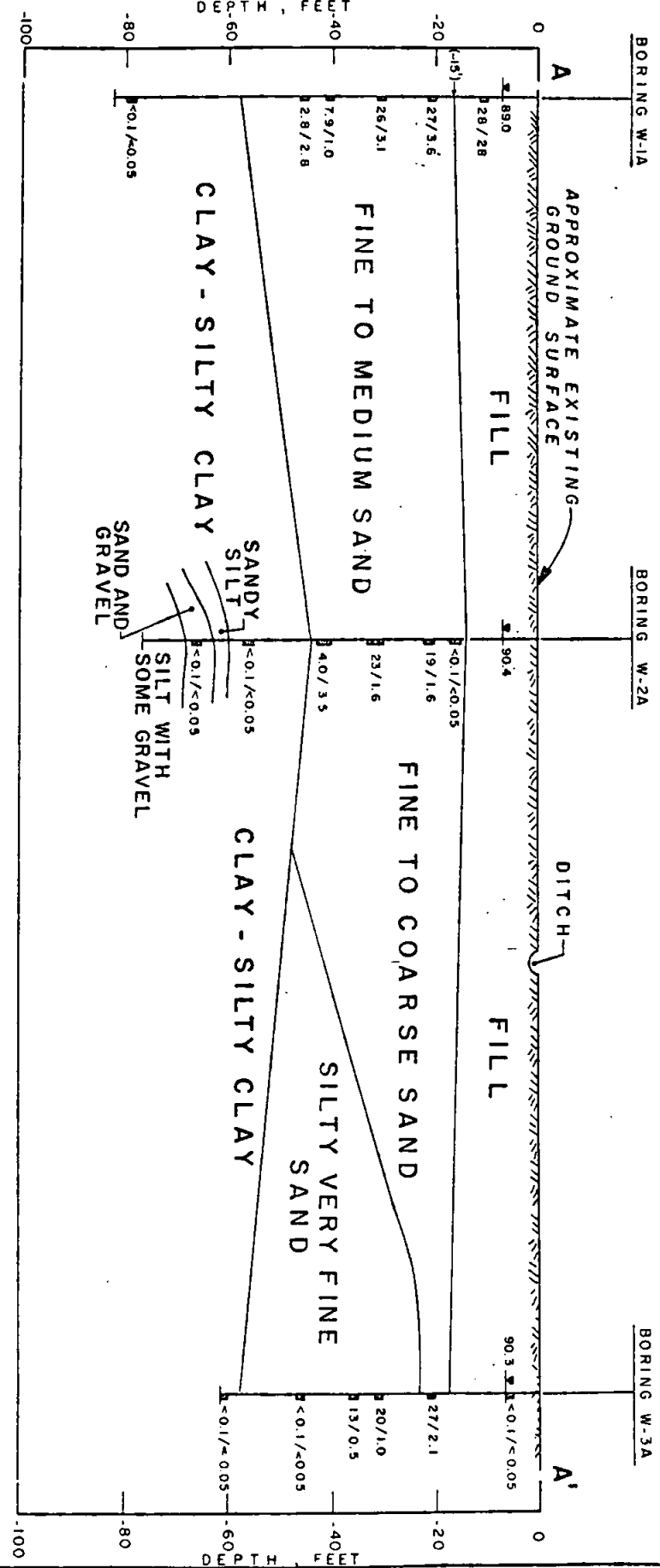
FIGURE 5

AREAS OF HYDROCARBON PRESENCE

PREPARED FOR

PPG INDUSTRIES, INC.
PITTSBURGH, PENNSYLVANIA

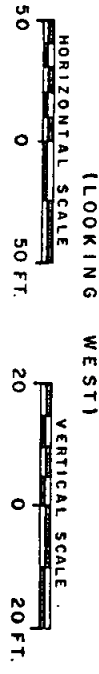
IDA/PPG/IDA/PPG



THE BORING LOGS AND RELATED INFORMATION OF THE SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED ON THE LOGS. THE DATA FROM THE BORING LOGS AT OTHER LOCATIONS MAY DIFFER FROM CONDITIONS OCCURRING AT THESE BORING LOCATIONS ALSO. THE PASSAGE OF TIME MAY RESULT IN A BORING LOCATIONS AT THESE LOCATIONS.

THE DEPTH AND THICKNESS OF THE SURFACE STRATA AND INTERPOLATED BETWEEN THE TEST BORINGS AND THE DEPTHS OF THE TEST BORINGS. THE INFORMATION ON ACTUAL SUBSURFACE CONDITIONS IS ONLY AT THE LOCATION OF THE TEST BORINGS. THE DEPTHS OF THE TEST BORINGS MAY VARY FROM THOSE INDICATED.

CROSS SECTION A-A'



NOTES:

1. REFER TO FIGURE 2 FOR CROSS SECTION LOCATION.
2. WATER LEVEL ELEVATIONS ARE RELATIVE TO SITE BENCHMARK (SEE TABLE 1).

LEGEND

SOIL CONCENTRATION OF
TOTAL CHROMIUM /
HEXAVALENT CHROMIUM
(PARTS PER MILLION
AT THIS LOCATION)

GROUND WATER ELEVATION
AS MEASURED 10-11-83.

PPG INDUSTRIES, INC.
PITTSBURGH, PENNSYLVANIA
HIDALGO DONNA

FIGURE 3

GENERALIZED
GEOLOGICAL CROSS SECTION A-A
GARFIELD AVENUE SITE
JERSEY CITY, NEW JERSEY

PPG INDUSTRIES, INC.
PITTSBURGH, PENNSYLVANIA
HIDALGO DONNA



CHROMIUM AND YOUR HEALTH

Division of Occupational and Environmental Health

March 1989

WHAT IS CHROMIUM?

Chromium is used in paint, stainless steel, chrome plating, photographic chemicals, leather tanning, and wood preservatives. Its chemical makeup varies and it occurs in several forms including a metal solid or dust. Some of these solids can be dissolved in water. Chromium waste in some forms may appear red, orange or yellow. Chromium in this discussion means all the forms of chromium.

IS CHROMIUM HARMFUL TO MY HEALTH?

A small amount of chromium is found in all people and is essential for good health. However, an excess of chromium can cause illness. Some forms of chromium and some ways you can come in contact with it are more harmful than others. Exposure to a more harmful type of chromium for a longer period of time increases the possibility of health problems.

From what we know about high exposures to chromium in work place settings, breathing in, eating or having skin contact with large amounts of chromium can cause symptoms. Some symptoms can occur shortly after exposure. These include injury to the skin, lungs, kidneys, and liver. Your body can repair some of the damage once exposure to chromium has stopped. Although the body can handle small amounts of chromium, a dose too large to tolerate and continued over a long period of time may lead to damage that cannot be repaired. Long term exposure to some forms of chromium may increase the risk of lung cancer, which would not develop for many years.

WHAT ARE SOME OF THE WAYS I CAN BE EXPOSED TO CHROMIUM?

