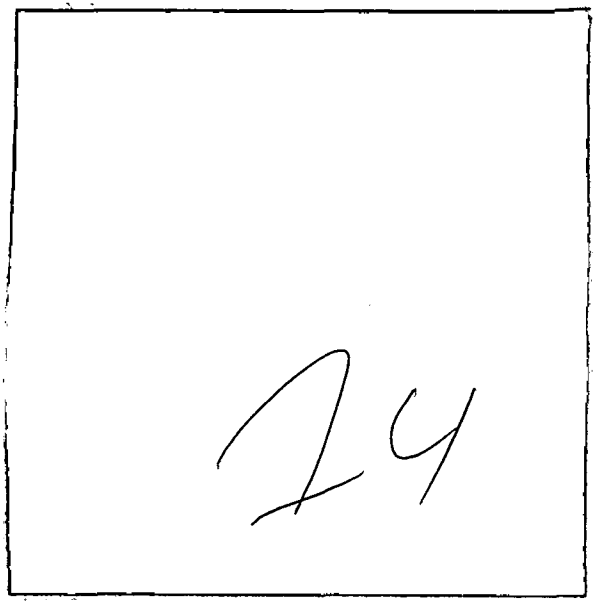
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ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES IN THE STATE OF NEW YORK

PHASE I - PRELIMINARY INVESTIGATION

FINAL REPORT

PREFERRED PLATING SITE

CONTRACT NO. D000452
NYSDEC SITE NO. 152030

Submitted To:
Division of Solid Waste
New York State
Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-0001

Submitted By:
Woodward-Clyde Consultants, Inc.
1250 Broadway, 15th Floor
New York, New York 10001

September 25, 1984

82C4548

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1250 Broadway. 15th Floor
New York. New York 10001
212-926-2878 (NY/NJ)
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Telex 133-541

Woodward-Clyde Consultants, Inc.

September 25, 1984
82C4548

New York State Department of Environmental Conservation
Division of Solid Waste
Room 209
50 Wolf Road
Albany, New York 12233

Attention: Mr. Norman H. Nosenchuck
Director

Subject: Engineering Investigations at Inactive Hazardous Waste Sites in the State of New York
Phase I - Preliminary Investigation
Preferred Plating Site
NYSDEC No. 152030
EPA No. Not Available

Dear Sir:

This report presents the results of our Preliminary Investigation of the Preferred Plating site in Farmingdale, Suffolk County, New York. This preliminary investigation fulfills the requirements of Phase I of our Contract No. D000452 to perform engineering investigations at 40 inactive hazardous waste sites in the State of New York. Phase II involves field investigation services at the sites.

The objective of Phase I was to:

- collect and review data
- perform a site reconnaissance
- prepare a draft Hazard Ranking System (HRS) and Documentation
- develop a specific site work plan for Phase II
- develop Phase II site investigation costs
- identify known responsible parties
- prepare a summary report

This report contains six sections. Section 1.0 includes a description of the site. Section 2.0 presents the preliminary HRS work sheets, the HRS documentation records, and EPA site assessment forms (2070-12 and 2070-13). Section 3.0 provides a brief summary of the history of site activities. Section 4.0 includes a discussion of existing site data. Section 5.0 provides an assessment of the data adequacy identifying major data gaps. Lastly, Section 6.0 presents the recommended Phase II Site Investigation Work Plan and costs. The sampling and analysis plan and the health and safety plan are not included. These are to be supplied by NYSDEC.

Preferred Plating went out of business in 1976 and is no longer located at the site. The current owner of this site is unknown. Since 1976, several firms have occupied the site, none of which are conducting similar operations to Preferred Plating.

Preferred Plating operated for more than twenty years at the site. During this time, data indicated that heavy metals were discharged into the subsurface environment causing ground water contamination on site and at nearby Fort Totten, U.S. Army Base.

The WCC Site Survey showed that an automobile repair shop now occupies the site. There is no evidence of the Preferred Plating operations at present.

The HRS scores developed for the Preferred Plating site are as follows:

S_M = 33.76 (S_{gw} = 58.41 S_{sw} = 0.0 S_a = 0.0)
S_{FE} = N/A
SDC = 0.0

Existing data on the Preferred Plating site were generally not adequate to complete all HRS work sheets. Additional data are needed to determine the contents and number of drums buried and the extent of ground water contamination. Additionally, no estimate has been made of the amount of leachate released to the leaching pools. The proposed work plan has been designed to answer questions primarily concerning soil contamination, ground water flow and quality, surface water flow and quality, and air quality. Proximity to surface waters and the documented presence of aromatic and chlorinated hydrocarbons in the ground water and soil samples indicate that potential health hazards may exist. A detailed description of the work plan and estimated costs is provided in Section 6.0. The total estimated cost for Phase II investigations at the Preferred Plating site is $17,095.

If there are any questions or comments concerning the work plan or any other portion of the Phase I report, please do not hesitate to contact us.

Very truly yours,

Donald R. Ganser

Donald R. Ganser,
Project Manager

DRG:cp
C732/131

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1 SITE LOCATION MAP - PREFERRED PLATING SITE

2 LOCATION PLAN FOR PROPOSED PHASE II INVESTIGATION

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Appendix

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B PERTINENT INFORMATION

C UPDATED NEW YORK STATE REGISTRY FORM

1.0
SITE DESCRIPTION

Preferred Plating is located in a light industrial area on Allen Boulevard in Farmingdale, Suffolk County, New York (Figure 1). The site is situated east of Route 110 south and is adjacent to the Long Island Railroad. The closest surface water body is approximately 6,000 feet east of the site and is an unnamed intermittent tributary to Massapequa Creek.

The site has changed ownership and use several times over the years and is currently being occupied by an auto repair shop. Preferred Plating was in existence at the site until 1976 when the firm filed for bankruptcy.

The site is located in an area where various light-industries also have operations. The site is nearly flat with a gentle slope toward the south. Over 90% of the immediate area is covered with impervious materials. Adjacent buildings surrounding the site and numerous underground utilities make subsurface investigations difficult.

At the time of the WCC Site Survey (August 16, 1983) the site was not being utilized by Preferred Plating and no evidence of hazardous materials (surface and subsurface) was observed.

2.0 U.S. Environmental Protection Agency Documentation

This section includes documentation records and work sheets required to develop Hazard Ranking System (HRS) scores. In addition, two EPA forms regarding site inspection and preliminary assessment have been completed and are included as required.

Documents included in this section are:

1. Preliminary Hazard Ranking System (HRS) Work Sheets
2. Documentation Records for HRS
3. EPA Form 2070-12 (Preliminary Assessment)
4. EPA Form 2070-13 (Site Inspection Report)

Forms were prepared as completely as possible using information available from county, state and federal agency files. The Suffolk County Department of Health files provided the most complete site-specific data. Information provided in the Documentation Records for HRS are referenced, and copies of most references are included in Appendix B. Analytical results are also included in the appendix.

2.1 Preliminary HRS Work Sheets

Facility Name: Preferred Plating Corp

Location: 32 Allen Blvd., Farmingdale, NY (Suffolk County)

EPA Region: II

Person(s) in Charge of the Facility: Unknown

Name of Reviewer: C. Mancini **Date:** 6 Sept. 1983

General Description of the Facility:

(For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

Preferred Plating formerly treated metal parts to increase corrosion resistance and provide base for paint. Several discharges to ground water have occurred. The company went out of business in 1976. The route of major concern is ground water.

Scores: S_M = 33.76 (S_{gw} = 58.41 S_{sw} = 0.0 S_a = 0.0)

S_{FE} = N/A

S_{DC} = 0.0

GROUND WATER ROUTE WORK SHEET

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	0	45	5.1
If observed release is given a score of 45, proceed to line 4. If observed release is given a score of 0, proceed to line 2.					
2 Route Characteristics					3.2
Depth to Aquifer of Concern	0 1 2 (3)	2	6	6	
Net Precipitation	0 1 (2) 3	1	2	3	
Permeability of the Unsaturated Zone	0 1 2 (3)	1	3	3	
Physical State	0 1 2 (3)	1	3	3	
Total Route Characteristics Score			14	15	
3 Containment	0 1 (2) 3	1	2	3	3.3
4 Waste Characteristics					3.4
Toxicity/Persistence	0 3 6 9 12 15 (18)	1	18	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 (8)	1	8	8	
Total Waste Characteristics Score			26	26	
5 Targets					3.5
Ground Water Use	0 1 (2) 3	3	6	9	
Distance to Nearest Well/Population Served	0 4 6 8 10 12 16 18 20 24 30 32 35 (40)	1	40	40	
Total Targets Score			46	49	
6 If line 1 is 45, multiply 1 x 4 x 5. If line 1 is 0, multiply 2 x 3 x 4 x 5	33,488			57.330	
7 Divide line 6 by 57.330 and multiply by 100	S_{gw} = 58.41				

SURFACE WATER ROUTE WORK SHEET

	Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1	Observed Release	(0) 45	1	0	45	4.1
	If observed release is given a value of 45, proceed to line 4. If observed release is given a value of 0, proceed to line 2.					
2	Route Characteristics					4.2
	Facility Slope and Intervening Terrain	(0) 1 2 3	1	0	3	
	1-yr. 24-hr. Rainfall	0 1 (2) 3	1	2	3	
	Distance to Nearest Surface Water	0 (1) 2 3	2	2	6	
	Physical State	0 1 2 (3)	1	3	3	
	Total Route Characteristics Score			7	15	
3	Containment	0 1 2 (3)	1	3	3	4.3
4	Waste Characteristics					4.4
	Toxicity/Persistence	0 3 6 9 12 15 (18)	1	18	18	
	Hazardous Waste Quantity	0 1 2 3 4 5 6 7 (8)	1	8	8	
	Total Waste Characteristics Score			26	26	
5	Targets					4.5
	Surface Water Use	(0) 1 2 3	3	0	9	
	Distance to a Sensitive Environment	(0) 1 2 3	2	0	6	
	Population Served/Distance to Water Intake Downstream	(0) 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40	
	Total Targets Score			0	55	
6	If line 5 is 45, multiply 1 x 4 x 5. If line 1 is 0, multiply 2 x 3 x 4 x 5			0	64,350	
7	Divide line 6 by 64,350 and multiply by 100	S_{sw} = 0.0				

AIR ROUTE WORK SHEET

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	0	45	5.1
Date and Location:					
Sampling Protocol:					
If line 1 is 0, the S = 0. Enter on line 5. If line 1 is 45, then proceed to line 2.					
2 Waste Characteristics					5.2
Reactivity and Incompatibility	0 1 2 3	1		3	
Toxicity	0 1 2 3	3		5	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
	Total Waste Characteristics Score			20	
3 Targets					5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
	Total Targets Score			39	
4 Multiply 1 x 2 x 3			0.0	35,100	
5 Divide line 4 by 35,100 and multiply by 100	S_a = 0.0				

	S	S^2
Groundwater Route Score (S_{gw})	58.41	3411.73
Surface Water Route Score (S_{sw})	0.0	0.0
Air Route Score (S_a)	0.0	0.0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		3411.73
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		58.41
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73$		$S_M = 33.76$

WORKSHEET FOR COMPUTING S_M

N/A

FIRE AND EXPLOSION WORK SHEET

	Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1	Containment	1 3	1		3	7.1
2	Waste Characteristics					7.2
	Direct Evidence	0 3	1		3	
	Ignitability	0 1 2 3	1		3	
	Reactivity	0 1 2 3	1		3	
	Incompatibility	0 1 2 3	1		3	
	Hazardous Waste Quantity	0 1 2 3 4 5 5 7 8	1		8	
	Total Waste Characteristics Score				20	
3	Targets					7.3
	Distance to Nearest Population	0 1 2 3 4 5	1		5	
	Distance to Nearest Building	0 1 2 3	1		3	
	Distance to Sensitive Environment	0 1 2 3	1		3	
	Land Use	0 1 2 3	1		3	
	Population Within 2-Mile Radius	0 1 2 3 4 5	1		5	
	Buildings Within 2-Mile Radius	0 1 2 3 4 5	1		5	
	Total Targets Score				24	
4	Multiply 1 x 2 x 3				1,440	
5	Divide line 5 by 1,440 and multiply by 100	S_{FE} = N/A				

DIRECT CONTACT WORK SHEET

	Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1	Observed Incident	(0) 45	1	0	45	8.1
	If line 1 is 45, proceed to line 4 If line 1 is 0, proceed to line 2					
2	Accessibility	0 1 2 (3)	1	3	3	8.2
3	Containment	(0) 15	1	0	15	8.3
4	Waste Characteristics Toxicity	0 1 2 (3)	5	15	15	8.4
5	Targets					8.5
	Population Within a 1-Mile Radius	0 1 2 3 (4) 5	4	16	20	
	Distance to a Critical Habitat	(0) 1 2 3	4	0	12	
	Total Targets Score			16	32	
6	If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			0	21,600	
7	Divide line 6 by 21,600 and multiply by 100	S_{DC} = 0.0				

2.2 Documentation Records for HRS

DOCUMENTATION RECORDS FOR HAZARD RANKING SYSTEM

INSTRUCTIONS: The purpose of these records is to provide a convenient way to prepare an auditable record of the data and documentation used to apply the Hazard Ranking System to a given facility. As briefly as possible summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference that will make the document used for a given data point easier to find. Include the location of the document and consider appending a copy of the relevant page(s) for ease in review.

FACILITY NAME: Preferred Plating Corporation

LOCATION: 32 Allen Boulevard., Farmingdale, NY

GROUND WATER ROUTE

1. OBSERVED RELEASE

Contaminants detected (5 maximum):

Copper, total chromium, cadmium, hexavelent chrome, cyanide. (Suffolk County, DEC) Jan. 2, 1975.

Well at Army Niki Site NY24C 6 ppm hexavalent chromium E. Farmingdale, N.Y. (Suffolk County DOH, Nov. 10, 1960).

Rationale for attributing the contaminants to the facility:

Facility used these contaminants to their processing. (Donnelly Engineering Corp., 1974).

* * *

2. ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifer(s) of concern:

Upper glacial aquifer (approximately 15 feet)
Magothy Aquifer (Isbister, 1966; Kilburn, 1982).

Aquifers are hydraulically connected (Franke and McClymonds, 1972)

Depth(s) from the ground surface to the highest seasonal level of the saturated zone (water table(s)) of the aquifer of concern:

Approximately 15 feet (Ground Water Control Map, Suffolk County DEC).

Depth from the ground surface to the lowest point of waste disposal/storage:

Approximately 8 feet (Photographs, Suffolk Co. DEC, 6-10-75).

Net Precipitation

Mean annual or seasonal precipitation (list months for seasonal):

46 inches (User's Manual).

Mean annual lake or seasonal evaporation (list months for seasonal):

31 inches (User's Manual).

Net precipitation (subtract the above figures):

15 inches

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Sand & Gravel (Soil Survey, Suffolk Co.).

Permeability associated with soil type:

Greater than 10^{-3} (User's Manual).

Physical State

Physical state of substances at time of disposal (or at present time for generated gases):

Liquids & Sludges (Suffolk Co. DEC 1971-1976).

3. CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Lined Surface Impoundment severely cracked and leaking (Donnelly Engineering, 1974).
Cesspool (Suffolk County DEC, 1975 Inspection).

Method with highest score:

Surface Impoundment (2)

4. WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

	Toxicity	Persistence
Nitric Acid	3	0
Sulfuric Acid	3	0
Hydrochloride Acid	3	0
Cadmium;	3	3
Chromium	3	3

Compound with highest score:

Chromium (18).

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

About 2,000 gallons per month x 25 years (300 months) = 600,000 gallons of Wastes (Liquid). (Donnelly Engineering, 1974).

Basis of estimating and/or computing waste quantity:

Based on water usage (Donnelly Engineers, 1974).

5. TARGETS

Ground Water Use

Use(s) of aquifer(s) of concern within a 3-mile radius of the facility:

Municipal water Supplies, industrial, irrigation (Kilburn, 1982).

Distance to Nearest Well

Location of nearest well drawing from aquifer of concern or occupied building not served by a public water supply:

Well on site used for processing water (Donnelly Engineering, 1974). No longer in use.

Distance to above well or building:

On site.

Population Served by Ground Water Wells Within a 3-Mile Radius

Identified water-supply well(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

Republic Aviation Corp. (10 wells), (1,100 employees).
SCWA Babylon Water District (16 wells), Population 900,000.
Industrial wells (6).

E. Farmingdale Water District, Population 7,850.
(NYS DOH, NYS Community Water System Sources, 1982).

Computation of land area irrigated by supply well(s) drawing from aquifer(s) of concern within a 3-mile radius, and conversion to population (1.5 people per acre):

None reported.

Total population served by ground water within a 3-mile radius:

+ 10,000 (Rand McNally, 1983).

SURFACE WATER ROUTE

1. OBSERVED RELEASE

Contaminants detected in surface water at the facility or downhill from it (5 maximum):

None detected.

Rationale for attributing the contaminants to the facility:

N/A.

2. ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

Less than 3 percent (USGS Quadrangle, Amityville; WCC Site Survey, 1983,).

Name/description of nearest downslope surface water:

Unnamed tributary to Massapequa Creek (Amityville, USGS, Quad.).
Approximately 6,000 feet.

Average slope of terrain between facility and above-cited surface water body in percent:

Less than 1 percent (USGS Quad. Amityville).

Is the facility located either totally or partially in surface water?

No. (WCC Site Survey, 1983).

Is the facility completely surrounded by areas of higher elevation?

No (WCC Site Survey, 1983).

1-Year 24-Hour Roinfall in Inches

2.7 (Figure 8, User's Manual).

Distance to Nearest Downslope Surface Water

Approximately 7,000 feet (USGS Amityville Quad.).

Physical State of Waste

Liquid/Sludge (Suffolk Co. DEC).

* * *

3. CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Surface Impoundment (3) (User's Manual).

Method with highest score:

Surface Impoundment (3) (User's Manual).

4. WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated

See: Ground Water.

Compound with highest score:

Cadmium (3)
Chromium

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

See: Containment Section.

Basis of estimating and/or computing waste quantity:

See: Containment Section.

* * *

5. TARGETS

Surface Water Use

Use(s) of surface water within 3 miles downstream of the hazardous substance:

None known (Suffolk County DEC).

Is there tidal influence?

No.

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

More than 2 miles (NYS DEC 1975a).

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

More than one mile (NYSDEC, 1975b).

Distance to critical habitat of an endangered species or national wildlife refuge, it 1 mile or less:

More than one mile (USF & WS, 1983; NYSDEC, 1983).

Population Served by Surface Water

Location(s) of water-supply intake(s) within 3 miles (free-flowing bodies) or 1 mile (static water bodies) downstream of the hazardous substance and population served by each intake:

None (Suffolk Co., DEC).

Computation of land area irrigated by above-cited intake(s) and conversion to population (1.5 people per acre):

None.

Total population served:

None.

Name/description of nearest of above water bodies:

N/A.

Distance to above-cited intakes, measured in stream miles:

N/A.

AIR ROUTE

1. OBSERVED RELEASE

Contaminants detected:

N/A.

Date and location of detection of contaminants:

N/A.

Methods used to detect the contaminants:

N/a.

Rationale for attributing the contaminants to the site:

N/A.

* * *

2. WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

N/A.

Most incompatible pair of compounds:

N/A.

Toxicity

Most toxic compound:

N/A.

Hazardous Waste Quantity

Total quantity of hazardous waste:

See: Ground Water.

Basis of estimating and/or computing waste quantity:

See: Ground Water.

* * *

3. TARGETS

Population Within 4-Mile Radius

Circle radius used, give population, and indicate how determined:

0 to 4 mi	0 to 1 mi	0 to 1/2 mi	0 to 1/4 mi
+10,000			

(Donnelly Marketing).

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

More than 2 miles (NYSDEC, 1975a).

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

More than 1 mile (NYSDEC, 1975b).

Distance to critical habitat of an endangered species, if 1 mile or less:

More than one mile (NYSDEC, 1983).

Land Use

Distance to commercial/industrial area, if 1 mile or less:

Immediately adjacent to site (WCC Site Survey, 1983).

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

Approximately 2 miles WSW to the Massapequa Reserve, (USGS Quadrangle, Amityville).

Distance to residential area, if 2 miles or less:

Less than 1,000 feet (WCC Site Survey, 1983).

Distance to agricultural land in production within past 5 years, if 1 mile or less:

None (NYS DA&M, 1983).

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

None (NYS DA&M, 1983).

Is a historic or landmark site (National Register of Historical Places and National Natural Landmarks) within the view of the site?

None. (NYSP&R, 1983).

2.3 EPA Form 2070-12

(Preliminary Assessment)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	N/A

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Preferred Plating Corporation	32 Allen Boulevard

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Farmingdale	NY		Suffolk		

09 COORDINATES LATITUDE	LONGITUDE
40 42 59.0	073 25 26.0

10 DIRECTIONS TO SITE (Starting from nearest public road)
Take Long Island Expwy East to Route 110 South
Make a left on Allen Blvd. Site is in first block.

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)
Out of Business	N/A

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
N/A			( )

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)
N/A	

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
N/A			( )

13 TYPE OF OWNERSHIP (Check one)
☐ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER: _____ (Specify) ☑ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)
☐ A. RCRA 3001 DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
☑ YES DATE 08/16/83 (MONTH DAY YEAR)
☐ NO

BY (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR ☐ C. STATE ☑ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)
CONTRACTOR NAME(S): Woodward-Clyde Consultants, Inc.

02 SITE STATUS (Check one)	03 YEARS OF OPERATION		
☐ A. ACTIVE ☑ B. INACTIVE ☐ C. UNKNOWN	1951 (BEGINNING YEAR)	1976 (ENDING YEAR)	☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
Heavy Metals & Acids — Nickel — Chromic Acids
Alodine — Nitric Acid — Phosphate — Non-Etch Acids — Hydrochloric Acid
Alkaline Cleaner — Black Dye — Dichromate — Cadmium — Caustics

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
Ground water supplies are threatened

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)
☐ A. HIGH (Inspection required promptly) ☑ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
James Pimm	Suffolk County Dept of Health	( )

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Wayne Saunders	—	Woodward-Clyde (Consultants)	(212) 986-2878 (201) 785-0700	08/31/83 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	N/A

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☐ A. SOLID
- ☐ B. POWDER, FINES
- ☒ C. SLUDGE
- ☐ D. OTHER (Specify)
- ☐ E. SLURRY
- ☒ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS: _____

CUBIC YARDS: _____

NO. OF DRUMS: Unknown

03 WASTE CHARACTERISTICS (Check all that apply)

- ☒ A. TOXIC
- ☐ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ☒ D. PERSISTENT
- ☐ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☐ G. FLAMMABLE
- ☐ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
(SLU)	SLUDGE			
OLW	OILY WASTE			POSSIBLE WASTE LOADS
(SOL)	SOLVENTS			OF 600,000 GALLONS
PSD	PESTICIDES			DISPOSED OF OVER
(OCC)	OTHER ORGANIC CHEMICALS			A 25 YEAR PERIOD
IOC	INORGANIC CHEMICALS			
(ACD)	ACIDS			
BAS	BASES			
(MES)	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SOL	ALODINE		DISCHARGE	3235	mg/l
ACD	NITRIC			513,000	
ACD	NON-ETCH			60,000	
ACD	SULFURIC			219,000	
ACD	CHROMIC			43,000	
SLU	COMPOSITION			-	
MES	CADMIUM			UNK	
MES	CHROMIUM			132,000	
MES	TITANIUM			1640	

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

SUFFOLK CO. DEC

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: NY | 02 SITE NUMBER: NJ1

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: +10,000
02 [ ] OBSERVED (DATE: 1951-1976) [X] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

GROUND WATER CONTAMINATION HAS BEEN DETECTED IN DOWN GRADIENT WELLS AT A US ARMY BASE

01 [ ] B. SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: _____
02 [ ] OBSERVED (DATE: _____) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

No information available (N/A)

01 [ ] C. CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED: _____
02 [ ] OBSERVED (DATE: _____) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 [ ] D. FIRE/EXPLOSIVE CONDITIONS
03 POPULATION POTENTIALLY AFFECTED: _____
02 [ ] OBSERVED (DATE: _____) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 [X] E. DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED: _____
02 [ ] OBSERVED (DATE: _____) [X] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

MATERIALS HAVE BEEN SPILLED THROUGHOUT THE SITE

01 [X] F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: 0.5 (ACRES)
02 [ ] OBSERVED (DATE: 1951-1976) [X] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

SOIL HAS BEEN CONTAMINATED OVER THE YEARS VIA LEAKING IMPOUNDMENTS

01 [X] G. DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: +10,000
02 [ ] OBSERVED (DATE: _____) [ ] POTENTIAL [X] ALLEGED
04 NARRATIVE DESCRIPTION

PUBLIC SUPPLY WELLS ARE LOCATED DOWN GRADIENT OF THE SITE.