If you live or work near or have walked on chromium sites you may have been exposed. Exposure can occur through the air by breathing in contaminated dust. It can enter the body by swallowing contaminated water, soil and food. You can also be exposed to chromium by direct contact with the skin.

HOW DO I KNOW IF MY HEALTH HAS BEEN AFFECTED?

Chromium can be an irritant to the skin, eyes, nose and throat. Other health effects may include coughing, wheezing, shortness of breath, fever and weight loss. Rashes, sores, blistering or peeling of the skin, and skin ulcers that do not heal are also possible reactions to chromium exposure. If you are concerned about any symptoms that you have, you should see your doctor or go to your local health clinic.

The New Jersey Department of Health is providing medical information on chromium exposure to doctors in Hudson County. If your doctor or local health clinic has not received this information have them contact the local health department.

HOW DO I GET TREATMENT IF I NEED IT?

Your doctor or local health clinic will be able to advise you should you need treatment.

HOW DO I AVOID CHROMIUM HAZARDS?

Contact of chromium with the skin, swallowing food contaminated with chromium, breathing in chromium contaminated dust or accidentally swallowing chromium contaminated soil can be harmful to adults and children. DO NOT ALLOW CHILDREN OR ADULTS INTO KNOWN CHROMIUM CONTAMINATED SITES. Be suspicious of dust or water from identified or suspected waste sites. Do not try to clean chromium contamination. If you come in contact with chromium, wash off your skin in cool water.

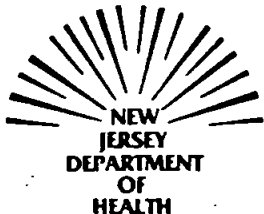
WHICH SITES ARE IDENTIFIED AS PROBLEMS?

Your local health department can provide you with a list of known contaminated sites in your area. Call your local health department if you suspect contamination.

WHAT IF I HAVE MORE QUESTIONS ABOUT CHROMIUM?

If you have further questions, contact your local health department. If you still have questions, your local health department may refer you to the correct state agencies for your particular concern.

Prepared by: New Jersey Department of Health
Division of Occupational and Environmental Health
CN-360 Trenton, N.J. 08625



CHROMIUM IN THE WORKPLACE

Division of Occupational and Environmental Health

This is a general notice to inform you that this property has been identified by the New Jersey Department of Environmental Protection (NJDEP) as either built on or adjacent to one of the known chromate contaminated sites in Hudson County.

WHAT ARE THE SITES AND HOW DID THEY GET THERE?

There are more than 100 sites in Hudson County known to be contaminated with elevated levels of chromium. There are 77 sites in Jersey City, 26 sites in Kearny and 1 site in Secaucus. Three chromate processing facilities operating in Hudson County, generated a chromium contaminated slag waste material. This slag waste material was used as landfill and diking materials in many areas. The three generators of the waste, Allied Signal Inc., PFG Industries and Maxus Industries (formerly Diamond Shamrock), operated chromate processing facilities for approximately 70 years, from 1900 until 1970. It is estimated that these chromium operations have resulted in the generation of approximately two million tons of waste residue containing from 2% to 5% chromium. Approximately 1,850,000 cubic yards of this material is now present in public, commercial, industrial and residential areas of Hudson County.

WHAT HAS BEEN DONE SO FAR?

To date, the NJDEP has taken soil samples to identify the chromium contaminated sites. Limited clean up actions have taken place at some locations throughout the County, and will continue to take place during the next several months. Under a Directive from the NJDEP these clean up measures have been undertaken by those companies responsible for dumping the waste. Other clean ups will be undertaken by a contractor hired by NJDEP with monies from the New Jersey Spill Fund.

IS CHROMIUM HARMFUL TO MY HEALTH?

A small amount of chromium is found in all people and is essential for good health. However, an excess of chromium can cause illness. Some forms of chromium and some ways you can come in contact with it are more harmful than others.

Information to date about high exposures to chromium in workplace settings has demonstrated that breathing in, eating or having skin contact with large amounts of chromium can cause injury. Some symptoms of injury can occur shortly after exposure. These include injury to the skin, lungs, kidneys, and liver. Your body can repair some of the damage once exposure to chromium has stopped. Although the body can handle small amounts of chromium, a dose too large to tolerate and continued over a long period of time may lead to damage that cannot be repaired. Long term exposure to some forms of chromium may increase the risk of lung cancer, which may not develop for many years.

The New Jersey Department of Health (NJDOH) is providing medical information on chromium exposure to all physicians in Hudson County. If your doctor has not received this information, please have him or her contact your local

health department. In Kearny the telephone number is (201) 997-0600. In Jersey City the telephone number is (201) 547-5168.

WHAT ARE THE PLANS FOR THE FUTURE?

In order to determine if exposures are taking place and to prioritize the sites for cleanup actions, several activities will take place during the next several months at your worksite.

A preliminary workplace survey will be completed by NJDOH and local health department industrial hygienists for all the workplaces on the NJDEP list. This survey will be used to determine the presence of the chromium contamination within your workplace. The survey will also be used to gather background information for a full industrial hygiene evaluation which is planned to take place during the coming year. The full industrial hygiene evaluation will include air monitoring to see if the chromium dust has become airborne and therefore more easily inhaled.

A report containing the results of this survey and the results of the detailed industrial hygiene evaluation will be made available to you, your employer and your labor union. In these reports, we will be making recommendations to your employer regarding cleanup and protective measures. The reports will also be on file at your local health department.

HOW DO I AVOID CHROMIUM HAZARDS?

Contact with chromium on the skin, swallowing food contaminated with chromium, breathing in chromium contaminated dust or accidentally swallowing chromium contaminated soil can be harmful to adults and children.

*** LEARN TO RECOGNIZE CHROMIUM WASTE:**

- LITTLE OR NO VEGETATION GROWS IN CHROMIUM FILLED SOIL CONTAMINATED WITH CHROMIUM.
- IN SOME FORMS CHROMIUM MAY APPEAR RED, ORANGE, YELLOW OR GREEN.

*** WHERE POSSIBLE, AVOID KNOWN CHROMIUM CONTAMINATED AREAS.**

*** ASK YOUR EMPLOYER TO TELL YOU WHERE THE CHROMIUM CONTAMINATION AREAS ARE IN YOUR WORKPLACE.**

WHAT IF I HAVE MORE QUESTIONS ABOUT CHROMIUM?

If you have questions concerning chromium, contact your local health department. Kearny, (201) 997-0600 or Jersey City, (201) 547-5168.

NEW JERSEY DEPARTMENT OF HEALTH
OCCUPATIONAL HEALTH SERVICE
CN 360
TRENTON, NEW JERSEY 08625
(609) 984-1863

3/17/89

Dumas/Ten



PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272 (412) 434-2872

Scott A. Tufts
Manager of Environmental Operations
Environmental Affairs
PPG Chemicals

June 4, 1987

Mr. Tom McKee
Mr. Ronald T. Corcory /
Division of Hazardous Waste Management
401 East State Street
CN 028
Trenton, NJ 08625

Dear Messrs. McKee and Corcory:

This letter is to confirm the discussions at our meeting of June 1, 1987 regarding the Garfield Avenue Site Directive.

As a result of the meeting, PPG Industries will commission IT Corporation of Pittsburgh, PA to prepare plans for paving and berming areas surrounding the site so as to minimize the migration of chrome material from the site into adjacent roadways and parking lots.

We anticipate submitting construction plans and schedules for this work for your approval by June 15, 1987.

Very truly yours,

A handwritten signature in black ink, reading 'Scott A. Tufts'.

Scott A. Tufts

SAT/dke

cc: S. G. Kuis
R. J. Samelson

DIVISION OF ENGINEERING

July 24, 1987

MICHAEL J. BARNES, P.E.
MUNICIPAL ENGINEER

ANTHONY R. CUCCI
MAYOR

New Jersey Department of Environmental Protection
401 East State Street - 5th Floor West
CN-028
Trenton, New Jersey 08625

Attention: Tom McKee
Bureau of Case Management

**SUBJECT GARFIELD AVENUE SITE
PPG CORPORATION
INTERIM REMEDIAL MEASURES
OUR PROJECT #87-017**

Dear Mr. McKee:

We have reviewed the proposed remedial measures for containing the exposure of contaminants to the public street as shown on the International Technology Corp. drawing 83-1690-A2 dated 6/11/87. Based on our review we have made the following comments:

1. A separate storm drainage system should be installed to drain the site directly into the 48" sewer main in Carteret Avenue to minimize the impact on the street drainage system by ensured dilution in the main.
2. The proposed sidewalks should consist of a minimum 6 inches of gravel or other suitable granular base capped with concrete, asphalt or other paving material.
3. 6" curbs will be adequate if the internal drainage system is capable of collecting and draining the site.

July 24, 1987

**SUBJECT GARFIELD AVENUE SITE
PPG CORPORATION
INTERIM REMEDIAL MEASURES
OUR PROJECT #87-017**

4. We are not sure how long this interim arrangement is expected to last until the complete remedial or clean up plan is executed and what the plan is?

Sincerely,



ABDUS S. SAFI, P.E., P.P.
Supervising Engineer
Division of Engineering



MICHAEL J. BARNES, P.E., P.P.
Municipal Engineer
City of Jersey City

mct

cc: Tex Aldridge-Environmental Technician

DIVISION OF ENGINEERING

July 24, 1987

MICHAEL J. BARNES, P.E.
MUNICIPAL ENGINEER

ANTHONY R. CUCCI
MAYOR

New Jersey Department of Environmental Protection
401 East State Street - 5th Floor West
CN-028
Trenton, New Jersey 08625

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Bureau of Case Management

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PPG CORPORATION
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3. 6" curbs will be adequate if the internal drainage system is capable of collecting and draining the site.

July 24, 1987


**SUBJECT CARFIELD AVENUE SITE
PPG CORPORATION
INTERIM REMEDIAL MEASURES
OUR PROJECT #87-017**

4. We are not sure how long this interim arrangement is expected to last until the complete remedial or clean up plan is executed and what the plan is?

Sincerely,



ABDUS S. SAFI, P.E., P.P.
Supervising Engineer
Division of Engineering

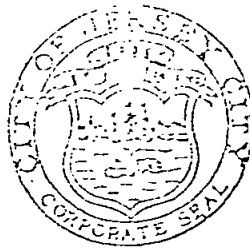


MICHAEL J. BARNES, P.E., P.P.
Municipal Engineer
City of Jersey City

mct

cc: Tex Aldridge-Environmental Technician

HAZARDOUS WASTE TASK FORCE



Garfield Ave-PPG
EARL ZELA TEX ALDREDGE
DIRECTOR

July 14, 1982

CITY HALL, JERSEY CITY, N.J. 07302

(201) 547-4776

Report in re: Garfield - Halladay Dump

HWTf case # 1X037

Location: Garfield Ave to Halladay St From 100ft north of Forest St to 400ft south of Carterett Ave.

On this date a field inspection was made of the forereferenced site. The persons making inspection were:

Earl Zela Tex Aldredge, Director, Hazardous Waste Task Force
City of Jersey City

Anthony Cocciardi, Bat. Chief, Fire Prevention Bureau, Div of Fire
Dept. of Public Safety, City of Jersey City

Richard J. Samelson, Manager Environmental Programs, Dept. of
Environmental Affairs, Industrial Chemical
Division, PPG Industries Inc.

Paul M. King, Senior Counsel, PPG Industries Inc.

Myself and Mr. Samelson photographed the site during the inspection of the site and the area around it. Mr. Samelson and Mr. King stated that PPG would test the site and area. They would also prepare a remedial plan for the correction of the problem. Further that they will assist in the City in this matter. Mr. King indicated to me that PPG is attempting to ascertain as to who acquired soil (waste) from the site. As soon as he can obtain any additional data he would forward it to me. The site contains visual signs of chromium contamination. I contacted Lawrence Construction Co. in re PPG intent to do sampling at the site and they said they had no objection to PPG doing the lab work. Notified Superfund Unit, USEPA, and DHM NJDEP.

Earl Zela Tex Aldredge
Earl Zela Tex Aldredge

Our goal is an environmentally safe community

MEMO

NEW JERSEY STATE DEPARTMENT

ENVIRONMENTAL PROTECTION

TO Peter Lynch through Robert PlumbFROM Thomas McKeeDATE September 29, 1983SUBJECT PPG Garfield Avenue Site

On September 9, 1983, a meeting was held in the Newark field office between representatives of PPG Industries, Lawrence Construction Company and DWR. The purpose of the meeting was to discuss the proposed hydrogeological investigation which is to be conducted at the site of a former PPG chromate producing plant on Garfield Avenue in Jersey City, NJ. In attendance were:

Mr. Richard Samelson, PPG Manager Environmental Programs
Sirous Haji-Djafari, PPG Hydrogeologic Consultant
Dorothy Molyneux, Lawrence Construction Co., General Manager
Edward R. Matthews, Lawrence Construction Co. Attorney
Robert Plumb, DWR, Assistant Chief, Metro Region
Ted Hayes, DWR, Geological Survey
Thomas McKee, DWR, Metro Region

Two other property owners besides Lawrence Construction Company occupy what was formerly the PPG chromate manufacturing plant. Mr. Samelson is working with Jersey City officials to obtain permission for PPG's consultant to work on their property. Preliminary indications are that there will be no problem in obtaining permission. The other property owners are HHA Transportation and the Halladay Street Corporation.

It was generally agreed that the hydrogeological investigation formulated by Mr. Djafari and submitted by PPG for DWR approval was acceptable. Some minor modifications of monitoring well design were requested by Ted Hayes and agreed to by Mr. Djafari.