01 [ ] H. WORKER EXPOSURE/INJURY
03 WORKERS POTENTIALLY AFFECTED: _____
02 [ ] OBSERVED (DATE: _____) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 [ ] I. POPULATION EXPOSURE/INJURY
03 POPULATION POTENTIALLY AFFECTED: _____
02 [ ] OBSERVED (DATE: _____) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

N/A

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: NY | 02 SITE NUMBER: N/A

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

N/A

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES (Spills/runoff/standing liquids/leaking drums) — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: 1951-1976) ☐ POTENTIAL ☒ ALLEGED
04 NARRATIVE DESCRIPTION

DISPOSAL OF ON-SITE MATERIALS HAS TAKEN PLACE OVER 25 YEAR PERIOD

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

N/A

III. TOTAL POPULATION POTENTIALLY AFFECTED: +10,000

IV. COMMENTS

THE FIRM IS NO LONGER IN BUSINESS AND CURRENT OPERATIONS ON SITE (AUTO REPAIR) ARE UNRELATED TO THE PROBLEM.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

SUFFOLK CO. DEC

EPA FORM 2070-12 (7-81)

2.4 EPA Form 2070-13

(Site Inspection Report)

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

EPA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	N/A

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
PREFERRED PLATING CORPORATION	32 ALLEN BLVD

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
FARMINGDALE	NY		SUFFOLK		

09 COORDINATES LATITUDE	LONGITUDE
40 42 59.	073 25 26.

10 TYPE OF OWNERSHIP (Check one)
☒ A. PRIVATE ☐ B. FEDERAL _____ ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER _____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
08 16 83 (MONTH DAY YEAR)	☐ ACTIVE ☒ INACTIVE	1951 (BEGINNING YEAR) 1976 (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR _____ (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
☐ E. STATE ☒ F. STATE CONTRACTOR Woodward-Clyde (Name of firm) Consultants Inc. ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
WAYNE R. SAUNDERS	Project Geologist	Woodward-Clyde	(201) 785-0700

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
N/A	N/A	—	( ) —
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
NONE INTERVIEWED	—	—	( ) —
FIRM IS OUT-OF-BUSINESS	—	—	( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☐ PERMISSION ☐ WARRANT	1100	SUNNY / CLEAR / 90°F

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
JAMES PIMA	SUFFOLK COUNTY DEC	(—) —

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
W.R. SAUNDERS	—	WOODWARD-CLYDE CONS.	212-720-2878 201-785-0700	08 31 83 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	N/A

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☐ A. SOLID
- ☐ B. POWDER, FINES
- ☐ C. SLUDGE
- ☐ D. OTHER _____ (Specify)
- ☐ E. SLURRY
- ☒ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____

CUBIC YARDS _____

NO. OF DRUMS Unknown

03 WASTE CHARACTERISTICS (Check all that apply)

- ☒ A. TOXIC
- ☐ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ☒ D. PERSISTENT
- ☐ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☐ G. FLAMMABLE
- ☐ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
(SLU)	SLUDGE			
OLW	OILY WASTE			Possible waste loads
(SOL)	SOLVENTS			of 600,000 gallons
PSD	PESTICIDES			
(OCC)	OTHER ORGANIC CHEMICALS			of waste disposed
IOC	INORGANIC CHEMICALS			
(ACD)	ACIDS			over 25 years period
BAS	BASES			
(MES)	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SOL	ALODINE		DISCHARGE	3235	mg/l
ACD	NITRIC			513,000	mg/l
ACD	NON-ETCH			60,000	mg/l
ACD	SULFURIC			219,000	mg/l
ACD	CHROMIC			43,000	mg/l
SLU	Composition			—	
MES	CADMIUM			UNK	
MES	CHROMIUM			132,000	mg/l
MES	Titanium			1610	mg/l

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Suffolk County DEC

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: NY | 02 SITE NUMBER: 0771

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: ±10,000
02 ☒ OBSERVED (DATE: 1951 - 1976) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
GROUNDWATER CONTAMINATION HAS BEEN DETECTED IN DOWN-GRADIENT WELLS AT A US ARMY BASE, FT. TOTTEN.

01 ☐ B. SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
N/A

01 ☐ C. CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
N/A

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
N/A

01 ☒ E. DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED: [redacted]
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
MATERIALS HAVE BEEN SPILLED THROUGHOUT THE SITE

01 ☒ F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: 0.5 ACRES (Acres)
02 ☒ OBSERVED (DATE: 1951 - 1976) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
SOIL HAS BEEN CONTAMINATED OVER THE YEARS VIA LEAKING IMPOUNDMENTS.

01 ☒ G. DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: ±10,000
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☒ ALLEGED
04 NARRATIVE DESCRIPTION
Public Supply wells are located down gradient of the S.L.

01 ☐ H. WORKER EXPOSURE/INJURY
03 WORKERS POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
N/A

01 ☐ I. POPULATION EXPOSURE/INJURY
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
N/A

EPA Form 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: NJ | 02 SITE NUMBER: N/A

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include names(s) of species)

N/A

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids/Leaking drums) — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☒ OBSERVED (DATE: 1951 - 1976) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Disposal of on-site materials has taken place over the years.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

N/A

III. TOTAL POPULATION POTENTIALLY AFFECTED: +10,000

IV. COMMENTS

The firm (Prefered Plating) is no longer in business and NEW OPERATIONS AT THE SITE (Auto Repair) ARE UNRELATED TO THE PROBLEMS.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Suffolk County DEL

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	N/A

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☑ G. STATE (Specify) SPDES		6/14/75	—	FIRM IS OUT-OF-BUSINESS
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☑ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☑ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)	SEE INSPECTION WCC	

04 TREATMENT (Check all that apply)

- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☑ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER _____ (Specify)

05 OTHER

☑ A. BUILDINGS ON SITE

06 AREA OF SITE

0.50 (Acres)

07 COMMENTS

Site instituted various remedial actions but none appeared to be adequate

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☐ B. MODERATE ☑ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

The lagoons on site had failed liners and some wastes were probably discharged to cesspool(s).

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ☑ NO

02 COMMENTS

Since has changed considerably since firm was in business various new BLDS have been erected.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

Suffolk County DEC, WCC Inspection

EPA FORM 2070-13 (7-81)

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE: NJ | 02 SITE NUMBER: N/A

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)	SURFACE	WELL	02 STATUS: ENDANGERED	AFFECTED	MONITORED	03 DISTANCE TO SITE
COMMUNITY	A. ☐	B. ☑	A. ☑	B. ☐	C. ☐	A. 0.25 (mi)
NON-COMMUNITY	C. ☐	D. ☐	D. ☐	E. ☐	F. ☐	B. _____ (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☐ A. ONLY SOURCE FOR DRINKING ☑ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) ☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER: +10,000 | 03 DISTANCE TO NEAREST DRINKING WATER WELL: 0.25 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
± 15 (ft)	SSE	0.0 (ft)	_____ (gpd)	☐ YES ☑ NO

09 DESCRIPTION OF WELLS (including useage, depth, and location relative to population and buildings)

Various Municipal supply wells are located at distances between 0.25 and 3 mi. from the S.A.

10 RECHARGE AREA		11 DISCHARGE AREA	
☑ YES ☐ NO	COMMENTS	☐ YES ☑ NO	COMMENTS

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☐ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☑ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
None	☐	_____ (mi)
	☐	_____ (mi)
	☐	_____ (mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. +10,000 NO. OF PERSONS	B. +10,000 NO. OF PERSONS	C. +10,000 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION: 0.25 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE	04 DISTANCE TO NEAREST OFF-SITE BUILDING
_____	± 0.01 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

Adjacent area is both light industry and residences.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER N/A

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☐ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ cm/sec ☑ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☑ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☐ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH	
+ 1000 (ft)	UNKNOWN (ft)	UNKNOWN	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
15 (in)	2.7 (in)	2 3 %	SOUTH	2 3 %

09 FLOOD POTENTIAL

SITE IS IN N/A YEAR FLOODPLAIN

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE	OTHER
A. > 2.0 (mi)	B. > 1 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

_____ (mi)

ENDANGERED SPECIES: NONE

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AG LAND
A. 20.1 (mi)	B. 20.25 (mi)	C. — (mi)	D. — (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Site is generally flat.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

WCC Inspection, USGS Amityville Quad.

WCC Files, USGS Reports.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	N/A

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	>20	Suffolk County DEC	51-76
SURFACE WATER			
WASTE	>20	Suffolk County DEC	51-76
AIR			
RUNOFF			
SPILL			
SOIL			
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☒ GROUND ☐ AERIAL

02 IN CUSTODY OF Woodward-Clyde Consultants
(Name of organization or individual)

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS Suffolk County DEC

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Suffolk County DEC

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	N/A

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER
UNKNOWN	
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	**04 SIC CODE**
05 CITY / **06 STATE** / **07 ZIP CODE**	
01 NAME	**02 D+B NUMBER**
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	**04 SIC CODE**
05 CITY / **06 STATE** / **07 ZIP CODE**	
01 NAME	**02 D+B NUMBER**
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	**04 SIC CODE**
05 CITY / **06 STATE** / **07 ZIP CODE**	
01 NAME	**02 D+B NUMBER**
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	**04 SIC CODE**
05 CITY / **06 STATE** / **07 ZIP CODE**	

PARENT COMPANY *(If applicable)*

08 NAME	09 D+B NUMBER
10 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	**11 SIC CODE**
12 CITY / **13 STATE** / **14 ZIP CODE**	
08 NAME	**09 D+B NUMBER**
10 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	**11 SIC CODE**
12 CITY / **13 STATE** / **14 ZIP CODE**	
08 NAME	**09 D+B NUMBER**
10 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	**11 SIC CODE**
12 CITY / **13 STATE** / **14 ZIP CODE**	
08 NAME	**09 D+B NUMBER**
10 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	**11 SIC CODE**
12 CITY / **13 STATE** / **14 ZIP CODE**	

III. PREVIOUS OWNER(S) *(List most recent first)*

01 NAME	02 D+B NUMBER	
Preferred Plating		
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	**04 SIC CODE**	
32 ALLEN BLVD		
05 CITY	**06 STATE**	**07 ZIP CODE**
FARMINGDALE	NY	
01 NAME	**02 D+B NUMBER**	
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	**04 SIC CODE**	
05 CITY	**06 STATE**	**07 ZIP CODE**
01 NAME	**02 D+B NUMBER**	
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	**04 SIC CODE**	
05 CITY	**06 STATE**	**07 ZIP CODE**

IV. REALTY OWNER(S) *(If applicable, list most recent first)*

01 NAME	02 D+B NUMBER	
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	**04 SIC CODE**	
05 CITY	**06 STATE**	**07 ZIP CODE**
01 NAME	**02 D+B NUMBER**	
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	**04 SIC CODE**	
05 CITY	**06 STATE**	**07 ZIP CODE**
01 NAME	**02 D+B NUMBER**	
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	**04 SIC CODE**	
05 CITY	**06 STATE**	**07 ZIP CODE**

V. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

Suffolk County DEC

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION
01 STATE: NY | 02 SITE NUMBER: N/A

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME	02 D+B NUMBER
Auto Repair (A&J)	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
32 Allen Blvd	

05 CITY	06 STATE	07 ZIP CODE
Farmingdale	NY	—

08 YEARS OF OPERATION	09 NAME OF OWNER
1-2	UNKNOWN

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER
Preferred Plating			

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
32 Allen Blvd.			

05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
Farmingdale	NY				

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD
25	Mr. J. Young

01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Suffolk County DEC

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	NJA

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	
05 CITY	06 STATE / 07 ZIP CODE	

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER: N/A

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ H. ON SITE BURIAL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☑ I. IN SITU CHEMICAL TREATMENT — 02 DATE 1974 — 03 AGENCY SUFFOLK CO. DEC
04 DESCRIPTION VARIOUS CHEMICAL TREATMENT

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	N/A

II. PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	NTA

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☒ YES ☐ NO

DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

Suffolk County DEC Files have various regulating actions over various years.

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Suffolk County DEC Files

EPA FORM 2070-13 (7-81)

3.0
SITE HISTORY

Preferred Plating Corporation was operated at the Allen Boulevard site from 1951 to 1976 when the firm filed for bankruptcy. The firm was owned by Mr. J. Young of the same address. A SPDES permit was filed for by Preferred Plating in June, 1975 but never was in compliance fully with the terms and conditions of the permit.

Preferred Plating Corporation previously (prior to filing for bankruptcy) treated metal ports to increase corrosion resistance and provide a cohesive base for painting to improve appearance. Since 1953 various discharges of waste materials through surface impoundments and leaching pits to the ground water environment have been documented. In addition, some surface discharges of hazardous wastes were also documented.

Various court actions through the years hove been instituted by the Suffolk County Department of Health dealing with the upgrading of on site treatment facilities. None of the court mandated compliances regarding the treatment facilities were acccomplished. In the year 1976 the company filed for bankruptcy.

The following products were utilized at the site during its operations:

Alodine	Phosphate	Hydrochloric Acid
Alkaline Cleaner	Dichromate	Caustics
Nitric Acid	Non-Etch Acids	Chromic Acids
Black Dye	Cadmium	Nickel

Analysis performed by the Suffolk County Department of Health and the U.S. Army (Ft.Totten) revealed that ground water contaminaton was attributed to the site.

4.0
SITE DATA

4.1 Site Area Surface Features

The former Preferred Plating site is located approximately 6,000 feet east of on unnamed (intermittent) tributary of Massapequa Creek (Figure 1). The elevation at this site is approximately 55 feet above sealevel, with a slope of less than 3% to the south. There is no designated NY State Significant Habitat (NYSDEC, Division of Fish and Wildlife, 1983), agricultural land (NYS, Division of Agriculture and Markets, 1983), nor historic or landmark soles (NYS Porks and Recreation, 1983) affected or potentially affected by the former site.

The predominate land use in the Immediate vicinity is light industrial, with the closest building located within 15 feet of the site. Mill Lane Junior High School is located approximately 2,000 feet west of the site but the site does not appear to have any impact upon it. The nearest residential area is approximately 300 to 500 feet south of the site. It is estimated that 250 to500 dwellings occur within a ¼ mile radius of the site.

4.2 Site Hydrogeology

4.2.1 Ground Water Occurrence. Ground water below the site occurs in unconsolidated sediments of Recent, Pleistocene, and Cretaceous age. An engineering report by Donnelly Engineering, (1974) reveals that the site is underlain by permeable sands and gravels. The depth to the unconfined ground water table is approximately 15 feet (Ground Water Contour Map, Suffolk County Department of Health).

These materials are believed to include recent shoreline deposits, alluvium, and fill, overlying a complex sequence of Pleistocene outwash deposits of sand and gravel and ground moraine deposits of sandy gravely clay and silt. (Upson, 1955). Together they form one of two major water-bearing units in the site area. This "principal aquifer" as defined by Isbister (1966) includes all beds overlying the Upper Cretaceous clay member of the Raritan Formation. In the site area, this includes only the upper glacial deposits. The Magothy Formation, which underlies much of Long Island, has been eroded, and the glacial deposits are believed to fill a buried channel. (Isbister, 1966; Kilburn, 1979). The glacial deposits are believed to be hydraulically connected to the Magothy aquifer to the south and east.

The upper glacial deposits at the site overlie the clay member of the Raritan Formation at an estimated depth of 150 feet (Isbister, 1966). This contact is erosional and is irregular in the site area. The clay overlies and confines the Lloyd Sand Member of the Raritan Formation, which constitutes the deep confined aquifer in the site region. The Lloyd Sand consists of stratified beds of sand, gravel, sandy clay, silt, and clay (Franke and McClymonds, 1972; Isbister, 1966). It is a productive aquifer in Nassau and Suffolk Counties. The Lloyd Sand overlies Precambrian rock at the site at an estimated depth of 400 feet (Franke and McClymonds, 1971; Kilburn, 1979). The bedrock surface dips approximately 60 feet per mile to the southeast, as do the overlying Cretaceous sediments.

Ground water in the upper glacial aquifer underlying the site is under water table conditions at higher elevations but becomes confined with depth due to interbedded clay and silt layers. Flow between the upper glacial aquifer and the deep confined aquifer is retarded by the intervening clay member of the Raritan Formation. Recharge to the deep aquifer is by slow leakage down through overlying materials (Kilburn, 1979).

Ground water at the site was encountered in most borings at depths of 25 to 30 feet. However, some borings were dry to 60 feet (Slacke, 1981), suggesting a perched water table. Perched water tables are common in this area of Suffolk County, but because of the area's variable stratigraphy, the elevation of the ground water table may also show significant variation over short distances (Isbister, 1966).

Regional ground water flow in both the principal aquifer and the deep confined aquifer is to the northwest (Franke and McClymonds, 1972). Local ground water flow is probably south-southeast and is reflective of regional topography.

4.2.2. Ground Water Quality. Ground water quality in Suffolk County is generally good, typically containing less than 100 ppm dissolved solids. Local salt water encroachment has been reported in the shallow aquifer near the north shore (Isbister, 1966) but has not been confirmed in the site area. The salt water front in the deep confined aquifer is believed to have stabilized 1 to 1.5 miles off shore. Locally high nitrate concentrations have also been reported in both the shallow aquifer and the deep confined aquifer in Suffolk County. The primary source for this nitrate contamination is believed to be septic systems, particularly cesspools, with some contribution from chemical fertilizers (Myott, 1980). Glenn Cove is one of the few sewered communities in Suffolk County (Isbister, 1966).

4.2.3 Ground Water Use.

Numerous wells are located both up and downgradient of the site, including an on site well. North of the site, Republic Aviation Corporation has 10 wells, the Suffolk County Water Authority District has 6 wells, and 6 industrial wells are reported in the area. All of the aforementioned wells ore within 3 miles of the site.

The majority of these wells ore completed in, and drawing water from the upper glacial aquifer or the Magothy aquifer (Kilburn, 1982).

The on site well and a well at the U.S. Army installation downgradient has been allegedly contaminated with the site activies of Preferred Plating.

4.3 Past Sampling Activities

From 1955 to 1976 the Suffolk County Department of Health has completed numerous analytical test both on waste materials and ground water both on and off site. Five (5) major contaminants were identified by the Suffolk County Department of Health, January 2, 1975 these were copper, chromium cadmium, hexavalent chromium and cyanide. All of these products were also detected in discharges by Preferred Plating. Available analytical results are included in Appendix B.

The on site well approximately 80 feet deep hod become contaminated by wastes generated at the site and disposed via leaching beds. The on site well was taken out of services and bottled water was utilized for employees.

The samples taken on site have revealed that subsurface soils and ground water hove been contaminated above acceptable county, state, and federal standards.

There has been no reported testing of air quality at this site.

5.0
DATA ADEQUACY

Existing available data were adequate for HRS scoring of the Preferred Plating Corp. site. The Suffolk County DEC files provided much useful site specific information. The WCC site survey was also very helpful in providing data on the site vicinity.

With a score of 58.41, the Ground Water route is the route of major concern. Documented data on an observed release to ground water from the Suffolk County DEC (1975) serves to elevate this route score. Although existing data for the Surface Water route is adequate and complete, this route achieved a score of only 0.0.

6.0
WORK PLAN

6.1 Objective

The objectives of this proposed work plan are to collect additional field information required to adequately define the extent of contamination and to prepare conceptual remedial action plans. This work plan will primarily address questions concerning soil contamination, ground water flow and quality. The analysis of wastes and ground water samples previously indicate that a potential health hazard exists downgradient and at the site.

6.2 Field Investigation Plan

6.2.1 Geophysical Studies. As part of the on site field investigation to characterize the hydrologic regime and waste location, a geophysical survey utilizing the Geonics EM 31 Terrain Conductivity Meter will be conducted. This technique has been utilized successfully to locate similar contaminant plumes and waste locations. Since the site is in a highly urbanized environment and surface site conditions (new buildings) have changed since Preferred Plating stopped operating, the scope of the survey would be limited.

Measurement should be attempted both north and south of the site along open unobstricted areas. Subsurface utility lines would hove to be mapped or reviewed to insure proper intrepretation of data.

It is anticipated that a two person team would conduct the survey in one day. Readings would be token with the coils in the vertical mode yielding a effective depth of exploration of 6 meters (19.7 feet). It is anticipated that measurement stations would be on a maximum of 20 feet centers with the

recorded data plotted on maps and interpreted. The maps will be useful in locating the ground water monitoring wells.

6.2.2 Monitoring Wells

6.2.2.1 Installation. Monitoring wells will be installed to provide data pertinent to both water chemistry and characterization of the stratigraphy and ground water regime at the site. It is recommended that a minimum of five monitoring wells be installed at the site, at the approximate locations indicated on Figure 2. The depth of the wells will be 20 feet into the saturated zone of the upper aquifer. The total approximate depth will be 35-45 feet. The screened length of the casing will be a minimum of 5 feet above and 10 feet below the static ground water level yielding a total of 15 feet screened interval.

The installation of the wells will be advanced through the overburden by 6-inch I.D. hollow stem augers or driven casing, with continuous split spoon sampling in the upper 10 feet and at 5 foot intervals thereafter. Soil samples will be classified in the field by a geologist or soil scientist.

Slotted 3-inch I.D. PVC well screen will be installed over 15 foot intervals in each well. Wells will be installed flush with the existing ground surface for logistical concerns (access by vehicles). A gravel pack will be completed to approximately 2 feet above the top of the screen, where a 1 foot bentonite seal will be installed. To further assure that water samples will be representative of the screened interval, the remaining annular space will be grouted, and protective steel casing will be installed. After installation the wells will be developed by pumping, to remove any fine grained material.

It is estimated that six days will be required to drill and develop the monitoring wells.

6.2.2.2 Water Elevation. Ground water depths will be measured at the time of well development and again a the time of pumping. Water elevations, measured relative to a datum established at the site, will be plotted and used to develop contours of the ground water table. Based on this map, the direction(s) of ground water flow will be estimated. Flow and gradient data will be fundamental input in quantifying site conditions and will be compared to plume geometries inferred from geophysical survey data.

It is anticipated that a two person crew will require one day to survey ground elevations at the site.

6.2.2.3 Aquifer Testing. "Slug"-type permeability tests will be conducted in each newly installed well to evaluate the permeability of materials spanning the screened interval. The method is a rapid means by which the in-situ permeability in the immediate vicinity of a monitoring well can be approximated. The test does not involve pumping of potentially contaminated water, and results generally suffice for ground water flow analysis.

6.2.3 Sampling and Analysis Plan

6.2.3.1 General Plan. To be provided by NYDEC.

6.2.3.2 Sample Parameters. Previous analysis of waste materials and ground water at the site indicate contamination with heavy metals (i.e. chromium, copper, nickel, cadmium). Laboratory analysis will be limited to those metals previously identified by the Suffolk County Health Department. Samples will be collected from ground water and soils. Sample types and parameters are summarized in Table 6-1.

6.2.3.3 Sampling Locations. One water sample and one soil sample from each of the ground water monitoring wells will be analyzed. Results of each pair of analyses will be compared to evaluate downward migration of contaminants through soil. Ground water analyses will be evaluated in terms of other

hydrogeologic data to evaluate the presence, distribution and migration directions of any ground water contamination plumes.

6.3 Health and Safety Plan.

To be supplied by NYSDEC.

6.4 Cost Estimate.

Costs for Phase II work were developed based on assumptions, rates, and charges described in WCC's cost proposal submitted to NYSDEC on 29 October 1982. These costs may be impacted by the sampling and analysis plan or health and safety plan to be supplied by NYSDEC. Costs have been grouped by task, and estimated cost for Phase II investigations on the Preferred Plating site is $17,095.

Table 6-1. PROPOSED CHEMICAL ANALYSES AT THE PREFERRED PLATING SITE.

	ANALYSES	
Sample Type	Metal Scan by JCP	Remarks
Ground Water	X	One sample at each well.
Soil	X	One sample from unsaturated zone.

TABLE 6-2. GEOPHYSICAL STUDIES COSTS.

			Estimated Cost	Total Estimated Cost
1. Direct Material				
a. Purchased Parts				
b. Subcontract Items				
c. Other				
2. Material Overhead				
	Estimated Hours	Rate/ Hour		
3. Direct Labor				
Senior Staff Engineer/ Geologist/Scientist	24	12.62	303	
		Total Direct Labor		$ 303
	O H Rate	X Base		
4. Labor Overhead				
Labor Overhead	120%	303	363	
		Total Labor Overhead		$ 363
5. Special Testing				
6. Special Equipment - Terrain Conductivity Equipment				$ 140
7. Travel				
a. Transportation			30	
		Total Travel		$ 30
8. Consultants				
9. Other Direct Costs				
10.		Total Direct Costs and Overhead		$ 836
11. General and Administrative Expense (rate 15% of Cost Element No's. 1, 3, 4, 7, 9)				$ 104
12. Royalties				-
13.			Sub Total	$ 940
14. Fee			85	
15.		Total Estimated Cost		$ 1,025

TABLE 6-3. DRILLING/WELL INSTALLATION COSTS.

			Estimated Cost	Total Estimated Cost
1. Direct Material				
a. Purchased Parts				
b. Subcontract Items			$ 4,880	
c. Other				
		Total Direct Material		$ 4,880
2. Material Overhead				
	Estimated Hours	Rate/ Hour		
3. Direct Labor				
Senior Staff Engineer/ Geologist/Scientist	60	12.62	752	
		Total Direct Labor		$ 752
	O H Rate	X Base		
4. Labor Overhead				
Labor Overhead	120%	752	909	
		Total Labor Overhead		$ 909
5. Special Testing				
6. Special Equipment				
Slug Test Euipment	200			
		Total Special Equipment		$ 200
7. Travel				
a. Transportation			30	
b. Subsistence			360	
		Total Travel		$ 390
8. Consultants				
9. Other Direct Costs				
10.		Total Direct Costs and Overhead		$ 7,131
11. General and Administrative Expense (rate 15% of Cost Element No's. 1, 3, 4, 7, 9)				$ 1,040
12. Royalties				-
13.			Sub Total	$ 8,171
14. Fee			735	
15.		Total Estimated Cost		$ 8,906

TABLE 6-4. SAMPLING AND ANALYSIS COSTS.

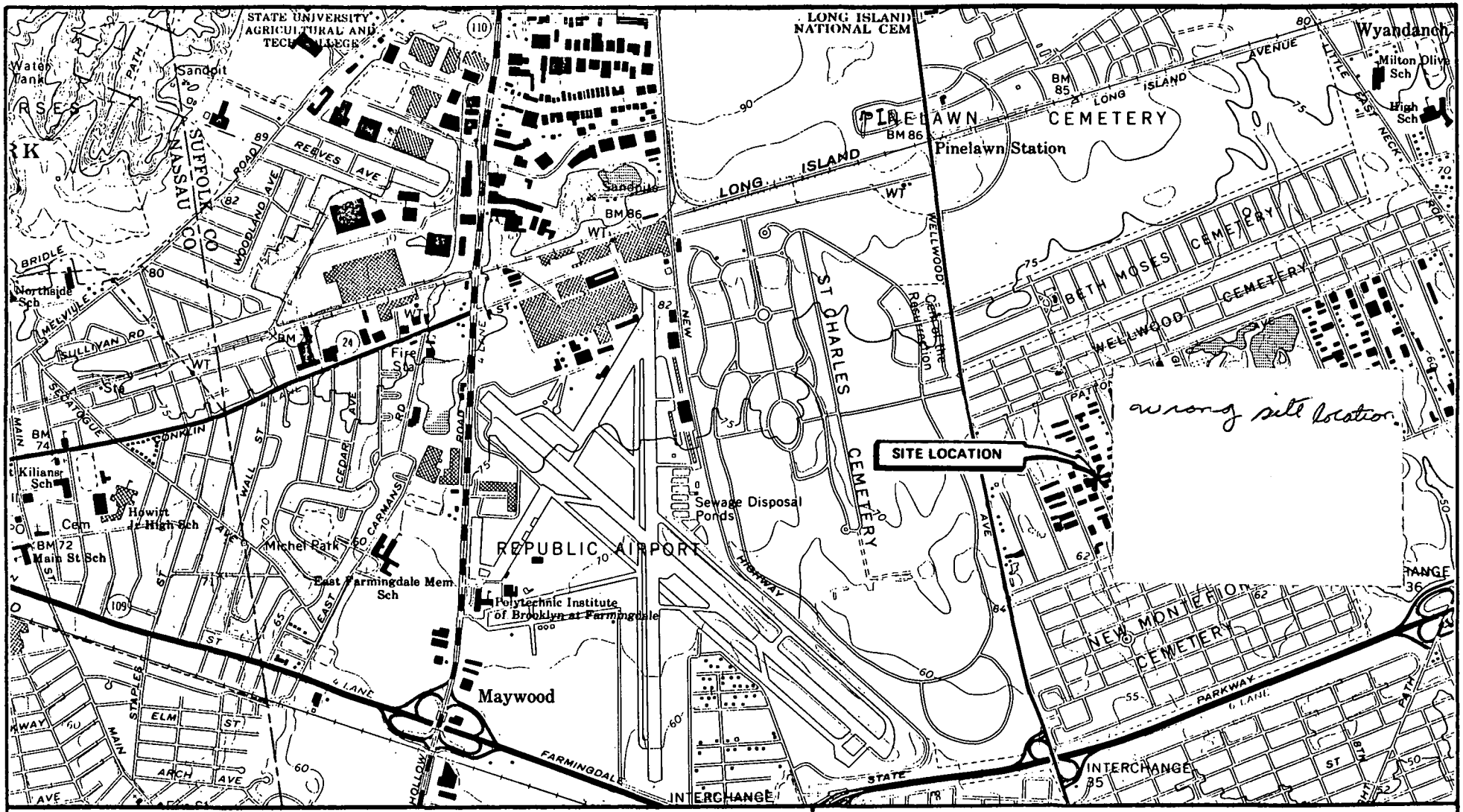
			Estimated Cost	Total Estimated Cost
1. Direct Material				
a. Purchased Parts				
b. Subcontract Items			$ 900	
c. Other				
		Total Direct Materials		$ 900
2. Material Overhead				
	Estimated Hours	Rate/ Hour		
3. Direct Labor				
Staff Engineer/ Geologist/Scientist	12	12.62	151	
		Total Direct Labor		$ 151
	O H Rate	X Base		
4. Labor Overhead				
Labor Overhead	120%	151	181	
		Total Labor Overhead		$ 181
5. Special Testing				$1,456
6. Special Equipment - Pumps, Bailers				$ 100
7. Travel				
a. Transportation			30	
b. Subsistence			60	
		Total Travel		$ 90
8. Consultants				
9. Other Direct Costs				
Sample Shipment				250
		Total Other Direct Costs		$ 250
10.		Total Direct Costs and Overhead		$3,128
11. General and Administrative Expense (rate 15% of Cost Element No's. 1, 3, 4, 7, 9)				$ 236
12. Royalties				-
13.		Sub Total		$3,364
14. Fee			303	
15.		Total Estimated Cost		$3,667

TABLE 6-5. REPORT PREPARATION COSTS.

			Estimated Cost	Total Estimated Cost
1. Direct Material				
a. Purchased Parts				
b. Subcontract Items				
c. Other				
2. Material Overhead				
	Estimated Hours	Rate/ Hour		
3. Direct Labor				
Senior Staff Engineer/ Geologist/Scientist	30	12.62	379	
Drattsperson	10	10.24	102	
Typist	3	8.44	25	
		Total Direct Labor		$ 506
	O H Rate	X Base		
4. Labor Overhead				
Labor Overhead	120%	506	607	
		Total Labor Overhead		$ 607
5. Special Testing				
6. Special Equipment				
7. Travel				
a. Transportation				
b. Subsistence				
8. Consultants				
9.		Other Direct Costs		$ 150
10.		Total Direct Costs and Overhead		$1,263
11. General and Administrative Expense (rate 15% of Cost Element No's. 1, 3, 4, 7, 9)				$ 189
12. Royalties				-
13.			Sub Total	$ 1,452
14. Fee			131	
15.		Total Estimated Cost		$ 1,583

TABLE 6-6. PROJECT MANAGEMENT COSTS.

	Estimated Hours	Rate/ Hour	Estimated Cost	Total Estimated Cost
1. Direct Material				
a. Purchased Parts				
b. Subcontract Items				
c. Other				
2. Material Overhead				
3. Direct Labor				
Principal In Charge	2	33.32	67	
Activity Leader	10	20.92	209	
Project Manager	10	20.91	209	
Asst. Prj. Engr/Geol/Sci.	10	14.96	150	
Typist	4	8.44	34	
		Total Direct Labor		$ 669
	O H Rate	X Base		
4. Labor Overhead				
Labor Overhead	120%	669	803	
		Total Labor Overhead		$ 803
5. Special Testing				
6. Special Equipment				
7. Travel				
a. Transportation			55	
b. Subsistence				
		Total Travel		$ 55
8. Consultants				
9. Other Direct Costs				
10.		Total Direct Costs and Overhead		$1,527
11. General and Administrative Expense (rate 15% of Cost Element No's. 1, 3, 4, 7, 9)				$ 229
12. Royalties				-
13.			Sub Total	$ 1,756
14. Fee			158	
15.		Total Estimated Cost		$ 1,914



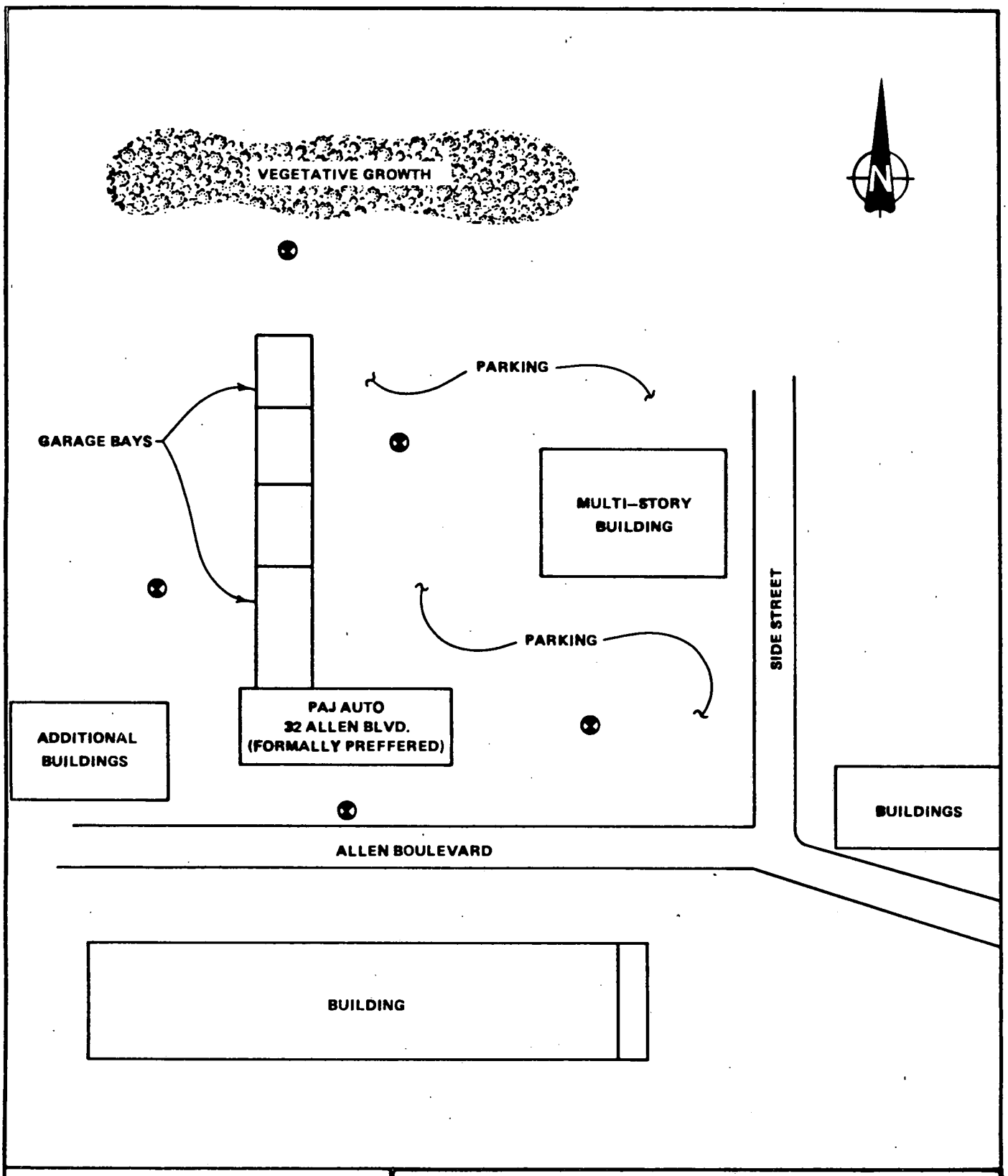
NOTE: BASE MAP FROM USGS, AMITYVILLE QUAD, 1970 (revised)

SITE LOCAITON MAP
PREFERRED PLATING

WOODWARD—CLYDE CONSULTANTS, INC.

CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS
NEW YORK, NEW YORK

DR. BY:	BTD	SCALE: 1 IN. = 2000 FT	PROJ. NO : 82C4548
CK'D. BY:	DRG	DATE: 21 OCTOBER 1983	FIG. NO : 1



LEGEND

⊗ PROPOSED MONITORING WELLS

PREFERRED PLATING

WOODWARD—CLYDE CONSULTANTS

CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS
WAYNE, NEW JERSEY

DR. BY:	CIG	SCALE: NOT TO SCALE		PROJ. NO:	82C4548-14
CK'D. BY:	WRS	DATE:	21 OCT 1983	FIG. NO:	2

APPENDIX A

APPENDIX A
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APPENDIX B

APPENDIX B
PERTINENT INFORMATION

1053 60TH STREET
BROOKLYN 19, N.Y.
ULSTER 4-6400

BROADHOLLOW ROAD & ALLEN BLVD.
FARMINGDALE, NEW YORK
FARMINGDALE 2-2600

PLEASE REPLY TO

July 22, 1953

Nassau County Dept. of Health
Riverhead, Long Island

Gentlemen:

Recently we have had an analysis made of our water supply which is from a new well. The analysis is a chemical examination which requires the talents of a Sanitary Engineer for scrutinization as to whether the properties are balanced for drinking water.

Therefore, we are asking your assistance at this time to review the enclosed physical and chemical examination made by the Lindsay Laboratories and notify us if it is approved.

Very truly yours

EYTON MANUFACTURING CO., INC.

George C. Bennett
Plant Manager

GCB:jmh
Encl. (1 Report)

[L]INDSAY LABORATORIES

"Everything for the Patient — Consult Your Physician"

Since 1904

— BRANCHES —

90-22 Sutphin Boulevard, JAMAICA 2   131 Fulton Avenue, HEMPSTEAD

302 ASHLAND PLACE
BROOKLYN 17, N. Y.
NEvins 8-5480

WATER ANALYSIS

LAB. NO. 759

DATE June 30, 1953

SAMPLE MARKED " EYTON WATER"   RECEIVED 6/23/53

PHYSICAL AND CHEMICAL EXAMINATIONS

APPEARANCE	Turbid	
SEDIMENT	Slight Brownish precipitate	
ODOR—COLD	0	
ODOR—HOT	0	
HYDROGEN ION CONCENTRATION (pH)	5.90	
COLOR (HAZEN SCALE)	0	PARTS PER MILLION
TURBIDITY (SILICA STANDARD)	15.0	" " "
IRON	0.17	" " "
CHLORINE AS CHLORIDES	10.8	" " "
NITROGEN AS NITRITES	0.015	" " "
NITROGEN AS NITRATES	0.75	" " "
NITROGEN AS FREE AMMONIA	0.18	" " "
NITROGEN AS ALBUMINOID AMMONIA	0.026	" " "
TOTAL HARDNESS (EXPRESSED AS $CaCO_3$)	32.0	" " "
ALKALINITY (EXPRESSED AS $CaCO_3$)	7.8	" " "
ORGANIC AND VOLATILE (LOSS ON IGNITION)	12.0	" " "
MINERAL MATTER (NON-VOLATILE)	53.0	" " "
TOTAL SOLIDS (DRIED AT 180° C)	65.0	" " "
FREE CARBON DIOXIDE	6.3	" " "

Note: Assays run on filtered sample.

Eyton Mfg. Co.
[illegible] Road & Allen Blvd.
[illegible], L. I., N. Y.

Att: Mr. George [illegible]

[illegible]

HERMAN E. BUL[illegible] M.D.
COMMISSIONER

Examination of samples from catchment area— Long Island
Sub-watershed
Project: Karpen Steel Prefab Co. - V. Farmingdale, Suffolk Co.

Sample: Catch/composite

Date reported: 7/31/53

Station:

Date Collected: 7/16/53 Time:

Lab. No.: SW 331

Source: outside tap - well

Weather:

Appearance of stream
Color
*Odor
Turbidity
Suspended matter
Bottom and deposits

Determination of sample	parts per million
Color	
*Odor	
Turbidity	
Suspended matter	
Temperature °C	
pH value	
Carbon dioxide	
Dissolved oxygen	
Percent saturation	
B.O.D. 5-day	
Hardness	
Chlorides	
Alkalinity	
Carbonate	
Bicarbonate	
Hydroxide	
Total	
Acidity	
Mineral	
Total	
Free carbon dioxide	

	parts per million
Aluminum	
Cadmium	<0.02
Chromium	<0.01
Copper	
Iron	
Lead	
Nickel	
Zinc	
Hexavalent Chromium	<0.01

Cyanide	
Thiocyanate	
Grease	
Phenol	
Phosphates	

Total solids	
Volatile	
Fixed	
Suspended solids	
Volatile	
Fixed	
Dissolved solids	
Volatile	
Fixed	
Non-settleable solids	
Volatile	
Fixed	
Settleable solids	
Volatile	
Fixed	
Settleable solids	
Ml. per liter 1 hr.	
Ml. per liter 4 hrs.	
Ml. per liter 24 hrs.	

M.P.N.

[redacted] DIRECTOR
K. MILLER, M.D.
ASSOCIATE DIRECTOR

HERMAN E. HILLEBOE, M.D.
COMMISSIONER

ASSISTANT DIRECTOR IN CHARGE OF
LABORATORIES FOR SANITARY AND
ANALYTICAL CHEMISTRY

Examination of samples from catchment area--- Long Island
Sub-watershed
Project: Casey Jones School - V. Farmingdale, Suffolk Co.

Sample: Catch/composite

Date reported:

Station:

Date Collected 7/20/53 Time:

Lab. No.: SW 349

Source: drinking fountain tap - well

Weather:

Appearance of stream
Color
*Odor
Turbidity
Suspended matter

Bottom and Deposits

Examination of sample	parts per million
Color	
*Odor	
Turbidity	
Suspended matter	
Temperature °C	
pH value	
Carbon dioxide	
Dissolved oxygen	
Per cent saturation	
B.O.D., 5-day	
Hardness	
Chlorides	
Alkalinity	
Carbonate	
Bicarbonate	
Hydroxide	
Total	
Acidity	
Mineral	
Total	
Oxygen consumed	
Free Ammonia	

	parts per million
Aluminum	
Cadmium	<0.02
Chromium	<0.01
Copper	
Iron	
Lead	
Nickel	
Zinc	
Hexavalent Chromium	<0.01
Cyanide	
Thiocyanate	
Grease	
Phenol	
Phosphates	
Total solids	
Volatile	
Fixed	
Suspended solids	
Volatile	
Fixed	
Dissolved solids	
Volatile	
Fixed	
Non-settleable solids	
Volatile	
Fixed	
Settleable solids	
Volatile	
Fixed	
Settleable solids	
Ml. per liter ½ hr.	
Ml. per liter 1 hr.	
Ml. per liter 2 hrs.	

[redacted] M.P.N.

DIVISION OF LABORATORIES AND RESEARCH
GILBERT DALLDORF, M.D., DIRECTOR
JOHN K. MILLER, M.D., ASSOCIATE DIRECTOR

NEW YORK STATE DEPARTMENT OF HEALTH
ALBANY 1
HERMAN E. HILLEBOE, M.D., COMMISSIONER

Form 44c

F. WELLINGTON GILCREAS
ASSISTANT DIRECTOR IN CHARGE OF LABORATORIES FOR SANITARY AND ANALYTICAL CHEMISTRY

Examination of samples from catchment area— Long Island
Sub-watershed
Project: Barnes Precision Tool
Farmingdale, Suffolk Co.