Mr. Matthews requested that the number of personnel at the site be kept to a minimum and statements to the press be limited to an agreed upon formulated statement. PPG and Lawrence agreed to a formulated statement. Robert Plumb stated that DEP public statements would be released from the Department's press office.

Field work on the PPG site should begin in early October.

E22:G25

REFERRED TO

BUREAU OR OFFICE

FILE

PERSON CONTACTED

PHONE NO. _____

AFFILIATION/ADDRESS

SUBJECT OF CALL/VISIT

SUMMARY OF CALL/VISIT

ACTION RECOMMENDED

ILLEGIBLE

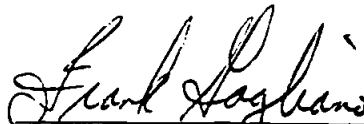
Signature

MEMONEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TO Pete Lynch, Chief, Metro Region, DWR
FROM Frank Gagliano, DWM, BFO DATE February 6, 1984
SUBJECT 800 Garfield Avenue, Investigative Report

Your office has provided me with a copy of PPG's report entitled "Results of Investigations Contaminant Survey and Hydrogeologic Investigations Garfield Avenue Site", prepared by PPG's consultants, D'Appolonia Waste Management Services.

Please have your staff review the report and forward any comments to me at DWM's Yardville office.


Frank Gagliano

FOC5:dg



State of New Jersey

DEPARTMENT OF HEALTH
CN 360, TRENTON, N.J. 08625-0360

RECEIVED
90 JAN 24 AM 10:57
CITY OF JERSEY CITY
ENGINEERING

January 18, 1990

Dear Employer and Employees,

The New Jersey Department of Health (NJDOH) recently completed a preliminary survey of your facility:

Cathy Daniels
880 Garfield Avenue
Jersey City, New Jersey 07305

Your facility was included in this survey because the New Jersey Department of Environmental Protection (NJDEP) has identified your facility as either built on or adjacent to one of the known chromium-contaminated sites in Hudson County.

These preliminary surveys are being conducted for the following purposes:

- * To identify areas in your facility where chromium-contaminated material is present.
- * To evaluate the potential for exposure to chromium contamination by employees and management personnel in your facility.
- * To give you some background information about the potential health effects of exposure to chromium and ways to avoid or reduce exposure.
- * To give you information regarding the remediation (clean up) efforts initiated by NJDEP.
- * To obtain information that will help consultants who will conduct a comprehensive industrial hygiene survey of your facility during the next year.

Please make the enclosed preliminary report on the above site available to all personnel on site.

For your information we have also enclosed copies of the following:

NJDOH Preliminary Workplace Survey Report
Results of Investigations Contaminant Study and Hydrogeologic
Investigations, Garfield Avenue Site, D'Appolonia Waste
Management Services, Pittsburgh, PA
NJDOH Factsheet - Chromium in the Workplace
NJDOH Factsheet - Chromium and Your Health

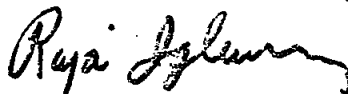
New Jersey Is An Equal Opportunity Employer

Through a contract between the New Jersey Department of Environmental Protection and a private consultant, a comprehensive industrial hygiene evaluation will take place at your facility in the future. It is our understanding that this evaluation will include comprehensive industrial hygiene sampling and that a report with specific recommendations for remedial measures will be prepared and provided to you.

Please confirm in writing that you have made the enclosed preliminary report available to all personnel at your facility.

If you have questions concerning your workplace, please call Carol Lamond at (609) 984-1863.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "Raja Iglewicz", with a stylized, flowing script.

Raja Iglewicz, C.I.H.
Certified Industrial Hygienist
Health Hazard Evaluation Program
Occupational Health Service

NEW JERSEY DEPARTMENT OF HEALTH - OCCUPATIONAL HEALTH SERVICE

PRELIMINARY WORKPLACE SURVEY REPORT - HUDSON COUNTY CHROMIUM PROJECT

Site Name: Garfield Avenue Site DEP Site No. 114
Business Name: Cathy Daniels
Address: 2 Dakota Street, Jersey City, NJ 07305
Type of Business: Warehousing and Distribution of Clothing
Date of Workplace Survey: 11-15-89 Phone: (201) 434-3777
Date of Sampling: 11-15-89

OBSERVATIONS:

At the time of the inspection there was visible evidence of possible chromium contamination in the surface soil of the unpaved area at the end of Dakota Street outside of the facility's parking lot.

There was no visible evidence of structural damage to the building at the time of the inspection.

FINDINGS/CONCLUSIONS

Note that this workplace is built on or near the former site of the PPG plant which is listed by NJDEP as a known chromium-contaminated site. (See attached Results of Investigations Contaminant Study and Hydrogeologic Investigations, Garfield Avenue Site, D'Appolonia Waste Management Services, Pittsburgh, PA.)

In order to determine whether the contaminated material was being tracked into the workplace, a bulk sample of floor dirt was taken from inside the workplace and analyzed by NJDOH Laboratory. (See attached Sampling Results Table.) Note that the results for total chromium were above what is considered to be normal background levels.

The possibility of employee exposure to chromium-contaminated material exists at your facility.

See the attached recommendations to limit personal exposure.

Send Report To: Dan Chester, Vice Pres., Cathy Daniels
Pres., AFL-CIO, Local 148
Pres., Lawrence Construction Co., (Building Owner)
Walter Lezynski, Jersey City Div. of Health
Robert Ferraiuolo, Director, Hudson Regional Health Comm.
Diana Crowder, Hudson Regional Health Comm.
Ron Corcoran, NJDEP
Betty Kearns, Env. Planner, Jersey City Chromium Task Force

INTERIM STEPS TO CONTROL YOUR PERSONAL EXPOSURE:

- * Learn to recognize chromium. It may appear as yellow, white or green crystals on walls and other surfaces. It may be yellow or green in water. It may be reddish-orange or green in the soil.
- * Avoid known areas of contamination wherever possible.
- * Do not raise dust or track it into work areas.
- * Change your work clothing to street clothing at the end of the shift.
- * Change your work shoes to street shoes at the end of the shift. Do not track dust into your car or home.
- * Keep work and eating areas free of dust and accumulated dirt.
- * Wash your hands before eating or drinking.
- * Wash eating utensils before eating or drinking.
- * Maintenance personnel should wet-wipe or mop, do not sweep or vacuum.
- * Many times you cannot see the chromium contamination. If the area has been identified as containing chromium by the New Jersey Department of Environmental Protection (NJDEP) and/or the New Jersey Department of Health (NJDOH), please use caution and avoid those areas.

Mr. Marwan Sadat, Director

Page 2

February 24, 1984

the sites' ownership, likely future ownership and future use, as well as the previously requested sampling data and the photos. We also requested copies of the responses of other recipients of Directive Letters on these sites. Your staff described their understanding of the future use of the Grant Street property, but cautioned that Jersey City was the best source for this information. We were told that the Division would send us the requested information or ask Jersey City to send information, but there would be no further extension of the deadline to respond to the Directive.