Sample: Catch/composite

Date reported: 8/21/53

Station:

Date Collected: 7/24/53 Time:

Lab. No.: SW-364

Source: Tap - well

Weather:

Appearance of stream:
- Color
- Odor
- Turbidity
- Suspended matter

Bottom and deposits

Examination of sample — parts per million
- Color
- Odor
- Turbidity
- Suspended matter
- Temperature °C
- pH value
- Carbon dioxide
- Dissolved oxygen
- Per cent saturation
- B.O.D., 5-day
- Hardness
- Chlorides
- Alkalinity
  - Carbonate
  - Bicarbonate
  - Hydroxide
  - Total
- Acidity
  - Mineral
  - Total

	parts per million
Aluminum	
Cadmium	
Chromium — Hex.	<0.01
Chromium — Total	<0.01
Copper	
Iron	
Lead	
Nickel	
Zinc	
Cyanide	*Not determined
Thiocyanate	
Grease	
Phenol	
Phosphates	

*Sample not preserved and 11 days old when received

Total solids	
Volatile	
Fixed	
Suspended solids	
Volatile	
Fixed	
Dissolved solids	
Volatile	
Fixed	
Non settleable solids	
Volatile	
Fixed	
Settleable solids	
Volatile	
Fixed	
Settleable solids	
Ml. per liter ½ hr.	
Ml. per liter 1 hr.	
Ml. per liter 2 hrs.	

VISION OF LABORATORIES AND RESEARCH
SERT DALLDORF, M.D. DIRECTOR
K. MILLER, M.D. ASSOCIATE DIRECTOR

NEW YORK
STATE DEPARTMENT OF HEALTH
ALBANY 1
HERMAN E. HILLEBOE, M.D.
COMMISSIONER

Form 44c 8-30-51-5M (3B-665)

F. WELLINGTON GILCREAS
ASSISTANT DIRECTOR IN CHARGE OF LABORATORIES FOR SANITARY AND ANALYTICAL CHEMISTRY

Examination of samples from catchment area— Long Island
Sub-watershed
Project: Eyton Mfg. Co.,
Farmingdale, Suffolk Co.

Date reported: 8/21/53

ple: Catch, composite

tion:

e collected: 7/24/53 Time:

b No.: SW-366

Tap - well

ther:

rance of stream
*Color
*Color
*Turbidity
*Suspended matter
Scum and deposits

Examination of sample	parts per million
Color	
*Color	
*Turbidity	
*Suspended matter	
Temperature °C	
pH value	
Carbon dioxide	
Dissolved oxygen	
Per cent saturation	
B.O.D. 5-day	
Hardness	
Chlorides	
Alkalinity	
Carbonate	
Bicarbonate	
Hydroxide	
Total	
Clay	
Mineral	
Metal	
Organic matter	
Free Carbon dioxide	

	parts per million
Aluminum	
Cadmium	<0.01
Chromium — Hex.	<0.01
Chromium — Total	<0.01
Copper	
Iron	
Lead	
Nickel	
Zinc	

* Not detemined

Cyanide	
Thiocyanate	
Grease	
Phenol	
Phosphates	

*Sample not preserved and 11 days old when received

Total solids	
Volatile	
Fixed	
Suspended solids	
Volatile	
Fixed	
Dissolved solids	
Volatile	
Fixed	
Non settleable solids	
Volatile	
Fixed	
Settleable solids	
Volatile	
Fixed	
Settleable solids	
Ml. per liter ½ hr.	
Ml. per liter 1 hr.	
Ml. per liter 2 hrs.	

August 10, 1953

Kempen Steel Prefab Company
Allen Boulevard
Fast Farmingdale, New York

Gentlemen:

A sample of your well water collected on July 16, 1953, by a representative of this department and analyzed in the New York State Department of Health Laboratory at Albany indicated that your water supply did not contain any ascertainable amounts of hexavalent or total chromium or any cadmium.

Very truly yours

Herbert W. Davis, P.E.
Director of Environmental
Sanitation

[illegible]

Examination of samples from catchment area— Long Island

Sub-watershed

Project: Palerri Metal Products
Farmingdale, Suffolk County

Sample: Catch/composite

Date reported: 8/21/53

Station:

Date Collected: 7/24/53 Time:

Lab. No.: SW-363

Source: Tap - well

Weather:

Appearance of stream
- Color
- *Odor
- Turbidity
- Suspended matter

Bottom and deposits

Examination of sample — parts per million
- Color
- *Odor
- Turbidity
- Suspended matter
- Temperature °C
- pH value
- Carbon dioxide
- Dissolved oxygen
- Per cent saturation
- B.O.D., 5-day
- Hardness
- Chlorides
- Alkalinity
  - Carbonate
  - Bicarbonate
  - Hydroxide
  - Total
- Acidity
  - Mineral
  - Total
- Oxygen consumed
  - From Tables ...

		parts per million
Aluminum		*
Cadmium		
Chromium	Hex.	<0.01
	Total	<0.01
Copper		<0.01
Iron		
Lead		
Nickel		
Zinc		
Cyanide		*Not determined
Thiocyanate		
Grease		
Phenol		
Phosphates		

*Sample not preserved and 11 days old when received

- Total solids
  - Volatile
  - Fixed
- Suspended solids
  - Volatile
  - Fixed
- Dissolved solids
  - Volatile
  - Fixed
- Non settleable solids
  - Volatile
  - Fixed
- Settleable solids
  - Volatile
  - Fixed
- Settleable solids
  - Ml. per liter ½ hr.
  - Ml. per liter 1 hr.
  - Ml. per liter 2 hrs.

Coliform Bacteria M.P.N.

March 22, 1954

Mr. F. Wellington Gilcreas
Assistant Director
Division of Laboratories and Research
New Scotland Avenue
Albany, New York

Re: Ground Water Pollution due to discharge of untreated industrial wastes in ground by Preferred Metals Company

Dear Mr. Gilcreas:

Three chemical sample bottles sent to you on March 17, 1954 are to be tested for hexavalent chromium. Previous samples taken from the same locations last September were sent to your laboratory for analysis. Two samples showed a high concentration of hexavalent chromium. Since that time the distinctive yellow color has disappeared from one of these well locations.

We are interested in finding out the present degree of contamination in the ground water underlying three locations. The samples were taken from the well of the Preferred Metals Company, the Lenkeit Tool Company and the Daisy Jones School of Aeronautics Inc. At present, all three concerns are using bottled water. The Preferred Metals Company, whose waste products has caused the contamination, has made some effort, pending the installation of a waste treatment system, to reduce pollution by removing the more concentrated solutions from the area.

Very truly yours,

Max B. Baxter, M. D.,
Deputy Commissioner

By: John P. Mahoney,
Sanitary Engineer

JPM:L

Cover letter

June 3, 1955

Mr. F. Wellington Gilcreas
Director
Division of Laboratories and Research
New Scotland Avenue
Albany, New York

Re: Ground Water Pollution due to discharge of untreated chromic acid wash waters into ground waters

Dear Mr. Gilcreas:

The samples taken from the wells of the Preferred Metals Company and Isenheit Tool Company are to be tested for the presence of hexavalent chromium. I refer to past communications on the ground water pollution due to the industrial operations of the Preferred Metals Company for background.

The present disposal system consists of a series of cesspools into which the chromic acid wash waters are dumped untreated. These cesspools have been removed approximately 100' due west of the location previously used for disposal. EAST

The wells have now cleared up to the point where visual evidence of contamination is absent.

Very truly yours,

J. P. Decker, M. D.,
Deputy Commissioner

By: John P. Mahoney,
District Engineer

JPM:ML

LAW OFFICES
OSCAR MUROV
272 SOUTH WELLWOOD AVENUE
LINDENHURST, NEW YORK

OSCAR MUROV

EDWARD R. PHILLIPS
JOSEPH P. PFINGST

TELEPHONE:
LINDENHURST 5-2400

October 24th, 1955

Suffolk County Department of Health
246 Griffing Avenue
Riverhead, New York

Re: Town of Babylon vs. Violators of Building Zone Ord. causing polution of underground waters - #6206

Attention: Mr. H. W. Davids, P.E.,
Director of Environmental Sanitation

Dear Mr. Davids:

I have been alerted by Mr. S. Lester Brown, Building Inspector of the Town of Babylon, with respect to the fact that Preferred Manufacturing Company at Allen Boulevard, North Amityville, New York, has failed to complete the installation of the sanitary system which would eliminate the polution of the underground waters in the township.

This morning Mr. Brown and his assistant, Mr. Harry Weisgerber, visited and discussed the matter with the Owner who promised to immediately enter upon the installation of the sanitary system, which plans he advised have been approved by your office.

After a conference I was directed to serve notice upon Preferred Manufacturing Company that unless they entered upon the installation of the sanitary system within the next 48 hours and unless they show proof by contracts that they have engaged other concerns to undertake such work within said 48 hours that we shall be obliged to proceed against them immediately for violation of the Town Ordinance.

Our notice to Preferred Manufacturing Company will also indicate that not only must they immediately undertake the installation of the sanitary system but the same must be completed within 30 days.

I am giving you notice of these facts so that our Town officials can work along with you in eliminating the polution problem in our township. Also I would appreciate your advising me as to the type of system being installed by Preferred Manufacturing and whether or not the same meets with your approval.

I would appreciate your also advising me as to whether [illegible]

satisfactorily.

I trust you will give this matter your immediate attention and let me hear from you at the earliest possible time.

Very truly yours,

OM/amr

CC/ S. Lester Brown, Esq.

CC/ Hon. Donald E. Muncy,
Supervisor

Mr. D[illegible]

October 27, 1955

Mr. Wallace W. Sanderson
Assistant Director
Division of Laboratories and Research
New York State Department of Health
New Scotland Avenue
Albany, New York

Re: Ground water pollution due to discharge of untreated chromic acid in wash waters on to ground surface

Dear Mr. [illegible]:

The chemical sample sent to the laboratories on October 26, 1955 from the Preferred Metals Company is to be tested for the presence of hexavalent chromium. I refer to past communications on ground water pollution due to industrial operations of the Preferred Metals Company for background. The last chemical sample sent to your office was dated June 3, 1955.

The present disposal system consists of a cesspool used as a holding tank and treatment chamber with the discharge line emptying on the ground surface approximately [illegible]00' due east of the location previously used for disposal. In the area where the previous location had been used for disposal, well samples taken from 3 [illegible] showed hexavalent chromium to be present in the water supply with a concentration of 4.8 P. P. M. Since the relocation of the disposal system, these wells have cleared up.

Presently the industrial waste effluent is supposedly treated in the cesspool-holding tank-treatment chamber by the batch method with ferrous iron sulfate and lime. The present sample was [illegible] the pool of water which was the remains of the previous [illegible]. The treated effluent is discharged on the ground and allowed to seep in the soil and thence into the ground water.

We are interested in the [illegible] of the present treatment. We believe that it is [illegible] and that the [illegible] of any sign of [illegible] in the [illegible] wells is caused only by the removal of the [illegible]. Therefore, it [illegible] that [illegible], in the [illegible] [illegible] in the area [illegible] plant [illegible].

[illegible]

[illegible]

March 31, 1960

Headquarters, First United States Army
Governors Island
New York 4, New York

Attention: [illegible] J. Flynn, Acting Chief, Claims & Litigation Division

Re: Preformed [illegible] [illegible]
[illegible]

Gentlemen:

Your letter of [illegible] 15, 1960, addressed to the attention of Mr. John M. Flynn, has been [illegible] to this office. In this letter, you requested information regarding [illegible] in Farmingdale, N. Y. Reference was also made to a letter [illegible] to this Department on November 9, 1959, which unfortunately had not been received.

In [illegible] of the questions [illegible] in your original letter of November 9, 1959, the following is [illegible]:

1. [illegible] the [illegible] State [illegible] Department until [illegible] 4, 1958. The [illegible] plans [illegible] the installation of:

   (a) [illegible] for the recovery of chromic acid. [illegible] ion exchange rinse waters would be [illegible] and alkaline from the rinsing [illegible] in lime neutralization.

   (b) [illegible] by means of alkaline chlorination. [illegible]

   (c) [illegible]

[illegible]

[illegible] 4, 1958:

It was found that untreated wastes were still being discharged into ground waters. Additional inspections made in the month of February and sampling of the waste discharged from the plant showed that leaching pit #1 contained cadmium, 5.4 ppm; hexavalent chromium, 0.01 ppm; total chromium, 0.35 ppm; copper, 0.60 ppm; zinc, 2.2 ppm; and a pH of 3.6. From leaching pit #2: cadmium, 0.38 ppm; hexavalent chromium, 1.44 ppm; total chromium, 2.4 ppm; copper, 0.70 ppm; nickel, 0.10 ppm; zinc, 0.50 ppm; and a pH of 10. From leaching pit #3: cadmium, 2.6 ppm; hexavalent chromium, 0.01 ppm; total chromium, 1.75 ppm; copper; 0.53 ppm; zinc, 16.0 ppm; cyanide, 2.2 ppm; and a pH of 3.9.

April 3, 1958:

An informal hearing was held at Riverhead. Mr. Young promised to complete installation of treatment facilities by May 5, 1958.

Inspections were made in June, July, and September. The treatment facilities for the cyanide waste were still not in operation. The [illegible] for the treatment of chromic [illegible] waste was in operation. Mr. Young, during the time of construction, had [illegible] a tank truck so that the cyanide wastes could be transported to the Town Dump for disposal.

[illegible] 3, 1958 [illegible] 1958:

Mr. Young stated that he had two months left in completing the chlorinator installation. An inspection in the latter part of October showed that the installation still had not been made. An attempt was then made to file an information against Preferred Manufacturing Company. However, upon consulting with the District Attorney's Office, it was their recommendation that a stronger case was needed. This Department then [illegible] [illegible] of the Town of Babylon to determine their position regarding Preferred Mfg. Company. It seemed that the Building Dept., Town of Babylon, was in a [illegible] position to carry out legal action against Preferred Mfg. Company. The Town of Babylon indicated its intent to carry out such action. However, no further information was received by this Department.

[illegible] 1959:

An inspection [illegible] at Preferred Mfg. Company Plating Plant [illegible] [illegible] of [illegible] collected. Hexavalent chromium was found [illegible] as high as 24 ppm which leads to [illegible] recirculation of the [illegible] [illegible] still not [illegible] originally [illegible] [illegible] [illegible] [illegible] [illegible].

[illegible]:

[illegible]

We hope that the above information answers the questions you had and gives you a good idea of the history of this problem.

If there is any other information we can supply, please feel free to contact this office.

Very truly yours,

Aldo Andreoli
District Engineer

AA:gk

cc: Mr. John M. Hill

September 22, 1960

Colonel Robert J. O'Connor
Chief, Litigation Division
Office of The Judge Advocate General
Department of the Army
Washington 25, D. C.

Dear Colonel O'Connor:

We have examined the copy you sent us of the file on your [illegible] claim against Preferred [illegible] Company for [illegible] of the [illegible] supply at NIKE Site [illegible], [illegible]ville, Long Island, New York. Your reference is [illegible]-T.

[illegible] opinion is that there is [illegible] of [illegible] against [illegible]. We do, therefore, [illegible] in [illegible] the offer in compromise and filing a [illegible] against the company.

Before we make a final decision, however, we need additional information.

1. [illegible] effects of [illegible].

In your report of investigation dated August 27, 1958, it is [illegible] page 2:

> [illegible] little is known of the results to the human body [illegible] with [illegible] the [illegible] in [illegible] the subject, it is [illegible] for [illegible] * * *. [illegible]]

[illegible], [illegible] give [illegible]

[illegible]

Department of Health. We thus deduce that the contaminated water had not made any of the personnel ill and that it was not aesthetically objectionable as to taste or color.

In Exhibit U, it is said in paragraph 1 that the United States Public Health Standards states that 0.05 ppm of chromium is cause for rejection of a water supply. Will you give us the source and citation of this standard, or any other pertinent information about it and its basis. In the same paragraph, it is said that "no permissible limit has been established for cadmium; however, it is considered to be toxic as hexavalent chromium." Will you also tell us specifically by whom it is so considered.

We would be interested in anything specific on the seriousness of the hazard here that might be used in the complaint and presentation of evidence to establish that abandonment of the well and connection to another water supply were necessary or at least eminently reasonable. We are somewhat chary of using in the complaint such language as "unfit for human consumption," "polluted," and "contaminated," as they arguably are either (1) meaningless so far as stating a cause of action is concerned or (2) conclusions rather than facts.

2. Re "Survey of Industrial Wastes" (Exhibit R)

The survey on page 2 notes that the industrial wastes in the Township of Babylon are significant "due to the physical characteristics of the sub-soils, velocities, and movement of the ground water."

We wonder whether this means that these factors are [illegible] to the extent that Preferred, for one, would not have been reasonably expected to know that the wastes it discharged would end up in the Army well, at least initially. If so, at what time, specifically, was Preferred put on notice (about the direction of the movement of the ground water, for example) as to the likelihood of contamination?

In connection with this, is the movement of the underground water in the direction of the Army well really significant? In other words, was Preferred apprised of the underground conditions in time to have prevented the pollution?

[illegible]

November 10, 1960

Headquarters Fort Totten
Flushing 59, L.I.
New York

Re: Preferred Manufacturing Company
Town of Babylon - Suffolk County

ATTENTION: Edward S. [illegible], Jr.
1st Lt, JAGC
Asst Post Judge Advocate

Gentlemen:

Reference was made to your letter of October 19, 1960 which requested answers to eight questions concerning the activities of Preferred Manufacturing Company, Allan Boulevard, Farmingdale, New York.

The information furnished has been numbered to correspond with the questions of your October 19 letter.

I. Samples collected from the well at the Army Nike Site, NY-24C, East Farmingdale, on January 2?, 1958 by this Department showed the presence of 0.60 ppm. of hexavalent chromium. The Public Health Service Drinking Water Standards set a limit of 0.05 ppm. of hexavalent chromium. If in excess of the 0.05 p.p.m. amount, this would constitute grounds for [illegible] of the supply. rejection

II. Reference was made to "Survey of Industrial Wastes, Town of Babylon, Suffolk County, Suffolk County Department of Health", prepared by Flynn and [illegible]. The survey [illegible] states that due to the physical characteristics of the subsoil [illegible] movement of the ground waters, waste, in [illegible] significant. It has been shown in [illegible] of Liberty Aircraft, [illegible], that waste travel in [illegible] the interior [illegible] out the [illegible] [illegible].

Mr. Young was notified on July 17, 1953 to appear before the Commissioner of Health of Suffolk County on July 23, 1953. At the meeting he was notified that samples collected by this Department analyzed by the New York State Department of Health from the well of Lenkert Company, approximately 150' S/E of the industrial waste leaching pools of Preferred Manufacturing Company, and the well of the Preferred Manufacturing Company, approximately 70' S/o their industrial leaching pits, showed the presence of 8.0 ppm. and 0.8 ppm. of hexavalent chromium perspectively.

Mr. Young was asked that as a former Director of the Plating Department at Liberty Aircraft, Farmingdale, was he aware that pollution of ground water from the waste of the Plating Department is of the same type of waste as is now being discharged from his plant and that such waste can be treated?

The neighboring well, which was contaminated in 1953 was abandoned. A new well was extended to a deeper strata which had not been contaminated by industrial discharges. During the construction of a new well, bottled water was being used.

III. The wash waters from various processes at Preferred Manufacturing were being discharged to self-service leaching pits.

IV. The Army well is located to the S/o the Preferred Manufacturing Company's industrial leaching pools. In this area, the ground waters flow in a southerly direction. References also made to "Survey of Industrial Wastes, Town of Babylon, Suffolk County Department of Health", prepared by Myers and Antonelli, page 2, paragraphs number 1, 2 and 3.

V. Preferred does have wells on its property for drinking purposes. In 1953, samples collected from this well showed the presence of hexavalent chromium in excess of the United States Public Health Drinking Standards. The well was deepened at that time to an uncontaminated strata, however, the well had to be relocated and deepened a number of times since, due to the intrusion of industrial wastes.

VI.

VII.

[illegible]
OFFICE OF THE POST [illegible]
Fort Totten, Flushing 59, L. I., New York

October 19, 19[illegible]0

Suffolk County Department of Health
Bay Shore Office
8 East Main Street
Bay Shore, L. I., New York

[illegible]:

Re: [illegible] Company
[illegible] - Suffolk County

[illegible] to the [illegible] you have [illegible] the activities of the [illegible], New York, which [illegible] the well [illegible] - 240 which is [illegible] Manufacturing [illegible].

The Department of Justice is [illegible] the filing of a legal [illegible] for pollution of the well [illegible]. [illegible] the local [illegible] to the [illegible] can be made, [illegible] of [illegible]. It would be appreciated if you [illegible] the following information and/or [illegible]:

1. [illegible] be [illegible] in anything [illegible] in the [illegible].

2. [illegible] of [illegible] Town of [illegible]

the ground water wastes". Does this mean that these factors are unusual to the extent that Preferred, for one, would not have been reasonably expected to know that the wastes it discharged would contaminate the Army well, at least initially? If so, at what time, specifically, was Preferred put on notice (about the direction of the movement of the ground water, for example) as to the likelihood of contamination?

In connection with this, is the movement of the underground water in the direction of the Army well really significant? In other words, was Preferred apprised of the underground conditions in time to have prevented the pollution?

It is noted that contamination by Preferred, according to the Survey, was [illegible] as early as 19[illegible]. The Army well contamination was [illegible] in 195[illegible] - [illegible] years later. If this pollution was of such a nature that Preferred knew or should have known that the Army well would probably be [illegible], why [illegible] the local health officials, for instance, [illegible] inform the Army of the possible dangers so that tests of the Army [illegible] could have been made before 195[illegible]?

The Survey states that the contamination first [illegible] to a well [illegible] a neighboring plant to the east of Preferred". ([illegible] supplied) Is this reconcilable with the statement that the underground [illegible] moves in a southerly direction? And was that well [illegible]? If so, how did the plant obtain a new water supply?

What is the date of the Survey?

3. [illegible] did the wastes discharged by Preferred enter the ground [illegible]?

4. As Preferred discharged its wastes into a below-the-surface [illegible], is its [illegible] in relation to the Army well properly significant? In other words, is there agreement among experts that [illegible] to conform to the surface [illegible]?

5. [illegible] which water [illegible] the [illegible]?

6. [illegible] supply? [illegible]

December 16, 1960

Headquarters Fort Totten
Office of the Post Judge Advocate
Fort Totten
Flushing 59, L.I., New York

To: Preferred [illegible] Company
[illegible], Suffolk County

Gentlemen:

[illegible] 19, 1960, from [illegible] [illegible], Jr., Assistant [illegible] Judge Advocate, regarding [illegible] [illegible].

The following information is supplied as requested [illegible]. [illegible] the following [illegible] paragraphs [illegible] [illegible] letter referred to above:

1. The specific hazard presented by the [illegible] of 0.10 ppm of [illegible] chromium in a drinking water supply can be [illegible]: The U.S. Public Health Service Drinking Water Standards [illegible] [illegible] the [illegible] Federal Register (February 6, [illegible]). [illegible] in part as follows: "[illegible] in excess of 0.05 parts per million (ppm) shall [illegible] supply". It should be noted [illegible] in the U.S. [illegible] [illegible] supply.

[illegible]

[illegible] condition [illegible] and has been [illegible] in this state [illegible] by [illegible] chemicals. This particular point is not believed [illegible] Preferred Manufacturing Co. ([illegible] Young) was [illegible] filing an application with satisfactory plans [illegible] and disposal of its industrial [illegible] discharge [illegible] Mr. Young was so instructed at an informal hearing at [illegible] office on July 23, 1953.

It should be noted that at the time of this hearing, Mr. [illegible] stated that he was formerly in charge of the plating [illegible] Corporation located in Farmingdale, Nassau County [illegible] was granted. [illegible] Aircraft Corp., along with [illegible] in Suffolk and Nassau Counties [illegible] from the New York State Health Department. [illegible] in his own [illegible] (Preferred Manufacturing Co. [illegible]). The writer is familiar with this [illegible] since I was with the Nassau County Department of Health from 1945 to [illegible] this problem of hexavalent chromium was first uncovered in Suffolk and Nassau Counties' water supplies.

In relation to the other plant with a chromium contaminated well, this plant is located east of the Preferred Manufacturing Co. site. This plant's well was located approximately 150 feet south-east of the industrial waste leaching pool system of Preferred. This well was found to be contaminated by chromium in 1953 and was abandoned. A new, relocated, deeper well was then installed. It is believed that the basic point here is that Preferred Manufacturing Co. knowingly and wrongfully started discharging an industrial waste effluent into the ground waters of the State of New York without a valid permit from the State Commissioner of Health and the New York State Water Pollution Control Board, as required by the Public Health Law of New York State. Whether or not he knew ahead of time that he would contaminate the wells of the Army Nike Site, or any other wells in the vicinity, is considered irrelevant since all the ground waters of the County, or for that matter all of the State of New York, are potential sources of water supply. Therefore, no discharge is permitted (legally) without a valid permit issued for such discharge.

[illegible]

[illegible] ... this equipment was ... Nike Site ... Pollution ... [illegible]

3. [illegible] ... principally of sand and gravel formations ... Once the wastes reach the ground water, it is well established ... technical reports, that these wastes will diffuse in the ground water ... extent and will travel in a relatively concentrated slug along with the ground water as it moves horizontally at a velocity of a few feet per day. This results in a "ribbon" of contaminated ground water travelling in the direction of the ground water flow. In this area, generally north to south.

4. It is significant that the Nike Site well was located in a general southerly direction from the Preferred Manufacturing Company's recharge pits receiving its industrial wastes. The direction of the ground water flow in this general area of Long Island has been established to be in a south-southeasterly direction (almost due south).

5. The Preferred Manufacturing Co. does have a water supply well on its property. In 1953 samples collected from their well showed the presence of hexavalent chromium in excess of the 0.05 ppm limit. The well was ... connected to an uncontaminated water-bearing stratum. This well ... a number of times due to the presence of ... [illegible]

6. It is physically possible that the contaminants from the Army water supply could be removed by special water treatment processes, however, it is our opinion that this would not be an economic enterprise. Also, the difficulties of operating and maintaining such a special water treatment facility at an Army Nike Base would present many problems of insuring a safe and adequate water supply at all times for Army personnel. Furthermore, there are no public or private water supplies that we know of in New York State treating their water supply [illegible] to remove hexavalent chromium.

The precedent was established in 1947 when the [illegible], [illegible] County public water supply well was found to contain hexavalent chromium. The [illegible] District [illegible] using the well. [illegible] wells were drilled at another [illegible] public water supply district.

7. It has [illegible] by surveys and inspections made by this department that [illegible] Allen Boulevard, East [illegible], Town of [illegible], had [illegible] treatment operations, [illegible] concentration of hexavalent [illegible] found in the Army Nike [illegible] by the [illegible] direction of the ground [illegible].

8. Mr. John [illegible], [illegible] of [illegible] Co., is believed to be qualified in the field of [illegible] of [illegible] following federal specifications. [illegible] work on a sub-contract basis for the [illegible] in the area who are prime contractors for Army, Navy and [illegible]. Furthermore, Mr. [illegible] the [illegible] from the State Health Department.

[illegible] that this [illegible] in this [illegible], please [illegible] call on us.

[illegible]

[illegible]

[illegible]

Lab. No.: 1506
Field No.: SCC 404
Date: 6/22/66
Time:
by: Robert C. Hoffman

Date Rec'd. in Lab.
Beach
Stream
Sewage
Other Ind Waste
Routine
Resample
Special

U: 50 3M-4/61

SUFFOLK COUNTY DEPARTMENT OF HEALTH

Bacteriological and Chemical Examination of Beaches, Streams and Sewage

Premises: PREFERRED METALS   Owner or District:

Location: EAST FARMINGDALE

BEACH OR STREAM SAMPLE DATA	SEWAGE PLANT SAMPLE DATA
Weather (circle): Fair cloudy rain	Point of collection:
Weather prev. 24 hrs.: Fair cloudy rain	Holding time before dechlorination:
Depth of water at point of collection:	Chlorine resid. *OT: OT + A: A + OT:
Depth below surface bottle submerged:	*Explain action taken if residual below 0.5 mg/L
Indicate by X where, along beach, sample taken:	Rate of flow: (MGD)

Other sample, or remarks: TEST FOR, IRON HEXAVALENT CHROMIUM TOTAL CHROME CROMIUM, pH. SAMPLE FROM PIT INSIDE BUILDING.

Bacteriological Exam. ☐ Confirm ☐ 36°C. Count ☐   Special Examination ☑

Dilutions: 10; 1.0; 1/10; 1/C; 1/M; 1/10M; 1/CM; 1/MM   D. O. ☐ B. O. D. ☐ S. S. ☐ ☐

BACTERIOLOGICAL EXAMINATION

Lab. No.:   Date Exam.:

Bacteria per ml.: Agar 36 C.–24 Hours:

pH 3.2

+	−	+	−	+	−	+	−	MPN/100 ml.
+	−	+	−	+	−	+	−	

Agar Count 37°C. 24 Hrs.	Vol. Ml.	Percent Gas Lactose Broth 24 Hrs. 48 Hrs.	Lact. Broth to Brill. Bile Green 24 Hrs. 48 Hrs.	Vol. Ml.	Percent Gas Lactose Broth 24 Hrs. 48 Hrs.	Lact. Broth to Brill. Bile Green 24 Hrs. 48 Hrs.

B. O. D. 5 DAY   mg/L

	Dil. Water	Sample			
Bottle No.				[illegible]	[illegible]
Vol. of Bottle	TOTAL IRON			[illegible]	[illegible]
Vol. of Sample Used					
% Conc. of Sample	[illegible]				[illegible]
Initial Titre ml.					
	TOTAL CHROMIUM				[illegible]
TITRE					
Initial D. O. mg/L	CR [illegible]				[illegible]
Final Titre ml.					
TITRE	[illegible]				[illegible]
Final D. O. — mg/L	[illegible]				[illegible]
Depletion	[illegible]				[illegible]

	TOTAL SOLIDS	mg/L	SUSPENDED SOLIDS	mg/L	Dissolved Solids mg/L
Ml. Sample					
TS Dish					
Dish					
Total					
TS Dish					
SS Dish					
Titre					

PUBLIC WATER
PRIVATE WATER
OTHER
DATE COMPLETED
EXAMINED BY

(NAME, NOT INITIALS)

SUFFOLK COUNTY DEPARTMENT OF HEALTH
Smithtown, N. Y.

CHEMICAL EXAMINATIONS OF WATER, SEWAGE, INDUSTRIAL WASTES

NAME Preferred Mfg Co. OWNER or DISTRICT

LOCATION 32 Allen Blvd. Farmingdale

WATER SUPPLY DATA

POINT of COLLECTION Open Pit S. South

CHLORINE RESIDUAL OT OT + A A + OT

REMARKS:

[ ] COMPLETE [✓] PARTIAL [ ] ROUTINE [ ] RE-SAMPLE [ ] SPECIAL

TEST	RESULT	TEST	RESULT	TEST	RESULT
Free Ammonia (mg/l N)		T. Hardness (mg/l $CaCO_3$)		B.O.D. (mg/l)	
Alb Ammonia (mg/l N)		T. Alkalinity (mg/l $CaCO_3$)		Iron (mg/l Fe)	1.0
Nitrites (mg/l N)		P. Alkalinity (mg/l $CaCO_3$)		Manganese (mg/l Mn)	1.7
Nitrates (mg/l N)	104	Free CO_2 (Nomograph)		Copper (mg/l Cu)	0.29
MBAS (mg/l)		T. Solids (mg/l)		Zinc (mg/l Zn)	0.9
pH	7.2	D. Solids (mg/l)		Cr^{6+} (mg/l)	5.0
C.O.D. (mg/l)		S. Solids (mg/l)		Cyanide (mg/l CN)	
T. PO_4 (mg/l)		Chlorides (mg/l Cl)		Fluoride (mg/l F)	
Dissolved O_2 (mg/l)		Spec. Cond. (mhos)		[illegible]	*
		Nickel (mg/l Ni)	0.17	Silver (mg/l Ag)	
		Cadmium (mg/l Cd)	0.07		
		T. [illegible]	*		

APPLICATION FOR WASTE DISPOSAL PERMIT

PRELIMINARY ENGINEERING REPORT

PART I

SUBMITTED TO

THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONTROL

BY

PREFERRED PLATING CORPORATION

32 ALLEN BOULEVARD

FARMINGDALE, NEW YORK 11735

PREPARED BY

DONNELLY ENGINEERING COMPANY

425 NEW YORK AVENUE

HUNTINGTON, NEW YORK 11743

MAY 1974

CORPORATE OFFICER John R. Fleming V.P.

L. A. Donnelly

LAWRENCE A. DONNELLY, P.E.

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A. Overall Project Summary

A1. General Description

Preferred Plating Corporation has the facilities to chemically treat metal parts for the purpose of increasing corrosion resistance, provide a cohesive base for painting and improve appearance. The plant is typical of a small metal surface finishing shop. Metal parts are received and immersed in various chemical solutions. Wastewater is produced by rinsing the parts between each treatment bath.

The factory employs 12 personnel on a single shift, 5 day week. Figure 2 shows the factory floor plan. It can be seen that the plant consists of materiel inspection and shipping, storage, metal finishing and office areas.

This report addresses itself to the reduction of wastewater quantity, which will be stored for later removal by an approved scavenger; and the disposal of an existing quantity of wastewater which had been stored in the past from processes no longer in use at Preferred Plating Corporation.

A2. Identification of Pollutants

The pollutants in the wastewater of Preferred Plating Corporation are typical of a metal surface finishing shop.

The following is a list of treatment baths used for metal parts.

Alodine
Phosphate
Hydrochloric Acid
Alkaline Cleaner
Periodic Reverse Plating
Dichromate
Caustic
Nitric Acid
Non-Etch Cleaner
Sulfuric Acid
Chromic Acid
Black Dye

Their concentrations can be found in Table 1, Section B2. The chosen method for wastewater disposal is storage and hauling. The nature and concentrations of the pollutants are therefore relevant only to carting costs.

A3. Classification of Receiving Waters

Preferred Plating Corporation is located 1800 feet North of the 42° 30' latitude line and 1200 feet West of the 73° 25' longitude line as shown on the Amityville, New York Quadrangle Map.

The surrounding area consists of industrial and commercial properties. Allen Boulevard passes on the Southern boundary, in front of the factory, which is about 300 feet East of Broad Hollow Road, Property elevation is 55 feet above sea level. Leaching pool disposal of raw sewage is customary in this area. The receiving ground waters are classified as CA. A portion of the USGS Topographical Quadrangle is presented in Figure 1.

Factory process water is pumped from a well on the factory site. The well depth is approximately 80 feet and has a pumping capacity of approximately 15 gpm. Bottled drinking water is used at the plant.

A4. Requirements for Waste Treatment

The domestic waste from this factory is from toilets, wash basins and drinking fountains. There is no cafeteria or other source of kitchen waste. The domestic sewage may pass directly to the sanitary leaching pools for subsurface sewage disposal.

The industrial waste consists of rinse water from the sulfuric acid running rinse, 12 stagnant rinses, and steam condensate line. It is proposed to store and haul all wastes except the steam condensate which can be sent directly to the leaching pool.

A5. General Plans for Pollution Abatement

Waste water flow is currently at a minimum for this installation. The overall plan for pollution abatement is to store all wastewater for subsequent removal by an approved scavenger.

All rinse water lines, running and stagnant, will be plumbed to the holding pits behind the factory, (see Figure 2), for later removal by a scavenger. The steam condensate line will be separated from the sulfuric acid rinse line and condensate will be drained to the leaching pools. All other drains will be located and closed to prevent accidental discharge of objectionable waste to the leaching pools.

A6. Process Schematic and Hydraulic Profile

The plan view of the metals surface finishing room is presented in Figure 3. This drawing shows the location of all process tanks. Also shown are the wastewater drains.

Figure 4 is the hydraulic profile of the wastewater drainage system from the sulfuric acid rinse tank. The layout of the water collection system is shown delivering wastewater to the pits located behind the factory building. As can be seen, the transfer of wastewater to the pits and leaching pools is accomplished by gravity flow. With the stagnant rinse tanks changed monthly, total water consumption will be 4025 gallons per month. With the incorporation of a double stagnant rinse system, the total can be cut to 2050 gallons per month.

Under the current rinsing system, the one running rinse produces 1300 gallons per month while the 9 stagnant rinses are producing 2725 gallons per month. Introduction of double stagnant rinses would reduce the 2725 figure to 779 gallons per month.

B. Plant and Process Description

B1. Factory Plot

Figure 2 is a drawing of the Preferred Plating Corporation property. It shows the plant layout, leaching pool locations, and location of wastewater holding pits.

B2. Description of Factory Wet Process

Metal parts are received at the plant. They are degreased in a solvent degreaser and then chemically cleaned in one of 3 cleaning processes. The parts then receive the proper chemical finishing to provide increased corrosion protection, a base for paint or improved appearance. The following is a list of the factory wet processes and their tank sequences (Tank numbers refer to Table 1; see also Figure 3).

Cleaning

A) Etch cleaning
15, 16, 17, 18

B) Non-Etch cleaning (for close tolerance material)
21, 22

C) Alkaline Cleaner
9, 8

Surface Finishing

D) Chromic Anodize
A or B, 26, 27, 1

E) Sulfuric Anodize
A or B, 23, 24, 1

F) Chromate Conversion (Alodine)
A or B, 3, 2, 1

C) Black Dye
29, 30, 1

H) Stainless Steel Passivate
C, 10, 8, 7, 6, 11

I) Phosphate Coating
C, 10, 8, 7, 6, 32, 5, 4

B2. Description of Factory Wet Process (cont'd.)

Metal parts entering the plant will go through any one of the following groups of processes.

Aluminum

1)	D
2)	E
3)	F
4)	D, F
5)	E, F
6)	E, G

Steel

1)	H
2)	I

B2. Description of Factory Wet Process (cont'd.)

Table 1 - Tank Identification

1)	Stagnant hot water rinse		243 gal
2)	Stagnant rinse (for Tank #3)		81 gal
3)	Chromate Conversion Coating		140 gal
	Alodine 1200 (Amchem Chem Co.)		
	CrO_3	2515 mg/liter	
	$Fe(CN)_3$	1440 mg/liter	
	Complex Fluoride Salts	3235 mg/liter	
4)	Stagnant rinse (for Tank #5)		382 gal
5)	Phosphate Coating		344 gal
	Parco Compound (Hooker Chem.Parker Div.)	54,000 mg/liter	
6)	Stagnant rinse (for Tank #7)		155 gal
7)	HCl	213,000 mg/liter	355 gal
8)	Stagnant rinse (for Tanks #9 and #10)		54 gal
9)	Alkaline Cleaner		400 gal
	Udylite Oxy Prep(Hooker Chem.-Udylite Div.)	90,000 mg/liter	
10)	Periodic Reverse Plating	60,000 mg/liter	100 gal
11)	Passivate		60 gal
	HNO_3	513,000 mg/liter	
12)	DiChromate (for Al metal)		45 gal
	$Na_2Cr_2O_7$	39,600 mg/liter	
13)	DiChromate (for Mg metal)		165 gal
	$Na_2Cr_2O_7$	132,000 mg/liter	
	CaF_2 or MgF_2	2,630 mg/liter	
14)	Stagnant Rinse		110 gal
15)	Caustic Etch		560 gal
	Aluminux (Diversy Chem)	60,000 mg/liter	

B2. Description of Factory Wet Process (cont'd.)

Table 1 - Tank Identification(cont'd.)

16)	Stagnant rinse (for Tank #15)		573 gal
17)	HNO_3	513,000 mg/liter	260 gal
18)	Stagnant rinse (for Tank #17)		370 gal
19)	Chromate Conversion Coating		510 gal
	Alodine 1200 (Amchem Chem.Co.)		
	CrO_3	2,515 mg/liter	
	$Fe(CN)_3$	1,440 mg/liter	
	Complex Fluoride Salts	3,235 mg/liter	
20)	Stagnant rinse		450 gal
21)	Stagnant rinse (for Tank #22)		145 gal
22)	Non-Etch cleaner		80 gal
	Alkalyte (State Chemical Co.)	60,000 mg/liter	
23)	H_2SO_4	219,000 mg/liter	330 gal
24)	Two tank counter-current rinse -Flow rate 1 gpm		150 gal
25)	Chromate Conversion Coating		280 gal
	My Chrome Alchromate (Mitchel Briarford Co.)	11,250 mg/liter	
26)	Chromic Acid		1675 gal
	CrO_3	43,000 mg/liter	
	H_2SO_4	Negligible	
27)	Stagnant rinse (for Tank #26)		504 gal
28)	Degreaser		
29)	Black Dye	10,000 mg/liter	280 gal
30)	Stagnant rinse (for Tank #30)		306 gal
31)	HCl	213,000 mg/liter	55 gal
32)	Titanium Solution		
	Parkoline Z (Hooker Chem. Parker Div.)	1640 mg/liter	
	NaOH	490 mg/liter	
	H_3PO_4	490 mg/liter	
	Na_2CO_3	490 mg/liter	
	Ti^{+4}	170 mg/liter	

B3. Water Conservation Techniques

Preferred Plating is currently employing a good water conservation program. The one running rinse in the rinsing system is a counter-current rinse. Water in this rinse flows only when objects are being rinsed. All other rinses are stagnant rinses. Further water savings can be realized through the implementation of a double stagnant rinse system. This will increase the life of the rinse by a factory of 3.5. The quantity of water consumed by the stagnant rinse will be 28.6% of its current level.

C. Factory Operations

Preferred Plating Corporation is a metals surface finishing plant which consists of an inspection and shipping department, a storage area, an office and a metal finishing area. The only industrial liquid waste source is the metal surface treatment shop. The factory employs 12 personnel on a single shift, 5 day week.

Metal parts are received in the shipping area. They are then sent through one or more of the processes explained in Section B2. Since all articles to be processed come from outside sources, parts received have no set size and shape. Therefore, the dragout of parts varies from job to job and cannot be estimated. The surface treatment of parts accounts for all industrial wastewater produced.

Domestic waste is only from wash basins, toilets and drinking fountain. This waste is passed directly to the sanitary leaching pools. All industrial waste is currently being held.

D. Development of Design Criteria

D1. Comprehensive Waste Survey

The sources of waste are best represented by the composition of the concentrated process baths (See Section B2). These materials will appear in the wastewater only through rinsing of parts or discarding of spent baths. Since all wastewater will be held and hauled by an approved scavenger, dragout calculations become unnecessary.

As already stated, all wastes will be "held and hauled". It is proposed to store the wastewater in the pits located behind the factory (See Figure 2).

To prepare the pits to be used as storage tanks, the following must be accomplished:

1) Wastewater currently in the tanks will be treated and removed as described below.

2) Repairs to the pits will be made by grouting in all cracks.

3) Pits will then be coated with a bituminous epoxy to insure against leakage to the ground.

4) A wooden deck will be placed over the pits to improve safety and keep out rain water.

The pits that will be used to store the wastewater currently contain water contaminated with cyanide and chrome. The following treatments for these waters are proposed.

1) Cyanide Destruction - Tanks 1A, 1B and 1C

Cyanide will be completely destroyed by alkaline chlorination. The overall reaction for this proces is as follows:

$$2CN^- + 5OCl^- + 2OH^- \longrightarrow 2CO_3^{-2} + 5Cl^- + N_2\uparrow + H_2O$$

This reaction will take place in two steps. The first step occurs at a pH above 9 with a reaction time of 1/2 to 1 hour. The second takes place at a pH below 7.5 with a reaction time of 1/2 to 1 hour.

D1. Comprehensive Waste Survey (cont'd.)

2) Hexavalent Chrome - Tanks 1A, 1B, 1C, IIA, IIB and IIC

Hexavalent Chrome will be reduced to its trivalent state using sodium bisulphite with sulfuric acid

$$4CRO_3 + 6NaHSO_3 + 3H_2SO_4 \longrightarrow 3Na_2SO_4 + 2Cr_2(SO_4)_3 + 6H_2O$$

This reaction will proceed rapidly at a pH below 2.5.

The pH of all tanks will then be raised to $8<pH<9$ to precipitate all heavy metal hydroxides. After a prolonged settling period, the supernatant will be decanted and discharged to a nearby leaching pool. The remaining sludge will be hauled away by an approved scavenger.

Procedure for Pit Treatment

It is important to have good mixing of wastewater while treatment is taking place. This will be accomplished by discharging compressed air through a tee located near the bottom of the pit. The air bubbles will lift the water and start a rolling action in the pit, thereby promoting good mixing.

Pit #1 - CN Destruction

1) Raise pH above 9 by addition of 11.64 g NaOH for each 10 ft. of water depth.
2) Add 2.42 lbs. NaOCl and 1.3 lbs NaOH. Add NaOH slowly to maintain ph between 9 and 10.
3) Wait 1/2 to 1 hour for reaction to go to completion.
4) When reaction is complete, lower pH to 7.5 through addition of 27.7 g H_2SO_4 and add 3.63 lbs NaOCl.

Pit #1 - Cr^{+6} Reduction and Precipitation

1) After CN^- is destroyed, lower pH to 2.5 through the addition of 19.9 lbs of H_2SO_4.
2) Add 0.634 lbs of $NaHSO_3$.
3) Wait 1/2 to 1 hour for reaction to go to completion.
4) Raise pH to 8 through addition of 16.2 lbs NaOH to precipitate metal hydroxides.

D1. Comprehensive Waste Survey (cont'd.)

Pit #2 - Cr^{+6} Reduction and Precipitation

1) Lower pH to 2.5 by the addition of 19.6 lbs H_2SO_4.
2) Add 1.02 lbs of $NaHSO_3$ and 0.480 lbs of H_2SO_4.
3) Wait 1/2 to 1 hour for reaction to go to completion.
4) Raise pH to 8 through the addition of 16 lbs of NaOH to precipitate metal hydroxides.

Pits #3 and #4 - Metals Precipitation

The only contaminants in pits #3 and #4 may be heavy metals. The contents of the two pits will be mixed together and then treated to remove heavy metals.

Procedure:

1) Pump contents of pit #4 into pit #3.
2) Add 0.525 lbs NaOH to raise pH above 8.

Reaction times in all preceding reactions will increase with decreasing temperatures. Times stated are for reactions at 70°F.