We believe an extension to the deadline is reasonable considering the potential legal and technical complexities of this problem and the work PPC has already undertaken to voluntarily address it to date.

As Mr. Skovlak of your staff is aware, PPC has been working with the Division of Water Resources since July, 1982, when PPC notified the Department of the existence of chromium ore residues remaining on the Garfield Avenue property. Without conceding liability for conditions on the property, PPC voluntarily undertook to engage a consulting firm to perform an environmental assessment of the site. The results of that work were provided to your agency in January.

When the report was provided, PPC advised Mr. Robert Plumb that the Company was unable to propose a remedial action plan for that site for two reasons. First, the investigation disclosed the presence of unknown organic materials beneath the surface which are in no way attributable to PPC's former operations. In addition, under the agreement by which PPC sold the property to Clif Associates in 1964, the purchaser and present owner undertook legal responsibility for any claims arising from the purchase of the property, including any claims for injury caused by chemicals remaining on the property. Notice of PPC's intent to seek indemnification under the agreement for any such claims was given to Clif Associates and to Lawrence Construction Company, the guarantor of the agreement, at the same time PPC informed your agency of the reasons for declining to propose a remedial plan at that time.

The next communication from your agency was not a reply to our letter and report on the Garfield site submitted in January, but to our surprise was the Directive Letter concerning the Grand and Woodlawn sites. No one at NJDEP had previously mentioned either of these sites to PPC. The Directive Letter simply recited the statutory findings and provided no information on the circumstances of the sites in question. After contacting your agency, we learned that a trucking firm employee has asserted that in 1975, more than ten years after PPC's sale of the property, material was taken from the Garfield Avenue site for use by the City of Jersey City and the Jersey City Redevelopment Authority as fill material on its property. The questions of legal responsibility presented by these facts, assuming for the present, that they are true, are troublesome to say the least. The possibility that additional locations, unknown to us, may be at issue at a future time certainly adds to the difficulties presented.

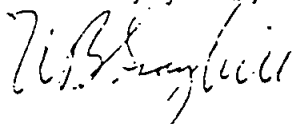
Mr. Marwan Sadat, Director
Page 3
February 24, 1984

We understand that in addition to PPG, the Division of Water Resources also has had discussions with Allied Corporation and Diamond Shamrock Corporation on their respective "chromium sites." But to our knowledge, the letter issued to PPG is the first directive that the state has issued for a chromium site cleanup. The remedial action undertaken on these sites may well establish a precedent for dealing with other chromium sites. While each remedy must be site specific, selection of a remedy should be prefaced upon a careful consideration of such criteria as the degree of risk of human exposure to the chromium, the present location and use of the property, and the future intended use of the property. Since the full scope of the chromium problem may not yet be known, we urge the state to establish such criteria and to make available information relevant to these criteria for each site. We believe that a piecemeal approach to these chromium sites will not be in anyone's best interests.

We are looking forward to meeting members of your staff to discuss these issues. Given the scope and complexity of this problem, the opportunity to obtain written confirmation of information on the sites in question, and an additional reasonable period to respond to the Directive are reasonable requests. Based upon our visits to the property, we believe that the site conditions, especially if the sites are completely fenced by the owners, present no immediate hazard to the public health requiring action without time for an informed evaluation of an appropriate response. Our willingness to cooperate with your agency in the conduct of the environmental assessment of the Garfield Avenue site and our visit to the other sites identified to date should establish that PPG is making a good faith evaluation of the problem and any obligations the Company may have. We would hope that such a meeting would also include other involved parties, notably the current owner of the Garfield Avenue site, the owners of the sites containing the fill, and the transporter. PPG has worked cooperatively with agencies of other states to address these kinds of problems, and it is not our desire to close the door on continued cooperation with your agency.

I look forward to your response to this letter and to meeting with you at an early date.

Sincerely yours,



W. B. Graybill
Director, Environmental Affairs

/lm

cc: J. Skoviak
F. Gaetano
J. Rogalski
R. Plumb



PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272 (412) 434-2350

February 24, 1984

W. B. Graybill

Director

Environmental Affairs — Chemicals

Dr. Marwan Sadat, Director
Division of Waste Management
New Jersey Department of
Environmental Protection
32 East Hanover Street
Trenton, NJ 08625

Dear Dr. Sadat:

This letter is to confirm the telephone conversation on February 23, 1984, which Susan Kuis, our Attorney at PPG Industries, and I had with Mr. John Skoviak and Mr. Frank Gagliano from the Division of Waste Management's Field Operations, Compliance and Enforcement section. We are addressing this correspondence to you as Director because the issues we are raising involve both the Enforcement and Hazardous Site Mitigation Sections of your department. We will be meeting with members of your staff on March 8 or 9 to discuss a response to several sites containing chromium in Jersey City. This letter will explain our reasons for requesting a meeting and requesting an extension of time for a reasonable period following the meeting to respond to the Directive Letter.

Our phone call to Mr. Skoviak and Mr. Gagliano was in further response to Mr. Joseph Rogalski's letter of January 31, 1984, to Mr. J. E. Burrell, directing PPG to remove and dispose of hexavalent chromium and contaminated soil located on certain properties on Grand and Woodlawn Streets in the City of Jersey City. The chromium allegedly came from property located on Garfield Avenue where PPG owned a chromium ore processing plant many years ago.

In response to the Directive Letter, representatives of PPG immediately contacted Mr. Skoviak to arrange to visit the lots in question. Mr. R. J. Samelson of PPG wrote to request additional information and an extension of ten days from the initial response time set in your letter. R. J. Samelson and I then visited the sites on February 8, 1984. We appreciate the cooperation of your staff in arranging the site visit.

During the site visit, we learned that Dr. Dime had taken soil samples on the sites and that information on the sampling location and results of the samples would be available. Your staff members also indicated that aerial photographs of the area may be available to us. PPG again requested to receive copies of all available information on these sites. To date, no additional information on these sites has been received by PPG.

Susan Kuis and I called Mr. Skoviak on February 23 to request a further extension to respond to the Directive Letter, and to request information on

PPG

HUDSON REGIONAL HEALTH COMMISSION

215 HARRISON AVE, HARRISON, NEW JERSEY 07029

TEL. 201-485-7001 FAX 201-485-1251

Charles J. Sheridan, President

Robert Ferraiuolo, Director

FIELD INVESTIGATION REPORT HRHC

LOCATION; Garfield Ave; Jersey City

INSPECTOR; Ron Ross *Ross*

DATE; 31 August 1989

RE; Possible chromium contamination

FINDINGS; On the afternoon of 31 August 1989 the curb/sidewalk construction on Garfield Ave. [Jersey City] was visited with John Zjawin [547-5562] of Jersey City Engineering Dept. [JCE]. Soil from beneath the concrete sidewalk on the east side of the street was taken at nine points. The location of these sample points is designated based on the plans for the construction project as follows; 53+40, 55+25, 56+50, 57+70, 59+25, 60+50, 61+30, 64+75, and 65+90. This covers the distance toward Communipaw Ave on the east side of the street where construction had not yet taken place. A weighed portion of each sample was mixed with water for five minutes and an aliquot of the supernatant tested with the chromogenic reagent from the Hach chromate in waste water kit [DR-100]. No chromate was detected in any sample. This test indicated with high reliability that if water soluble chromate was present the concentration was less than 20 ppm of chromate in any of the samples.