D2. Economic Analysis

With the stagnant rinse water changed monthly, waste water accumulation at Preferred Plating is 4000 gal /month. Hauling costs are $0.12/gal.

Yearly cost for hauling = (4000 gal/month)(12 months/yr)($0.12/gal)
= $5760/year

With the installation of a double stagnant rinse waste accumulation will be 2000/gal/month.

Cost for additional Tanks = $5200 + installation costs

Amortizing this over a 10 year period at 10% interest

Yearly cost for new tanks = $P \frac{i(Hi)^n}{(Hi)^n-1}$ = ($5200)(.163) = $846

Yearly cost for hauling = (2000 gal/month)(12 months/yr)($0.12/gal)
= $2880

Total Yearly Cost = $2880 + $846 + installation
= $3726 + installation

Savings realized through use of double stagnant rinse system
= $5760 - $3726 = $2034

Treatment of pit waste versus hauling waste.

Total volume of pit waste equals 46,500 gallons.

Cost for hauling is $0.12 /gal

Total cost for hauling waste = (46,500 gal)($0.12/gal) = $5560

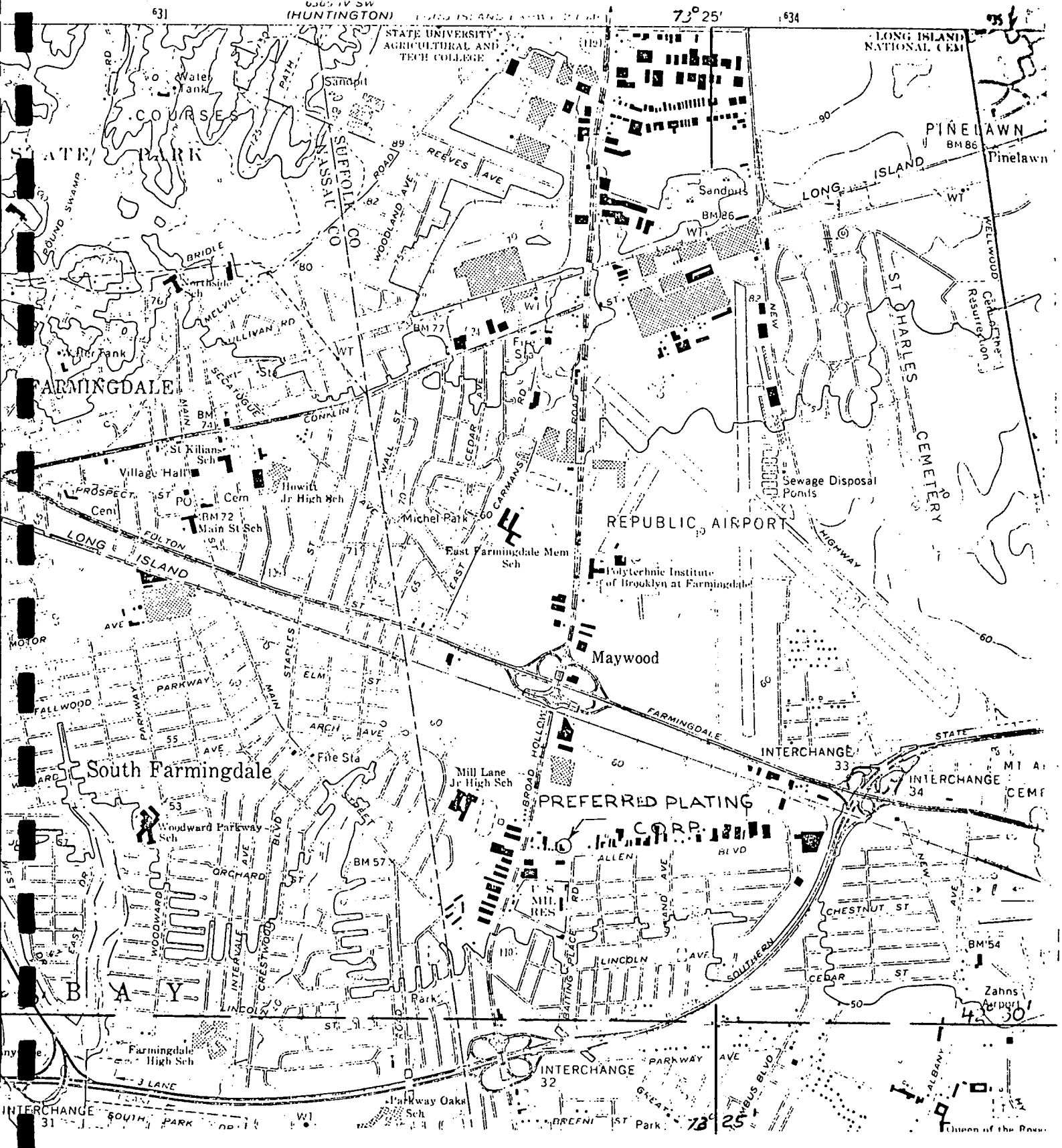
Cost for treatment of pit wastes.

Cost of Chemicals = $20

Estimated cost for labor to treat waste = $1000

Cost for sludge hauling (estimated at 10% of original volume)
= (.1)($5560) = $560

Total cost for treating pit wastewater = $1580



FROM:

AMITYVILLE QUADRANGLE
NEW YORK
7.5 MIN. SERIES (TOPOGRAPHIC)

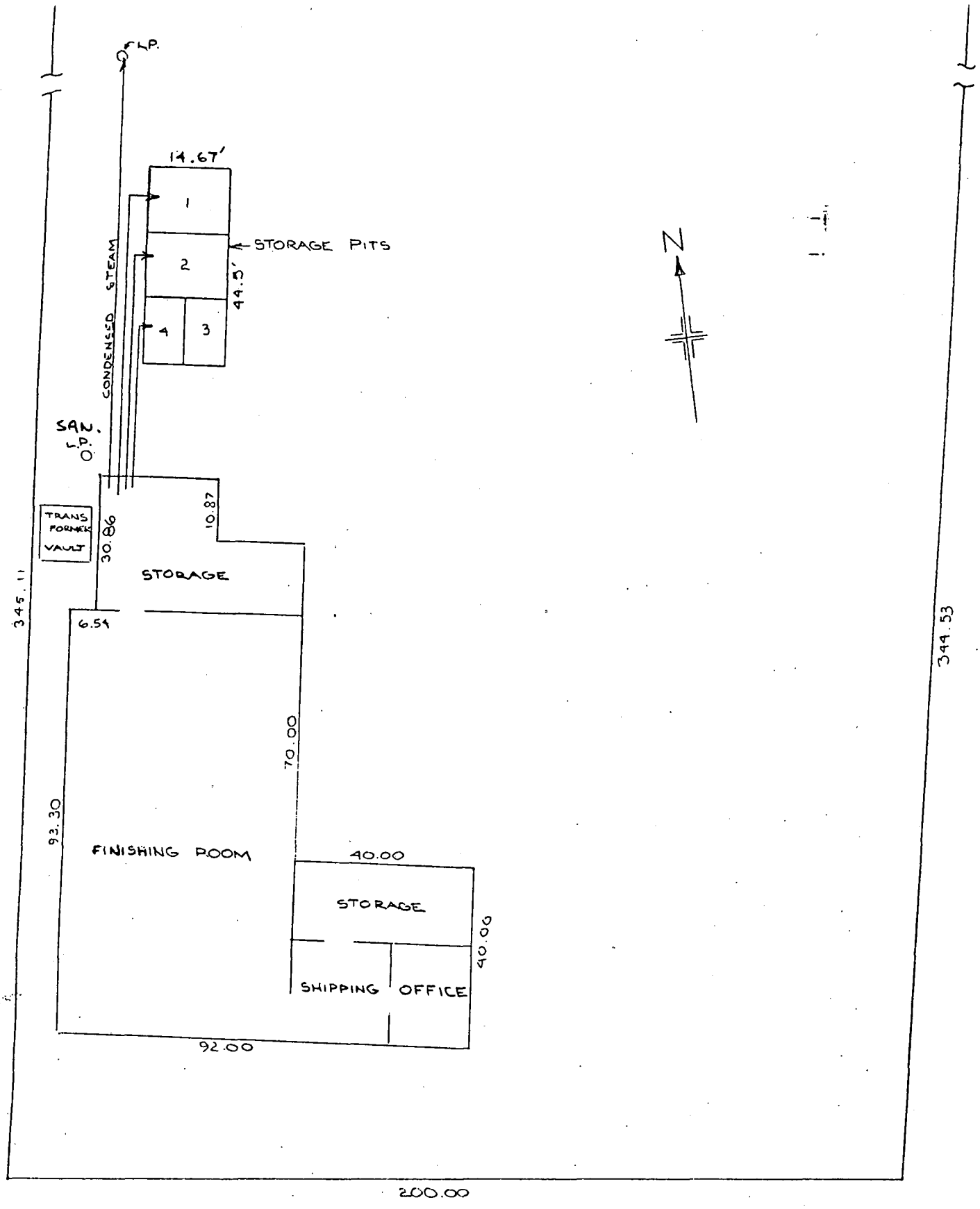
FOR:

PREFERRED PLATING CORP.

BY:

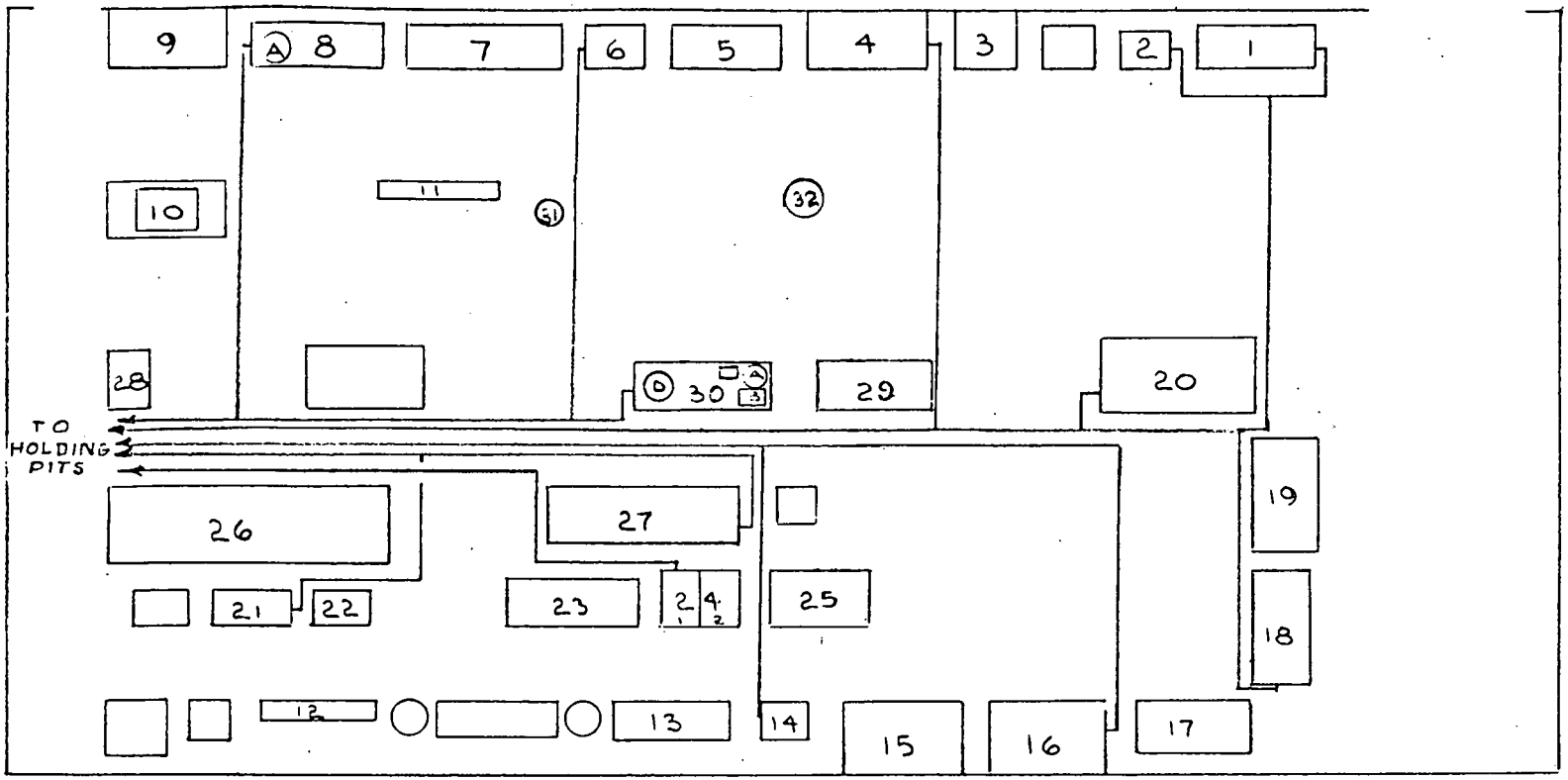
DONNELLY ENGINEERING CO.

DATE: DEC. 13, 1973
FIGURE # 1
SCALE: 1" = 2000'



REFERRED
PLATING INC.

BY:
DONNELLY
ENGINEERING CO.
DATE: 2/22/74
SCALE: 1" = 30'-0"
FIGURE # 2



N

FINISHING ROOM TANK LAYOUT SCHEMATIC

NOTE: TANKS NOT NUMBERED ARE NOT USED FOR ANY PROCESSING. SEE SECTION B2 TABLE 1 FOR TANK ID.

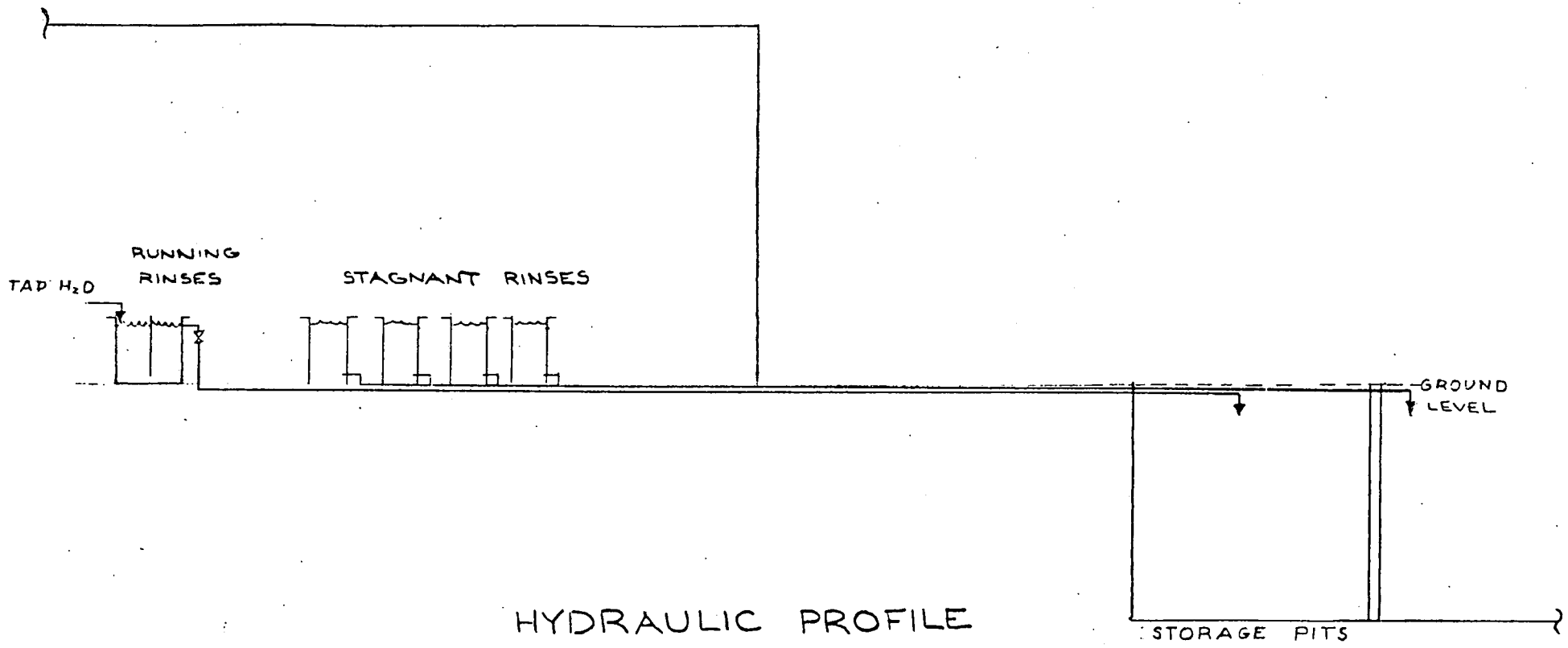
FOR:

PREFERRED PLATING INC.

BY:

DONNELLY ENGINEERING CO.

DATE: DEC. 13, 1973
DR BY: M. AVANZINI
SCALE: 1" = 10'
FIGURE # 3



HYDRAULIC PROFILE

FOR:
PREFERRED
PLATING INC.

BY:
DONNELLY
ENGINEERING CO.
DATE: 2/22/74
FIGURE # 4

John M. Flynn, P.E.
Commissioner

SUFFOLK COUNTY
DEPARTMENT OF ENVIRONMENTAL CONTROL

1324 Motor Parkway Hauppauge N. Y. 11787
(516) 234-2622

NOTIFICATION OF UNSATISFACTORY INDUSTRIAL WASTE SAMPLING

Date Jan. 2, 1975

Industrial Mfg. Co.
32 Allen Blvd.
Farmingdale, N.Y. 11735

Gentlemen:

On Dec. 19, 1974 samples of your industrial waste were taken from your [illegible] trough next of pits. Upon analysis, the following parameters were found to be unsatisfactory:

1. Copper - 3.3 mg/l	6.
2. Chromium - 50 mg/l	7.
3. Cadmium - 0.03 mg/l	8.
4.	9.
5.	10.

The acceptable limits on each of these parameters according to New York State Groundwater Standards are as follows:

1. Copper - 0.4 mg/l	6.
2. Chromium - 1 mg/l	7.
3. Cadmium - 0.02 mg/l	8.
4.	9.
5.	10.

Please see that these conditions are corrected as soon as possible. If you have any questions or need any assistance, please do not hesitate to contact this office.

Very truly yours,

[illegible]
Director

104

Louis J. Capobianco
NAME, NOT INITIALS

DATE COL. 12-10-74

TIME COL. 10:30 AM

LAB NO. 12-74-204

TYPE SAMPLE WD.

DATE REC'VD. 12/10

TIME REC'VD. 13

DATE COMPLETED 12/24 SQ

SUFFOLK COUNTY ENVIRONMENTAL CONTROL LABORATORY
CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE

NAME OR FIRM Profound Mfg Co.

ADDRESS OR LOCATION 32 Allen Blvd Farmingdale

POINT OF COLLECTION Trough W. of 3 pits

REMARKS/INSTRUCTIONS

TEST	RESULT		TEST	RESULT mg./liter		TEST	RESULT mg./liter
00095 CONDUCT	umho		00618 NITRATE-N			01042 COPPER	3.3
00400 pH	8.5		00613 NITRITE-N			01045 IRON	0.6
TEST	RESULT mg./liter		00608 AMMONIA-N			01055 MANGANESE	
00411 ph. ALKALINITY			00625 TKN			01034 CHROMIUM	50.
00410 T. ALKALINITY			00671 O-PO_4-P			01067 NICKEL	0.1
00940 CHLORIDE						01092 ZINC	
00950 FLUORIDE						00927 MAGNESIUM	
00720 CYANIDE			00500 TOT. SOLIDS			00916 CALCIUM	
			70299 SUS. SOLIDS			01051 LEAD	
00945 SULFATE			70300 DISS. SOLIDS			01027 CADMIUM	0.03
38260 MBAS			00310 B.O.D.			01077 SILVER	
00340 C.O.D.						00930 SODIUM	
00681 T.O.C.			00619 FIELD NITRATE			00935 POTASSIUM	
			00611 FIELD pH			01007 BARIUM	
			00620 FIELD D.O.				
			00010 FIELD TEMP				
			00011 FIELD SAL				
			[illegible]				

John M. Flynn, P.E.
Commissioner

SUFFOLK COUNTY
DEPARTMENT OF ENVIRONMENTAL CONTROL

1324 Motor Parkway Hauppauge N. Y. 11787
(516) 234-2622

NOTIFICATION OF UNSATISFACTORY INDUSTRIAL WASTE SAMPLING

Date Oct. 30, 1975

Preferred Plating Corp.
32 Allen Blvd.
Farmingdale, N.Y. 11735

Gentlemen:

On Oct. 15, 1975 samples of your industrial waste were taken from your side trough. Upon analysis, the following parameters were found to be unsatisfactory:

1. Total Chrome - 6.6 mg/l
2. Cadmium - 0.04 mg/l
3.
4.
5.
6.
7.
8.
9.
10.

The acceptable limits on each of these parameters according to New York State Groundwater Standards are as follows:

1. Total Chrome - 1 mg/l
2. Cadmium - 0.02 mg/l
3.
4.
5.
6.
7.
8.
9.
10.

Please see that these conditions are corrected as soon as possible. If you have any questions or need any assistance, please do not hesitate to contact this office.

Very truly yours,

[illegible]

FIELD NO. 106 LAB NO. 10-75-128

COL. BY L. Coputino
NAME, NOT INITIALS

TYPE SAMPLE D~d.

DATE COL. 10/15/75 DATE REC'VD. 10/15

TIME REC'VD.

TIME COL. 9:30 Am DATE COMPLETED 10/22 SQ

SUFFOLK COUNTY ENVIRONMENTAL CONTROL LABORATORY
CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE

NAME OR FIRM Preferred Plating Corp

ADDRESS OR LOCATION 32 Allen Blvd Farmingdale

POINT OF COLLECTION Side Trough

REMARKS/INSTRUCTIONS

TEST	RESULT		TEST	RESULT mg./liter		TEST	RESULT mg./liter
00095 CONDUCT	umho		00618 NITRATE-N		X	01042 COPPER	0.15
00400 pH	6.9		00613 NITRITE-N		X	01045 IRON	0.5
TEST	RESULT m.g./liter		00608 AMMONIA-N			01055 MANGANESE	
00411 ph. ALKALINITY			00625 TKN		X	01034 CHROMIUM	6.6
00410 T. ALKALINITY			00671 0-PO_4-P		X	01067 NICKEL	<0.1
00940 CHLORIDE						01092 ZINC	
00950 FLUORIDE						00927 MAGNESIUM	
00720 CYANIDE			00500 TOT. SOLIDS			00916 CALCIUM	
			70299 SUS. SOLIDS			01051 LEAD	
00945 SULFATE			70300 DISS. SOLIDS		X	01027 CADMIUM	0.04
38260 MBAS			00310 B.O.D.			01077 SILVER	
00340 C.O.D.						00930 SODIUM	
00681 T.O.C.			00619 FIELD NITRATE			00935 POTASSIUM	
			00941 FIELD Cl			01007 BARIUM	
			00299 FIELD D.O.		X	Cr^{+6}	4
			00010 FIELD TEMP			11-5-75	
			[illegible] 31				
			[illegible]				
			[illegible]				

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

NYS INDUSTRIAL INSPECTION AND STATUS REPORT FORM

Company Name : Preferred Plating Corp
Permit No. : 47-0300
Location : 32 Allen Blvd. Box 156
Mailing Address : Farmingdale

Date of Inspection: 10/16/75
Date(s) of Previous Inspection(s):
Previous Inspector(s):
Receiving Waters: groundwater
W.Q. Classification: GA
Weather Condition: clear

Company Representative(s), Title (s): John Young

Number of Discharges Reported: 0
Number of Discharges Observed: 1
Action Taken or Planned on Unreported Discharges: Compliance Conference
or formal hearing will be requested.

---

(1) PROCESS

(a) Industrial Process: Electroplating
(b) Reported Production:
(c) Current Production 75% capacity
(d) Rated Production:
(e) Raw Materials Used: [illegible]
(f) What process modification, expansions, etc. have been made that would either increase or decrease raw waste loads, water usage, etc. that have not been previously reported: None

(g) Industrial process flow diagram indicating wastewater sources (attach copy if on file and verify with company):

(h) Continuity of Operation: _____ Batch ___/___ Semi-Continuous
_____ Continuous

(2) EFFLUENT LIMITATIONS VIOLATIONS (Based upon Self-Monitoring Data)

Discharge No.	Parameter	Permit Limitation	Reported Discharge	Date/Period of Violation

Inspection & Status
Permit No.

(2.1) EFFLUENT DISCHARGE NO. 001, 002, 003
(a) Wastewater Flow: [illegible] gpd/day maximum
(b) Measuring Device used for Flow: none
(c) Wastewater Characteristics: slight odor, turbidity, clear and must be determined
(d) Type of treatment units and treatment sequence sketch (attach copy if on file and verify with company):

(e) Appearance of Effluent(s):
(1) visible oil _____
(2) foam _____
(3) floating solids _____
(4) Suspended Solids _____
(5) color _____
(6) Temperature _____
(7) Odor _____
(8) other _____

(f) Appearance of Receiving waters:
(1) visible oil _____
(2) foam _____
(3) floating solids _____
(4) turbidity _____
(5) sludge deposits _____
(6) color _____
(7) temperature _____
(8) odor _____
(9) other _____

(2.2) EFFLUENT DISCHARGE NO. [illegible] Picture Taken:
(a) Wastewater Flow: [illegible]
(b) Measuring Device used for Flow: [illegible]
(c) Wastewater Characteristics: [illegible] storm condensate only
(d) Type of treatment units and treatment sequence sketch (attach copy if on file and verify with company):

(e) Appearance of Effluent(s):
(1) visible oil _____
(2) foam _____
(3) floating solids _____
(4) suspended solids _____
(5) color _____
(6) temperature _____
(7) odor _____
(8) other _____

(f) Appearance of Receiving waters:
(1) visible oil _____
(2) foam _____
(3) floating solids _____
(4) turbidity _____
(5) sludge deposits _____
(6) color _____
(7) temperature _____
(8) odor _____
(9) other _____

(2.3) EFFLUENT DISCHARGE NO. [illegible]
(a) Wastewater Flow: [illegible]
(b) Measuring Device used for Flow: [illegible]
(c) Wastewater Characteristics: [illegible]
(d) Type of treatment units and treatment sequence sketch (attach copy if on file and verify with company):

(e) Appearance of Effluent(s):
(1) visible oil _____
(2) foam _____
(3) floating solids _____
(4) suspended solids _____
(5) color _____
(6) temperature _____
(7) odor _____
(8) other _____

(f) Appearance of Receiving waters:
(1) visible oil _____
(2) [illegible]
(5) color
(7) [illegible]

(3) COMPLIANCE

(a) Is company complying with schedule of compliance? NO

(b) What is the current projection of the company regarding compliance with future dates in Compliance Schedule?
All dates have passed without compliance

(c) Is company complying with any additional compliance requirements such as a special report submittal to the proper regulatory agency? [illegible]

(d) Has company notified the proper regulatory agency of any non-compliance with permit conditions? [illegible]

*(e) Has company requested modification of any permit conditions other than permit sampling schedules? [illegible]

*(f) Are any modifications appropriate? [illegible]

(4) SELF-MONITORING PROGRAM

(a) Does quantity of reported self-monitoring data and signing official comply with requirements of permit? [illegible]

(b) What is the apparent quality of plant records that are required under the conditions of the permit? [illegible]

(c) If net values are applicable, is the surface water intake sampled and analyzed? [illegible]

(d) Is there any additional monitoring being performed by the plant that has not been reported? If yes, what parameters and frequency is involved and what conclusions can be drawn from data? [illegible]

(e) Do sampling locations appear to be adequate to obtain [illegible]

(f) Has company identified different sampling point need for each discharge pipe by providing a sketch of flow diagram?

(g) [illegible]

(h) In your judgement, do sampling procedures, frequency and type of sample typify plant's daily discharge (i.e. are maximum production periods, batch discharges, etc. reflected in monitoring data)? Not applicable

(i) Does plant perform its own analysis? Not applicable
If not, what laboratory is analysis contracted to?
If yes, what is the appearance of plant's laboratory?

(j) Do all sampling and analytical methods conform to the guidelines published pursuant to Section 304(g) of 1972 FWPCAA?
Not applicable.

(k) Has plant requested modification to permit sampling schedules?
Not applicable

(l) Are modifications appropriated?
Not applicable

(5) MISCELLANEOUS

(a) Did the permit application truly represent conditions at the plant site? Yes

(b) Are any of the following toxic pollutants or compounds containing them, being discharged that would require modification of the permit: No ✓ Yes _____ (Check those Applicable)

Aldrin	____	DDE	____
Dieldren	____	DDT	____
Benzidine	____	Endrin	____
Cadmium	____	Mercury	____
Cyanide	____	Polychlorinated biphenyls	____
DDD (TDE)	____	Toxaphene	____

If yes, what modifications are necessary?

(c) Is sludge being generated at plant? Not applicable
If yes, is plant reporting on its disposal?
If sludge disposal is at plant site, is there any visual evidence or records associated with entry of pollutants into surface or ground waters?
If not at plant, where is the disposal site, and is it acceptable to regulatory agencies?

(d) [illegible]?

(e) Is there any discharge of unreported contaminated storm runoff?
Yes - Storm water contaminated by unreported waste discharges, accidents

(f) Is the treatment system maintained in good working order and operated efficiently? Not applicable - no treatment units, facilities not operating efficiently

(g) What alternate power supply provisions exist for waste treatment facilities? Not applicable
If none, what happens to the wastewater when there is a power failure?

(h) Have all bypasses of waste treatment facilities been eliminated:
If not, why? If not, is flow monitoring installed in bypass?
[illegible] being bypassed by [illegible]

(i) Are there any obvious air emission, noise, radiation, pesticides, or solid wastes problems at the plant?
What are they? No
If yes, send copy of this report to the appropriate personnel.

(j) Does plant require a Spill Prevention Control Countermeasure Plan? No
NOTE: SPCC plan is required if the permittee stores more than;
1. 1,320 gallons of oil above ground;
2. 660 gallons of oil in a single container above ground;
3. 42,000 gallons of oil underground.

If so, is the plant approved by a licensed P.E.?

Inspection & Status
Permit No.

SUMMARY AND RECOMMENDATIONS

Violations and/or Problems

SPDES compliance schedule violated
Illegal discharge of industrial wastes observed
due to poorly maintained treating facilities
Certification of nonexempt use not sent
Requested structural data for holding facilities
not sent

Recommended Action

Recommend further
enforcement action
in form of a formal
hearing resulting in
[illegible]

Comments

[illegible]

Inspector's signature:

Name:

Title:

DISTRICT - DOCKET NOS.

misdemeanor

STATE OF NEW YORK)
COUNTY OF SUTFOLK) ss:

The People of the State of New York
-vs-
} Defendant(s)

DEFENDANTS IN CUSTODY		
	FROM DATE & HOUR	TO DATE & HOUR
1.		
2.		
3.		

Name (Complainant) James H. Pim

of No. Suffolk County Department of Environ- Sgd. #
mental Control

being duly sworn, says that on dates set forth below about times set forth below

at 32 Allen Blvd., Farmingdale Town of Babylon

County of Suffolk, State of New York, the defendant(s) Preferred Plating Corporation,
32 Allen Blvd., Farmingdale and John Young, acting on behalf of said
defendant at the same address

wrongfully, intentionally, knowingly, committed the offense(s) of:

willfully violating Article III, section 2(a) of the Suffolk County
Sanitary Code.

Count = 1

in that: 9:30 a.m.
on the fifteenth day of October, 1975, at the place above stated, the defendants as owner, lessee or tenant of any property, dwelling, building or place, constructed or maintained a private or individual sewage disposal system, pipe, or drain so as to expose or discharge the sewage contents or any other deleterious liquid or matter therefrom onto the surface of the ground, or exposed to the atmosphere so as to endanger any source or supply of drinking water, to wit, at the time and place above Preferred Plating Corp. as tenant of the above premises and John Young acting on behalf of said corporate tenant, maintained said private drain so as to expose the contents therefrom to the atmosphere and further, said drain system composed of pits, which were cracked allowing a discharge of the deleterious liquid contained therein so as to endanger the source or supply of drinking water.

(SEE RIDER)

This complaint is based on (personal knowledge) & (information & belief), the source being the attached ☐sworn deposition(s) of Louis Copertino

dated 6/25/76 ☐ ☐ the attached laboratory report of the Suffolk County Police Department, dated ☐ ;

☐ Warrant Requested ☐ Criminal Summons Requested

SWORN TO BEFORE ME , 19

Count #2

in that: at 2:30 p.m. on the eighteenth day of June, 1976, at the place above stated, the defendants as owner, lessee or tenant of any property, dwelling, building or place, constructed or maintained a private or individual sewage disposal system, pipe, or drain so as to expose or discharge the sewage contents or any other deleterious liquid or matter therefrom onto the surface of the ground, or exposed to the atmosphere so as to endanger any source or supply of drinking water, to wit, at the time and place above Preferred Plating Corp. as tenant of the above premises and John Young acting on behalf of said corporate tenant, maintained said private drain so as to expose the contents therefrom to the atmosphere and further, said drain system composed of pits, which were cracked allowing a discharge of the deleterious liquid contained therein so as to endanger the source or supply of drinking water.

STATE OF NEW YORK)
) ss.:
COUNTY OF SUFFOLK)

AFFIDAVIT

LOUIS COPERTINO, being duly sworn, deposes and says:

THAT I am employed by the Suffolk County Department of Environmental Control as an Environmentalist II.

THAT on the fifteenth day of October, 1975 at 9:30 a.m. during the course of my duties I visited the Preferred Plating Corporation at 32 Allen Boulevard, Farmingdale, N.Y.

THAT at the time and place above stated Preferred Plating Corp. as tenant of the above premises and John Young acting on behalf of said corporate tenant, maintained a private drain so as to expose the contents therefrom to the atmosphere and further, said drain system composed of pits which were cracked, allowing a discharge of the deleterious liquid contained therein so as to endanger the source or supply of drinking water.

Louis J. Copertino

Sworn to before me this 25th
day of June, 1976

Notary Public

INTER-OFFICE MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL CONTROL

TO: FOR THE RECORD DATE: June 22, 1976

FROM: Roy Gilbert

SUBJECT: Preferred Plating Corp.
32 Allen Blvd., Farmingdale

On Friday, June 18, 1976 James Pim and I visited Preferred Plating Corp. for the purpose of inspection and sampling.

On Feb. 18, 1976 a compliance conference was scheduled with Mr. Young of Preferred Plating. At that time he was told to take the necessary steps to leak-proof and seal the large pits at the rear of his plant, which at that time contained a few inches of contaminated water. Since this time, although all necessary approvals had been given, no action had been taken by Mr. Young and in fact, conditions have worsened.

During our inspection of June 18th, we noticed several feet of water in each of the pits. The water appeared greenish in nature. In addition, there was a massive oil spill in the back of the plant resulting from an accident during a recent oil delivery. The spill is conservatively estimated at a few hundred gallons. Several hundred square feet of earth were covered by standing oil puddles or were totally oil soaked. In addition, the southeast pit contained about 6" of oil on top of the water.

Since our last contact with Mr. Young prior to June 18, 1976, we learned that he sold the building and is renting now from the new owner. The new owner hauled a tank from the property containing industrial waste, which was supposed to be disposed of by an approved scavenger. The final disposal point of this waste is presently unknown.

All discharges from the plant empty into a pit, which leads to a trough. These holding facilities appear to be leaking occasionally into the large pits, which are cracked badly and allow the leaching of the industrial discharges into the groundwater.

According to Mr. Donnelly's engineering report, the minimum water production would be 700-800 gal/month. It would be very difficult to hide this volume of water over a year or more of collection, yet Mr. Young has done so. This leads to the conclusion that there must be some discharge via leaks in all holding facilities.

The conditions in the interior of the plant are abhorrent. Most of the piping is not exposed enough to be examined as to its conditions. The floor under the duck boards is perpetually wet and not exposed for inspection of its condition. It is likely there may be many leaking pipes in the plant and leaks through cracks in the floor.

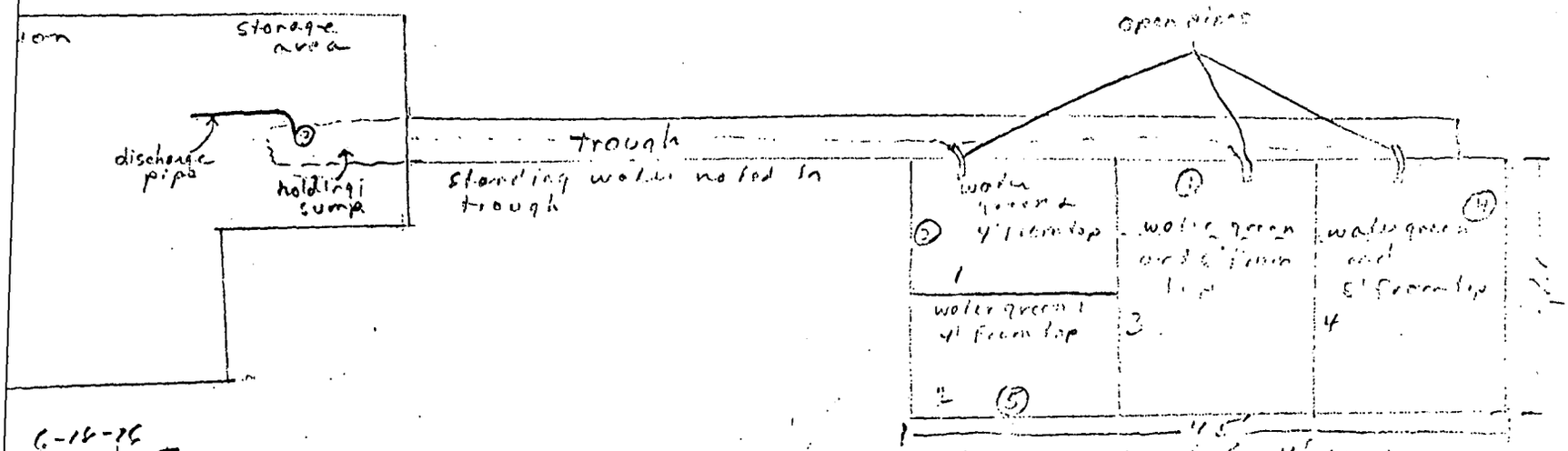
Due to violation of the compliance schedule in the SPDES permit, disregard of recommendations at the compliance conference, improper control over the haulage of industrial wastes and the continuous permitting of groundwater discharge of industrial waste from the leaking structures at the rear of the property, I recommend further enforcement action resulting in substantial punitive fines and criminal action under the Suffolk County Sanitary Code, if possible.

Samples were taken at the time of our inspection.

Find attached a diagram of the holding pit situation at Preferred Plating.

Roy Gilbert
RG/rt
Att.
cc: A. Orensky, Reg. Att'y.,
NYSDEC - Region I

PREFERRED PLAN



pits approximately 11' deep

pits 1 & 2 contain approx 1400 cubic yards

pit 3 contains approx 1000 cubic yards

pit 4 contains approx 600 cubic yards

total 3000 cubic yards

or 22,500 gallons

6-16-16
sample #
410
411
412
413
oil

SUFFOLK COUNTY DEPARTMENT OF ENVIRONMENTAL CONTROL
1324 MOTOR PARKWAY
HAUPPAUGE, NEW YORK (234-2622)

INDUSTRIAL WASTE INSPECTION REPORT

Name Preferred Plating

Address 32 Allen Blvd. Farmingdale

Date 6/1/76

Name & Title of Contact [illegible]

INDUSTRIES USING SCAVENGER DISPOSAL	Sat.	Unsat.
(1) Records of pickups since last inspection (volumes, dates, type of material, name of scavenger)	No pick up	
(2) Amount of waste on hand at present (volume, type of material, type of containers)		
(3) Equipment in satisfactory repair		
(4) Proper storage conditions		
(5) Backflow prevention		

INDUSTRIES WITH ON SITE TREATMENT	Sat.	Unsat.
(1) Permit to operate valid & posted		
(2) Proper sampling w/records of results up-to-date and readily accessible		
(3) Light, Ventilation		
(4) Treatment chem. on hand		
(5) Qualified operator		
(6) Backflow prevention		
(7) Safety equipment		
(8) All equip. in satisfactory repair		
(9) Sludge holding and disposal		
(10) Effluent disposal & access. for sampling		
(11) Proposed changes		

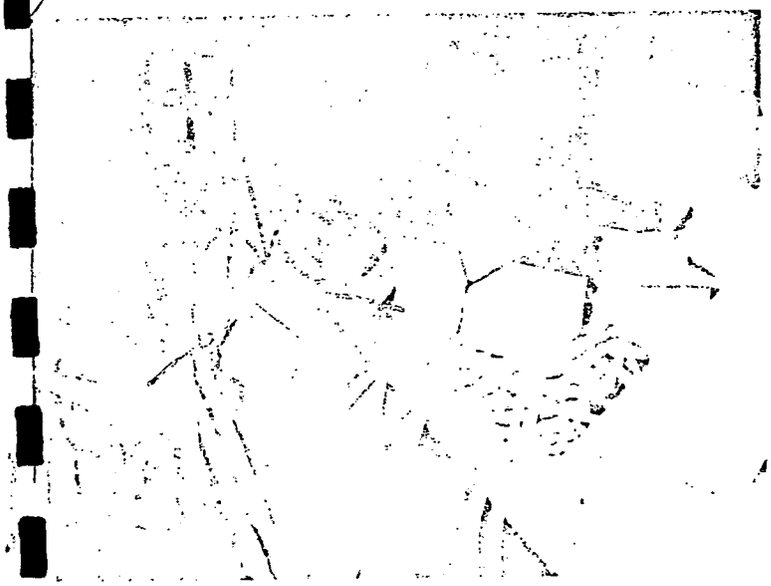
[illegible]

Comments: [illegible]

PREFERRED PLATING INC.

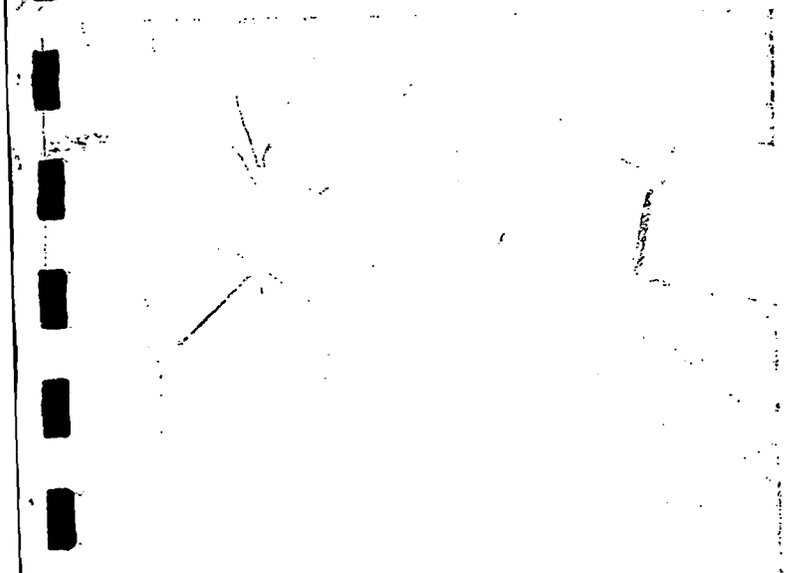
32 ALLEN BLVD, FARMINGDALE

ALL PICTURES TAKEN ON 6-23-76. by LOUIS J. COPPOLINO
TIME APPROX 2:00 PM



PIPE DISCHARGING PLATING EFFLUENT TO CONCRETE SUMP*

* CONCRETE SUMP CONTINUES INTO CONCRETE TROUGH WHICH RUNS ALONG SIDE OF CONCRETE PITS.



SAME PICTURE AS ABOVE

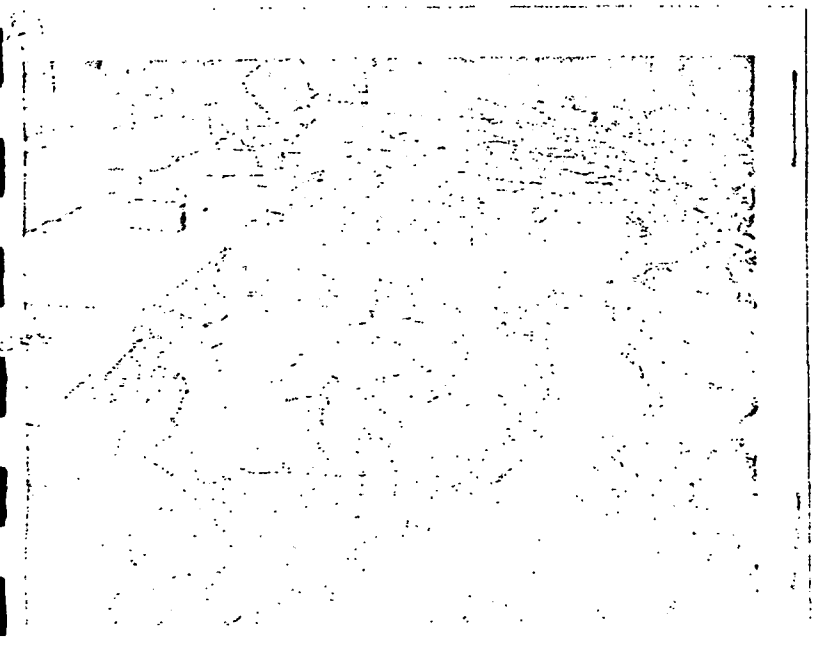
DIFFERENT ANGLE

32 ALLEN BLVD FARMINGDALE

(3)

SIDE TROUGH CONTAINING

PLATING EFFLUENT. - NOTE OIL SOAKED GROUND ON SIDE OF TROUGH.