CONCLUSION AND RECOMMENDATIONS; There is no indication of chromate contamination in the area sampled. There is no contraindication to performing the intended construction in this area. Because of the known waste sites in the area continued monitoring is recommended. It is suggested that if green or yellow material is observed it should be tested for chromate. The west side of Garfield Ave will be tested for chromate contamination on 5 Sept. 1989 to assure that construction is not initiated in contaminated areas. If HRHC is notified of construction near areas of known chromium contamination with two weeks or greater notice, then preconstruction testing will be performed in cooperation with JCE personnel to assure that the site is clear before work is begun. In addition HRHC will try to schedule a staff member to be available to test suspicious material that is uncovered in the course of such projects. It is hoped that these efforts will eliminate adverse health impacts from chromium exposure during JCE activities and minimize any costs to Jersey City due to chromium contamination.

HCFIR38

"SERVING BAYONNE, EAST NEWARK, GUTTENBERG, HARRISON, HOBOKEN,
JERSEY CITY, KEARNY, NORTH BERGEN, SECAUCUS,
UNION CITY, WEEHAWKEN, WEST NEW YORK."

CITY OF
JERSEY CITY

Hazardous Waste Task Force



EARL ZELA TEX ALDREDGE
DIRECTOR
(201) 547-5204

CITY HALL, JERSEY CITY, N.J. 07302

May 11, 1982

PPG Industries Inc.
One Gateway Center
Pittsburg, Pa.

Dear Sir/Madam:

The Hazardous Waste Task Force has determined that the property formerly owned by Pittsburg Plate Glass Co. and Columbia Southern Chemical Corp. in the City of Jersey City, may be a danger to the public health, safety and welfare.

The City requests that you supply to this agency any data you may have in reference to the past uses of this property.

Property: Block 2026A
formerly Blocks 2005A, 2025, 2026, 2027, part 2006 1/2
formerly Blocks 2003, 2004, 2005, 2016, 2025

Sincerely,

Earl Zela Tex Aldredge
Director

EZTA:tm

9. Specify the earliest year represented by information from employee
knowledge supplied on this and other forms 1954 (73-74)

Facility Name: _____

Site Name: _____

9. Components (or characteristics) of process waste from this facility disposed at site: (1=present in waste; 2=not present in waste; 9=don't know)

FILL IN EVERY BLOCK SPACE

Acid solutions, with pH < 3	<input checked="" type="checkbox"/>	(10)
pickling liquor	<input checked="" type="checkbox"/>	(11)
metal plating waste	<input checked="" type="checkbox"/>	(12)
circuit etchings	<input checked="" type="checkbox"/>	(13)
inorganic acid manufacture	<input checked="" type="checkbox"/>	(14)
organic acid manufacture	<input checked="" type="checkbox"/>	(15)
Base solutions, with pH > 10	<input checked="" type="checkbox"/>	(16)
caustic soda manufacture	<input checked="" type="checkbox"/>	(17)
nylon and similar polymer generation	<input checked="" type="checkbox"/>	(18)
scrubber residual	<input checked="" type="checkbox"/>	(19)
Heavy metals & trace metals (bonded organically & inorganically)	<input checked="" type="checkbox"/>	(20)
arsenic, selenium, antimony	<input checked="" type="checkbox"/>	(21)
mercury	<input checked="" type="checkbox"/>	(22)
iron, manganese, magnesium	<input checked="" type="checkbox"/>	(23)
zinc, cadmium, copper, chromium (trivalent)	<input checked="" type="checkbox"/>	(24)
chromium (hexavalent)	<input checked="" type="checkbox"/>	(25)
lead	<input checked="" type="checkbox"/>	(26)
Radioactive residues, > 3 pico curies/liter	<input checked="" type="checkbox"/>	(27)
uranium residuals & residuals for UF ₆ recycling	<input checked="" type="checkbox"/>	(28)
lathanide series elements and rare earth salts	<input checked="" type="checkbox"/>	(29)
phosphate slag	<input checked="" type="checkbox"/>	(30)
thorium	<input checked="" type="checkbox"/>	(31)
radium	<input checked="" type="checkbox"/>	(32)
other alpha, beta & gamma emitters	<input checked="" type="checkbox"/>	(33)
Organics	<input checked="" type="checkbox"/>	(34)
pesticides & intermediates	<input checked="" type="checkbox"/>	(35)
herbicides & intermediates	<input checked="" type="checkbox"/>	(36)
fungicides & intermediates	<input checked="" type="checkbox"/>	(37)
rodenticides & intermediates	<input checked="" type="checkbox"/>	(38)
halogenated aliphatics	<input checked="" type="checkbox"/>	(39)
halogenated aromatics	<input checked="" type="checkbox"/>	(40)
acrylates & latex emulsions	<input checked="" type="checkbox"/>	(41)
PCB/PBB's	<input checked="" type="checkbox"/>	(42)
amides, amines, imides	<input checked="" type="checkbox"/>	(43)
plastizers	<input checked="" type="checkbox"/>	(44)
resins	<input checked="" type="checkbox"/>	(45)
elastomers	<input checked="" type="checkbox"/>	(46)
solvents protic (except water)	<input checked="" type="checkbox"/>	(47)
carbontetrachloride	<input checked="" type="checkbox"/>	(48)
trichloroethylene	<input checked="" type="checkbox"/>	(49)
other solvents nonprotic	<input checked="" type="checkbox"/>	(50)
solvents halogenated aliphatic	<input checked="" type="checkbox"/>	(51)
solvents halogenated aromatic	<input checked="" type="checkbox"/>	(52)
oils and oil sludges	<input checked="" type="checkbox"/>	(53)
esters and ethers	<input checked="" type="checkbox"/>	(54)
alcohols	<input checked="" type="checkbox"/>	(55)
ketones & aldehydes	<input checked="" type="checkbox"/>	(56)
dioxins	<input checked="" type="checkbox"/>	(57)
Inorganics	<input checked="" type="checkbox"/>	(58)
salts	<input checked="" type="checkbox"/>	(59)
mercaptans	<input checked="" type="checkbox"/>	(60)
Misc	<input checked="" type="checkbox"/>	(61)
pharmaceutical wastes	<input checked="" type="checkbox"/>	(62)
paints & pigments	<input checked="" type="checkbox"/>	(63)
catalysts (eg. vanadium, platinum, palladium)	<input checked="" type="checkbox"/>	(64)
asbestos	<input checked="" type="checkbox"/>	(65)
shock sensitive wastes (eg. nitrated toluenes)	<input checked="" type="checkbox"/>	(66)
air water reactive wastes (eg. P ₄ , aluminum chloride)	<input checked="" type="checkbox"/>	(67)
wastes with flash point below 100° F.	<input checked="" type="checkbox"/>	(68)

PROVIDE A COMPLETE LIST OF ALL FIRMS AND INDEPENDENT CONTRACTORS,
INCLUDING THE COMPANY AND ITS AFFILIATES AND SUBSIDIARIES, USED
TO REMOVE PROCESS WASTES FROM THIS FACILITY SINCE 1950.

Company Name: PPG Ind Chem Div

Facility Name: Jersey City Plant

<u>Name of Firm or Contractor</u>	<u>Address</u>	<u>ICC # (If Known)</u>	<u>Years Used</u>
-----------------------------------	----------------	-----------------------------	-------------------

Can track name as unknown. To best of our knowledge material
was used for filling and construction around Jersey City.
City of Jersey City took some of the waste to fill swampy
meadowland area.

While plant has been closed for about 15 years we
never received any adverse reaction to my knowledge to the
use of these wastes for fill.

The waste was the solids remaining after distillation
of Chloroform Chloroac - Chloroac came from
South Africa. Primary residue consisted of
Iron oxide with some silicate, etc.

JERSEY CITY

(ENGINEERING DEPT.)



LDS JC-E 10506686



Hudson County New Jersey Chromium Remediation Projects

- A. Non-Residential Sites Remedial Investigation**
- B. Non-Residential Sites Interim Remedial Measures**

Quarterly Report

Administrative Consent Order Sections II, III, IV

January 1, 1996 to March 31, 1996

April 1996

PPG Industries, Inc.

PPG



PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272 (412)434-2337

W. B. Kennedy, Jr.
Project Manager
Chemicals Group

Received by _____
Date Received _____
Time Received _____

April 29, 1996

Bob Marcolina
New Jersey Department of Environmental Protection
Division of Hazardous Waste Management
401 E. State Street, CN 028
Trenton, New Jersey 08625-0028

Subject: Quarterly Report - First Quarter 1996
PPG Chromium Remediation Projects

Dear Mr. Marcolina:

Enclosed are three copies of the quarterly report for the First Quarter 1996. This report is submitted in accordance with Paragraph 74 of the ACO.

Table 1 presents a chronology of key events for all of the work being performed under the ACO. **Appendix A** presents a summary of progress for the non-residential site remediation projects, **Appendix B** presents a summary of progress for interim remedial measures at the non-residential sites.

A detailed scheduling plan for the Second Quarter 1996 can not be submitted at this time. As stated in our June 30, 1994 letter regarding the Non-Residential Sites Scheduling Plan, there are a number of unresolved issues that continue to impact the schedule for site investigations, preparation and submittal of work plans, RI reports, and other deliverables under the ACO. The levels of uncertainty associated with the unresolved issues have the potential for disrupting our best efforts to forecast a schedule. Refer to the June 30, 1994 letter for a summary of these issues.

Please sign and date one copy of this transmittal letter upon receipt and return to Mr. L.S. Bryant by regular mail.

Sincerely,

W. B. Kennedy, Jr.
Project Manager

Attachments

TABLE 1

**CHRONOLOGY OF KEY EVENTS
JANUARY 1 through MARCH 31, 1996**

January 5, 1996	IRM repairs were performed at Site 137.
February 27, 1996	Monthly meeting in Trenton, NJ.
February 27-29, 1996	Additional IRM repairs were performed at Site 137.
March 1, 1996	IRMs were installed at eight locations at Site 114.
March 8, 1996	PPG submitted the Final Remedial Action Work Plan for Group 14 - Site 164.
March 21, 1996	Monthly meeting in Trenton, NJ.
March 25, 1996	Quarterly inspections were performed at non-residential IRM Group 1 (Sites 133 and 137), Group 2 (Site 146), Group 3 (Sites 004, 005, 008, and 006), Group 4 (016, 112, 112A), Group 5 (Site 107), and Group 6 (Sites 063 and 065).
March 25, 1996	IRM repairs were made at Site 107.
March 26, 1996	Quarterly inspections were performed at non-residential IRM Group 3 (Sites 002 and 003).
March 26, 1996	NJDEP approved the Final Remedial Action Work Plan for Group 14 - Site 164.

Appendix A

A. NON-RESIDENTIAL SITES REMEDIATION

1.0 INTRODUCTION

- 74(a) This quarterly progress report for the Non-residential Sites Remedial Investigation and Clean-up is presented pursuant to Section V of the Administrative Consent Order (ACO) dated July 19, 1990. Section 2.0 is provided to discuss progress on items of a general nature or that have an impact on all sites. In accordance with Paragraph 74a, the remainder of the report is organized to show progress on each non-residential site grouping established in the approved Grouping and Scheduling Plan. The six reporting criteria specified in Paragraph 74b through 74g of the ACO form the basis for discussion in each section. Also in accordance with Paragraph 74, each discussion presented is preceded by a number citing the paragraph of the ACO requirement to which the discussion refers.

2.0 GENERAL

74(d) **Activities Completed During the Current Reporting Period**

39. Field Sampling - Quality Assurance Program Plan (FS-QAPP): No activities were performed during this reporting period.
39. Data Validation: No data validation reports were submitted during this reporting period.

74(g) **Activities to be Initiated During Next Reporting Period**

39. Field Sampling - Quality Assurance Program Plan (FS-QAPP): QAPP revisions will be prepared to address the change in laboratory ownership to Core Laboratories, Inc.

3.0 GROUP 1 - GREGORY PARK APARTMENTS (SITE 156)

74(c) **Activities Previously Initiated, and Not Yet Completed**

41. RI Report: PPG is awaiting comments from NJDEP on the Draft Remedial Investigation (RI) Report submitted September 29, 1993. No activities have been performed during the reporting period, and no activities are scheduled pending resolution of the existing RI and RA issues.

4.0 GROUP 2 - NJDEP GREEN ACRES (SITE 008)

74(c) Activities Previously Initiated, and Not Yet Completed

41. RI Report: No activities have been performed during the reporting period, and no activities are scheduled pending resolution of the existing RI and RA issues.

5.0 GROUP 3 - ULTRAMAR PETROLEUM #1 (SITE 112)

74(d) Activities Completed During the Current Reporting Period

41. RI Report: No activities have been performed during the reporting period, and no activities are scheduled pending resolution of the existing RI and RA issues.