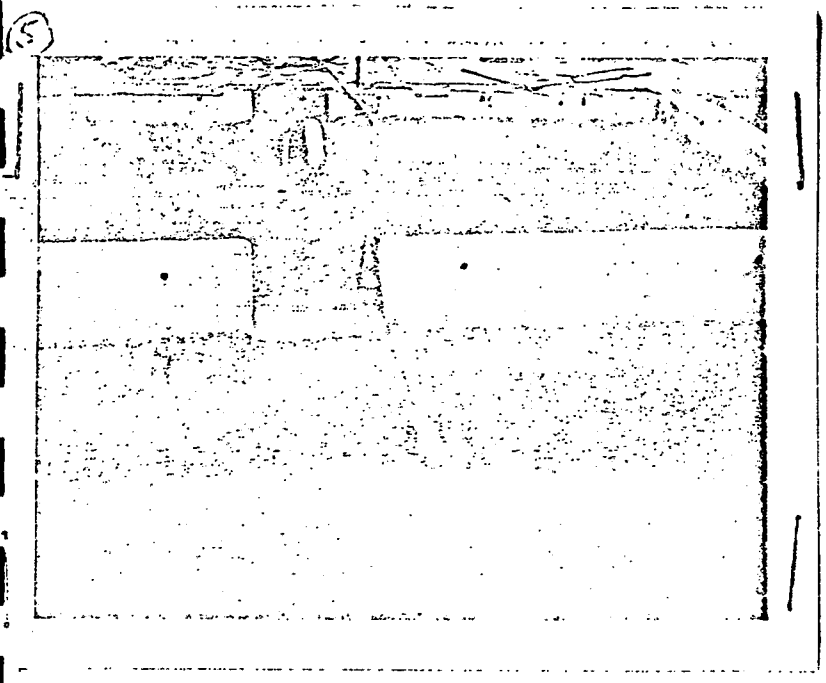


SAME PICTURE AS

ABOVE DIFFERENT ANGLE *

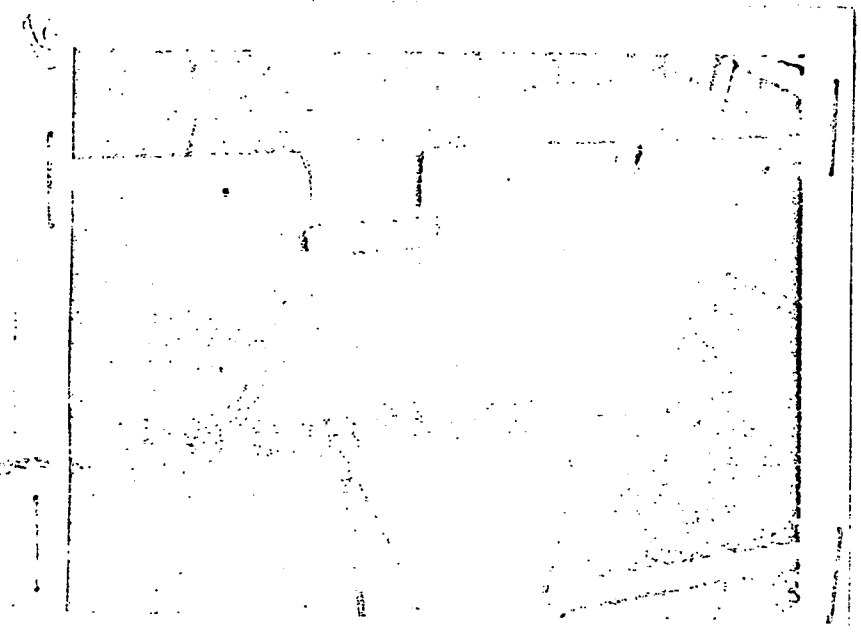
* ALSO SHOWN IN BOTH PHOTOGRAPHS IS OPEN CONCRETE PITS.

EASTERN VIEW



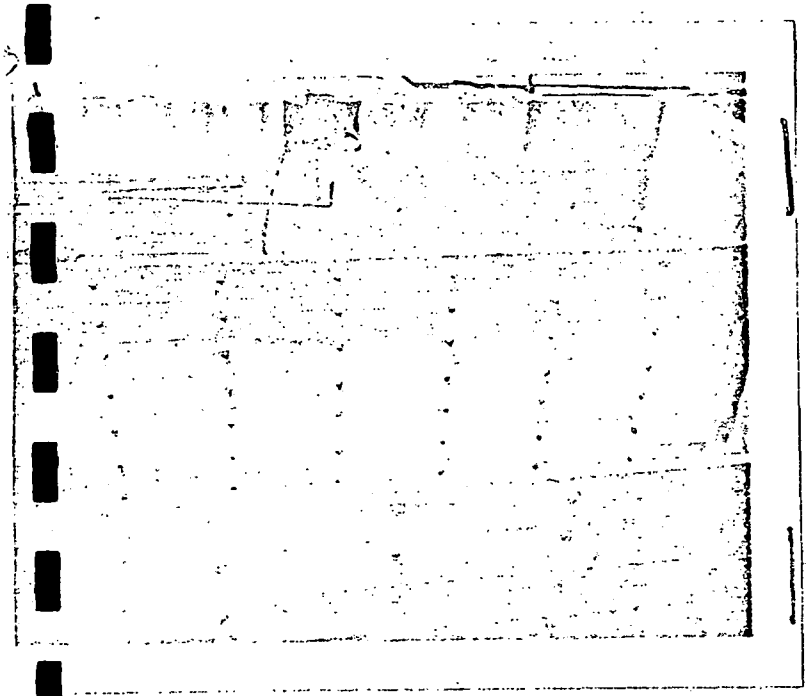
PICTURE OF SOUTHERN MOST PIT SHOWING STRUCTURAL CRACKS IN THE WALLS. *

*FARTHEST WALL IS SIDE OF TROUGH



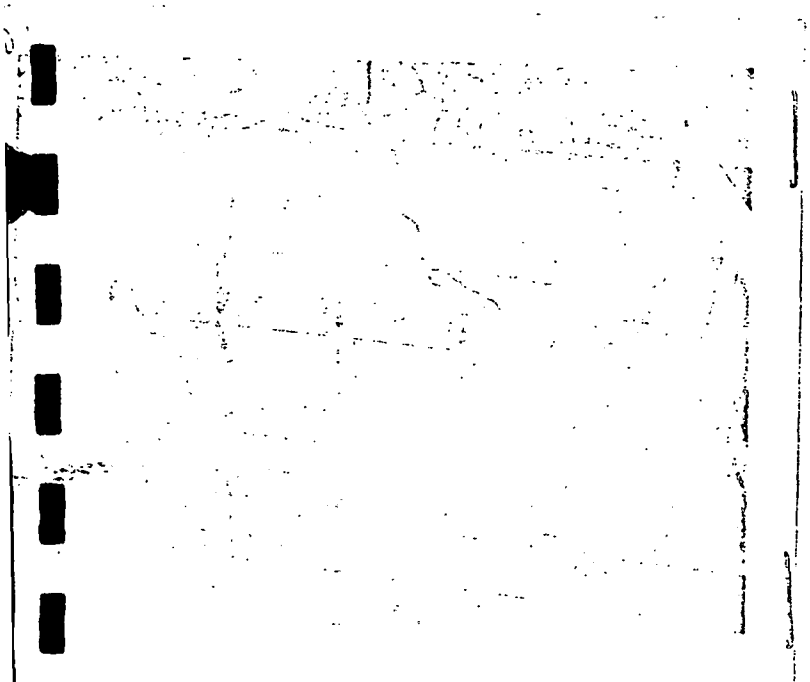
WESTER VIEW OF SOUTHERN MOST PIT.

NOTE GREEN COLORED EFFLUENT IN ONE SECTION WHICH IS APROX. 2' deep



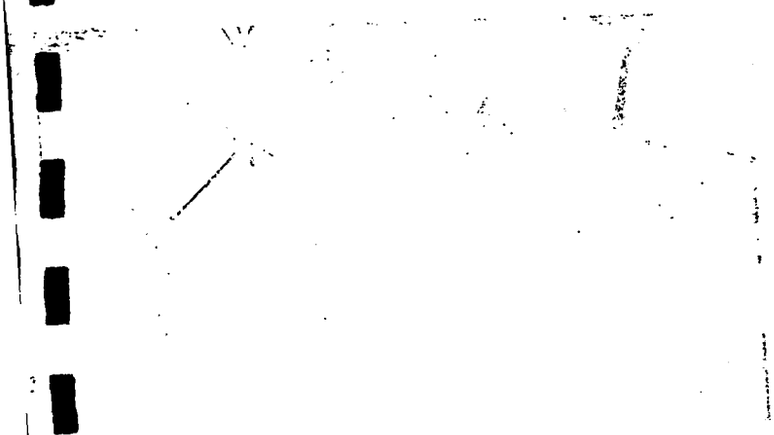
PICTURE OF MIDDLE PIT

SHOWING STRUCTURAL CRACK IN SIDE WALL OF TROUGH WHICH CONTAINS PLATING EFFLUENT



PICTURE OF NORTHERN MOST PIT AGAIN SHOWING STRUCTURAL CRACKS IN THE WALL.

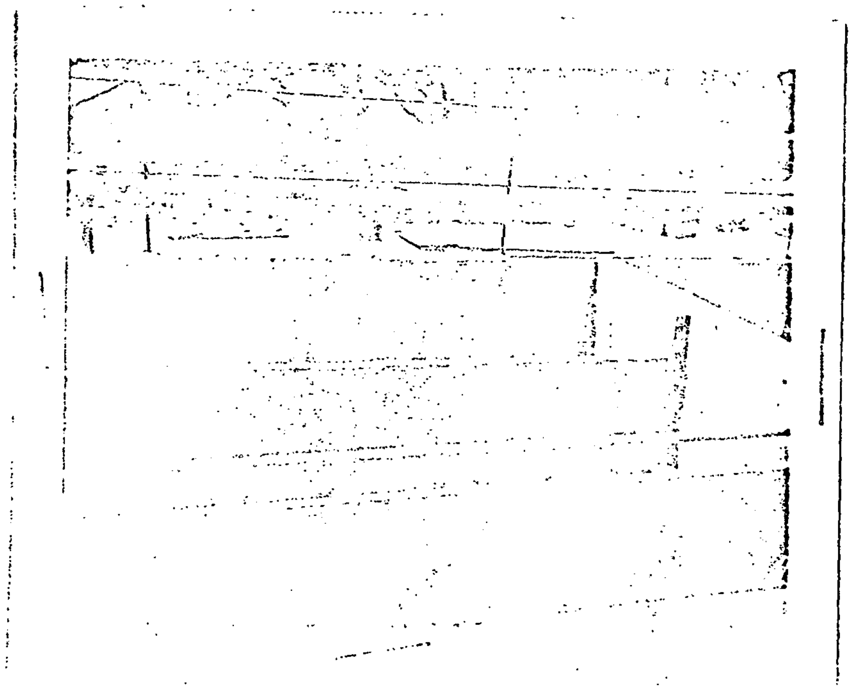
PICTURE OF SOUTHERN HOST PIT SHOWING GREEN COLORED EFFLUENT IN ONE COMPARTMENT AND OIL IN THE OTHER COMPARTMENT.



Different angle

BY ROY GILBERT

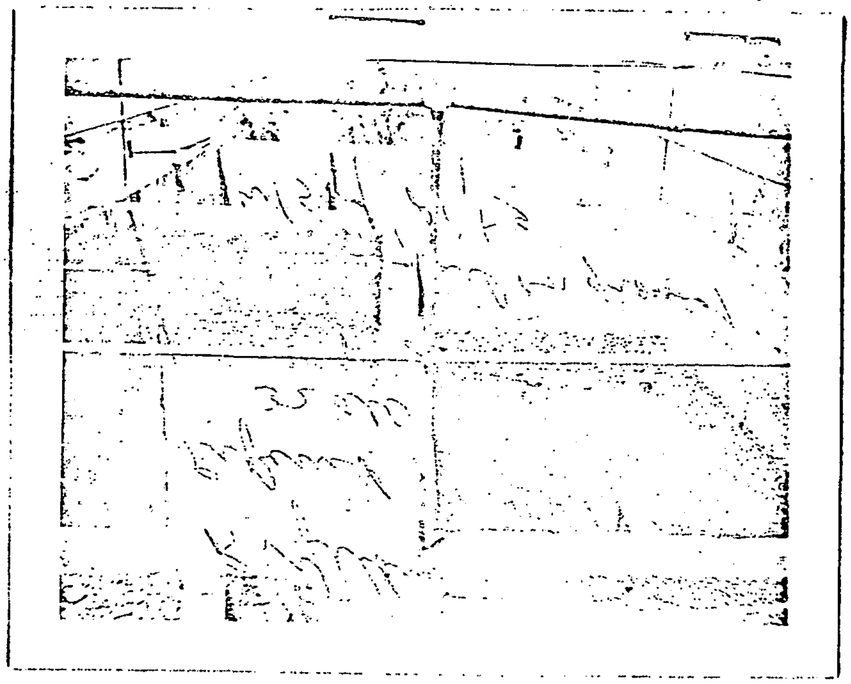
IN ABOVE PICTURE, NOTE OIL SOAKED EARTH + STANDING OIL ON GROUND ALONG SOUTH SIDE OF PIT AREA - RECTANGULAR TANK ON LEFT, FILLED WITH OIL



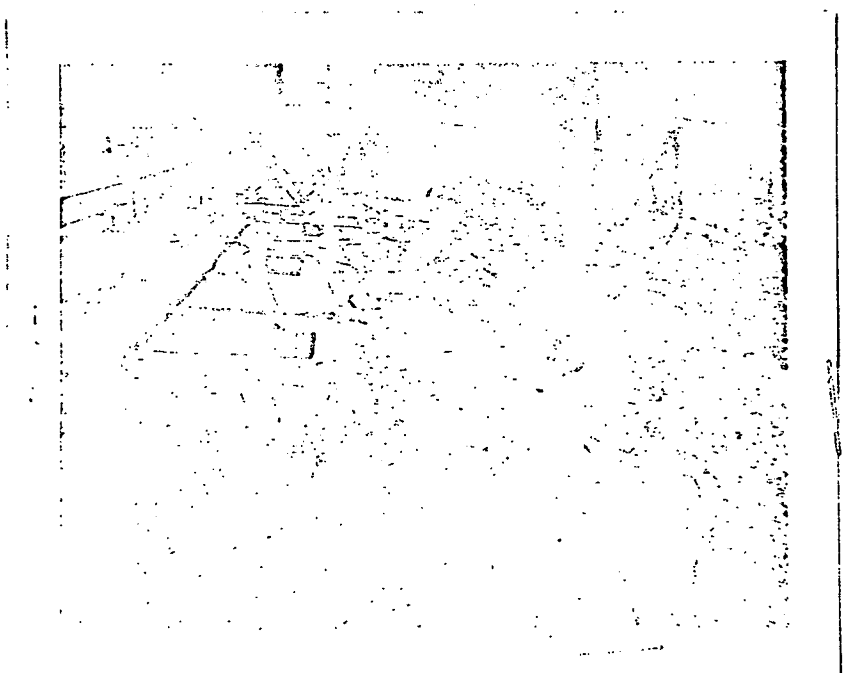
ABOVE PICTURE OF [illegible] PIT LOOKING WEST [illegible] NOTE [illegible] FROM TRENCH TO PIT AND [illegible] OF CONCRETE [illegible] IT [illegible] TO [illegible]
[illegible] PIT [illegible]

[illegible] 6-22-76 1:30 PM

by. Roy Gilbert



The 2 south pits shown above - note water level approximately 4' from top - note left (east) pit containing oil - at least several inches deep.



above picture looking south along west side of pit area [illegible]
adjacent pits along west side is covered [illegible] [illegible]
[illegible]

Preferred Manufacturing Company

Farmingdale, New York

Industrial Waste Treatment Plant

The industrial waste treatment plant designed for Preferred Manufacturing Company at Farmingdale, New York will be set up to remove all undesirable wastes from the water before it is discharged to dry wells.

The waste treatment plant consists of three parts:

1 - Chromic acid recovery -by ion exchange-20 gpm (Max.)
2 - Cyanide destruction - by alkaline chlorination-15 gpm
3 - Acid and alkali neutralization - by lime-5 gpm

The ion exchange equipment will operate on a continuous basis; the alkaline chlorination and the alkali-acid neutralization will operate on a batch basis. At maximum anticipated flows each batch tank system offers holding capacity for a minimum of 8 hours, thus permitting ample time for proper treatment.

Wherever possible, the incoming well water lines will end with a positive air break to prevent any cross connection. Where such an air break is impossible a check valve, relief valve and vacuum breaker will be installed. The private well water system provides water for the manufacturing and plating operations only. Drinking water is supplied in bottles. The well pumps each have a maximum capacity of 1200 GPH. A recent field test indicated the pump on the line operated approximately 75% of the time. One pump is retained as a stand-by.

The ion exchange units, consisting of one cation exchange unit and one anion exchange unit, will operate in series to treat the dilute chromic acid rinse waters. The cation exchange unit will contain 10 cubic feet of sulfonated styrene type of cation resin, regenerated with a dilute sulfuric acid. This will effectively remove essentially all cations from the chromic acid rinses. The anion exchanger will contain 10 cubic feet of a highly basic polystyrene resin which will remove both strong and weak anions, primarily the anionic group of chromic acid from solution. The anion resin has a capacity for removing 2.5 lbs. of CrO_3 per cubic foot from rinse water. The anion resin is regenerated with a dilute caustic solution. The effluent, mineral free, of the ion exchange equipment will be returned to the plating operations in a closed system.

[illegible] cation exchange unit will also be used to remove metals from [illegible] solution. This makes it possible to [illegible] with no need to [illegible].

When the anion exchange unit is regenerated, sodium dichromate will result in the effluent of the unit. The sodium dichromate is retained for reuse in the plating room. Thus all chromic acid in the plating room will be retained for reuse with none discharged to waste.

The sulfuric acid and ion exchange rinse waters discharged to waste from the ion-exchange equipment will be blended with the acid and alkalis from rinsing operations in the plating room for treatment in the lime neutralization tanks.

The lime neutralization batch tanks will each contain a minimum volume of 5,000 gallons and will be filled alternately. Lime will be added from a lime slurry tank as required for neutralization. Leeds and Northrup recording, indicating and controlling pH instruments will assure complete neutralization prior to discharge.

Cyanide solutions will be directed to either of two holding tanks. Each tank holds a minimum of 10,000 gallons which is 25% in excess of anticipated maximum total flow of cyanide solutions in an eight hour day. When a tank is full, the flow from the plating room will be diverted to the alternate tank. The contents of the full tank will then be alkaline chlorine treated to destroy the cyanide completely to carbon dioxide and nitrogen gases and alkaline precipitates. When tests show all cyanide destroyed and a chlorine residual is maintained, the contents will be pumped to dry wells. Precipitates retained in the settling basins will be trucked to the Babylon Town Dump. Air is available for supplemental agitation if found to be necessary.

At such time, estimated each 6 Months as the precipitate volume warrants the settling basins will be manually cleaned with buckets and shovels.

There will be no drain connection in the plating room area which will lead to any point except the floor drainage sump. Leaks, spillage and other solutions which flow into the drainage sump will be transferred to the appropriate treatment system by a portable type sump pump. Consequently, it will be impossible for any plating room wastes to bypass the treatment system without proper control.

A suitable log of daily operations will be kept on forms furnished by the Suffolk County Health Department. In addition samples of each batch of solution treated will be retained for 30 days, on the premises, suitably tagged as to time of obtaining sample, sampling point, and date of sampling.

The [illegible] required to [illegible] are estimated to contain:

[illegible] - [illegible] ppm, [illegible]
[illegible] - 10 ppm, Maximum
[illegible] - 50 ppm, Maximum
[illegible] - 5 ppm, Maximum
[illegible]
[illegible]

* Only at times when the cation exchange unit is regenerated. It is estimated that this will be at a maximum frequency of once per week, and will be in one 5,000 gallon batch from the lime neutralization system. The remainder of the time it is estimated that the Calcium sulfate concentration will be 75 ppm.

The past purchasing history indicates the following listed average consumption of chemicals in the manufacturing and plating operations:

Chromic Acid -	830 Lbs./Mo.
Sodium Bichromate-	166 Lbs./Mo.
Sodium Cyanide-	200 Lbs./Mo.
Potassium Cyanide-	17 Lbs./Mo.
Muriatic Acid-	133 Lbs./Mo.
66° Be' Sulfuric Acid-	29 gals./Mo.
Caustic Soda	83 Lbs./Mo.
42° Be' Nitric Acid-	25 gals./Mo.
Proprietary Alkaline Cleaners-	500 Lbs./Mo.
Cadmium -	300 Lbs./Mo.
Copper -	17 Lbs./Mo.
Silver -	166 Troy oz./Mo.
Zinc -	17 Lbs./Mo.
Tin -	50 Lbs./Mo.
Nickel -	34 Lbs./Mo.
Nickel Sulfate -	40 Lbs./Mo.

Attached and made a part of this report are drawings and Manufacturers' Catalogs.

Catalogs: - Fisher & Porter - Chlorination equipment
Porr Company - Ion Exchange equipment

Drawings: - Sketch No. 101 - Flow diagram - waste disposal system

Sketch No. 102 - Source of waste solutions
Sketch No. 103 - Equipment and piping for waste treatment
Sketch No. 104 - Ion Exchange equipment piping

APPENDIX C

APPENDIX C
UPDATED NEW YORK STATE REGISTRY FORM

HAZARDOUS WASTE DISPOSAL SITES REPORT
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Code: _____

Site Code: 152030

Name of Site: Preferred Plating Corp. Region: I

County: Suffolk Town/City Farmingdale

Street Address 32 Allen Blvd.

Status of Site Narrative:

Site is currently inactive. In 1976 the Preferred Plating Corp. went out of business. The site occupies approximately 0.50 acres, and now consists of an auto repair facility. Area is light industry park.

Type of Site: Open Dump ☐ Treatment Pond(s) ☐ Number of Ponds _____
Landfill ☐ Lagoon(s) ☒ Number of Lagoons _____
Structure ☐

Estimated Size 0.05 Acres

Hazardous Wastes Disposed? Confirmed ☒ Suspected ☐

*Type and Quantity of Hazardous Wastes:

TYPE	QUANTITY (Pounds, drums, tons, gallons)
Solvents, Acids, Heavy Metals	Possibly over 600,000 gallons.

* Use additional sheets if more space is needed.

Name of Current Owner of Site: Unknown

Address of Current Owner of Site: Unknown

Time Period Site Was Used for Hazardous Waste Disposal:

, 1951 To , 1976

Is site Active ☐ Inactive ☒
(Site is inactive if hazardous wastes were disposed of at this site and site was closed prior to August 25, 1979)

Types of Samples: Air ☐ Groundwater ☒ None ☐
Surface Water ☐ Soil ☐

Remedial Action: Proposed ☐ Under Design ☒
In Progress ☐ Completed ☐
Nature of Action:

Status of Legal Action: Case in 1976 State ☒ Federal ☐

Permits Issued: Federal ☐ Local Government ☐ SPDES ☒
Solid Waste ☐ Mined Land ☐ Wetlands ☐ Other ☐

Assessment of Environmental Problems:

The site may have disposed of large granites of waste materials via cesspools and leaking impoundments.

Assessment of Health Problems:

Ground water supplies may be threatened

Persons Completing this Form:

Wayne R. Sanders

WCC

New York State Department of Environmental Conservation

New York State Department of Health

Date