6.0 GROUP 4 - ULTRAMAR #2 (SITE 112A) and LINDEN AVENUE EAST (SITE 16)

74(c) Activities Previously Initiated, and Not Yet Completed

43. RI Report Comments and Finalization: Soil fractionation data was discussed at a meeting with NJDEP on February 27, 1996. This data was originally submitted to NJDEP in a letter dated November 22, 1995. NJDEP requested modifications to the analysis of the fractionation data, and this modification was submitted during this reporting period. No formal comments have been received from NJDEP regarding this data. PPG is also awaiting written comments on the Draft Risk Assessment submitted to NJDEP on February 4, 1994. No further action to finalize reports is anticipated pending receipt of RA comments and resolution of RI and RA issues.

7.0 GROUP 5 - CAVEN POINT SITES (SITES 02, 03, 04, 05 and 66)

74(c) Activities Previously Initiated, and Not Yet Completed

41. RI Report: No activities were performed during the reporting period, and no activities are scheduled pending resolution of the existing RI and RA issues.

8.0 GROUP 6 - ROSS WAX (SITE 133) & VITARROZ (SITE 135)

74(c) Activities Previously Initiated, and Not Yet Completed

40. RI Implementation: PPG has delayed mobilization on these sites pending resolution of existing RI and RA issues.

9.0 GROUP 7 - GARFIELD AVENUE SITE (SITE 114)

74(c) Activities Previously Initiated, and Not Yet Completed

39. RI Work Plan: PPG must delay the submittal of the Revised Draft RI Work Plan until existing RI and RA issues are resolved and the plan modified as necessary to reflect resolution of the issues.

10.0 GROUP 8 - GARFIELD AUTO PARTS (SITE 121), TOWN & COUNTRY LINEN (SITE 132), TALARICO AUTO (SITE 143)

74(c) Activities Previously Initiated, and Not Yet Completed

39. RI Work Plan: PPG has prepared a Revised Draft RI Work Plan, but must delay submittal of the document until existing RI and RA issues are resolved and the plan can be modified to reflect resolution of the issues.

11.0 GROUP 9 - RUDOLF BASS SITE (SITE 137)

74(c) Activities Previously Initiated, and Not Yet Completed

39. RI Work Plan: PPG must delay the submittal of the Revised Draft RI Work Plan until existing RI and RA issues are resolved and the plan modified as necessary to reflect resolution of the issues.

12.0 GROUP 10 - FASHIONLAND (SITE 107) AND ALBANIL DYESTUFF (SITE 108)

74(c) Activities Previously Initiated, and Not Yet Completed

39. RI Work Plan: PPG must delay submittal of the Revised Draft RI Work Plan until existing RI and RA issues are resolved and the plan modified as necessary to reflect resolution of the issues.

13.0 GROUP 11 - HARTZ MOUNTAIN SITE (SITE 147)

74(c) Activities Previously Initiated, and Not Yet Completed

50. Remedial Action Plan: During the March 21, 1996 meeting with the Department, PPG discussed the development of, and difficulties with, remediation concepts that do not include remediation of property located north of the Group 11 site.

14.0 GROUP 12 - BURMA ROAD SITES (SITES 063 AND 065)

74(c) Activities Previously Initiated, and Not Yet Completed

39. RI Work Plan: No activities were performed during the reporting period, and no activities are scheduled pending resolution of the existing RI and RA issues.

15.0 GROUP 13 - COMMERCE STREET SITE (SITE 146)

74(d) Activities Completed During the Current Reporting Period

39. RI Work Plan: No activities were performed during the reporting period, and no activities are scheduled pending resolution of the existing RI and RA issues.

16.0 GROUP 14 - VALUE CITY SITE (SITE 164)

74(c) Activities Previously Initiated, and Not Yet Completed

53. Final Remedial Action Plan: PPG submitted the Final Remedial Action Work Plan (RAWP) for the site on March 8, 1996.
54. Remedial Action Implementation: The RAWP was approved by NJDEP on March 26, 1996. Implementation of the RAWP is planned for May 1996.

17.0 GROUP 15 - GRAND STREET SITES (SITES 010, 011, 080, 082, 083, 084, and 085)

74(c) Activities Previously Initiated, and Not Yet Completed

41. RI Report: Compliance averaging options were discussed in a meeting with NJDEP on March 21, 1996. PPG received input from NJDEP on options deemed suitable for managing issues remaining after the residential cleanup.

Appendix B

B. NON-RESIDENTIAL SITES INTERIM REMEDIAL MEASURES

1.0 INTRODUCTION

74(a) Identification of Site Grouping

The grouping of the interim remedial measure (IRM) non-residential sites is presented in Table 2. Site-specific activities described in this report are presented in Section 2.0 on a group-by-group basis.

2.0 ACTIVITIES AT EACH GROUP OF SITES

2.1 Group 1 - (Sites 121, 133, 137)

74(d) Activities Completed During the Reporting Period

- Quarterly inspections were performed at Sites 133 and 137 on March 25, 1996.
- IRM repairs were performed at Site 137 on January 5, 1996, and on February 27, 28, and 29, 1996. Plastic and plywood were used to cover a new IRM location inside the building. Gravel and asphalt were used to cover new IRM location in the driveway.

2.2 Group 2 - (Sites 114, 132, 135, 143, 146)

74(d) Activities Completed During the Reporting Period

- Quarterly inspections were performed at Sites 114 and 146 on April 4, 1996 and March 25, 1996, respectively.
- IRMs were installed at eight locations at Site 114 on March 1, 1996.

2.3 Group 3 - (Sites 002, 003, 004, 005, 008, 066)

74(d) Activities Completed During the Reporting Period

- Quarterly inspections were performed at Sites 004, 005, 008 and 066 on March 25, 1996, and at Sites 002 and 003, on March 26, 1996.

2.4 Group 4 - (Sites 016, 112, 112A, 147)

74(d) Activities Completed During the Reporting Period

- Quarterly inspections were performed at Sites 016, 112 and 112A on March 25, 1996.

2.5 Group 5 - (Sites 107, 108)

74(d) Activities Completed During the Reporting Period

- IRM repairs were made at Group 5, Site 108 on March 25, 1996. Plastic and plywood were used to repair existing IRMs.

2.6 Group 6 - (Sites 063, 065)

74(d) Activities Completed During the Reporting Period

- Quarterly inspections were performed at Sites 063 and 065 on March 25, 1996.
- The drainage ditch at Sites 063 and 065 was treated with ferrous sulfate on 7 occasions during this reporting period.

2.7 Group 7 - (Site 156)

74(b) Activities Completed During the Reporting Period

- No activities were performed this quarter.

2.8 Group 8 - (Site 164)

74(b) Activities Completed During the Reporting Period

- No activities were performed this quarter.

TABLE 2

**HUDSON COUNTY CHROME REMEDIATION PROJECTS
INTERIM REMEDIAL MEASURES
NON-RESIDENTIAL SITES GROUPING**

<u>Group</u>	<u>Sites</u>
1	121, 133, 137
2	114, 132, 135, 143, 146
3	002, 003, 004, 005, 008, 066
4	016, 112, 112A, 147
5	107, 108
6	063, 065
7	156
8	164