915064-

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES

PHASE I INVESTIGATION

Dresser Industries **Site No. 915064**
Depew **Erie County**

DATE: February 1986

Prepared for:
New York State Department of Environmental Conservation

50 Wolf Road, Albany, New York 12233
Henry G. Williams, *Commissioner*

Division of Solid and Hazardous Waste
Norman H. Nosenchuck, P.E., *Director*

By:

Recra Environmental, Inc.

ERRATA SHEET - Dresser Industries, ID #915064

1. Section 7, pg. 15

   A drum sampling program should be included in the proposed Phase II work plan.

2. Section 7, pg. 23, 1st paragraph

   Change "..., dedicated galvanized steel bailers ..." to read "..., dedicated stainless steel or PVC bailers ..."

3. Section 7, pg. 24, 2nd paragraph

   Change "..., dedicated galvanized steel bailers ..." to read "..., dedicated stainless steel or PVC bailers ..."

1/3132

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES IN THE STATE OF NEW YORK PHASE I INVESTIGATIONS FOURTH ROUND

Dresser Industries
Village of Depew
Erie County, New York
Site #915064

Prepared For:

Division of Solid and Hazardous Waste
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-0001

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January, 1986

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SECTION 1

1.0 EXECUTIVE SUMMARY

The Dresser Industries site is approximately 15 acres, located on the west side of Transit Road directly across the street from Dresser Transportation Division, at 2 Main Street, Depew, Erie County, New York (Figure 1). Dresser manufactures car couplers and steel castings for the railroad industry. Wastes generated by Dresser include spent bentonite clay (sludge), foundry sands (some with phenolics), slag, and lubricating oil. Records of waste disposal at the landfill are for the period 1961 to May 1, 1979 (Reference 10).

A previous site profile report by the Erie County Department of Environment and Planning noted the entire area, including a section beyond the current Dresser property, had been filled in. The landfill is currently used as a staging area prior to removal for disposal elsewhere (References 6 and 13).

The Phase I Summary Report presented herein represents a compilation of available information regarding the Dresser Industries site. Information sources include NYSDEC Region 9, Erie County Department of Environment and Planning, and various other sources.

The intent of the Hazard Ranking System (HRS) is to provide a method by which uncontrolled hazardous waste sites may be systematically assessed as to the potential risk that a site may pose to human health and the environment. The HRS is designed to provide a numerical value through an assessment of technical data and information, and relating that information with respect to:

- migration of hazardous substances from the site (Sm)
- risk involved with direct contact (Sdc)
- the potential for fire and explosion (Sfe).

The risks involved with direct contact (Sdc) and the potential for fire and explosion (Sfe) are evaluated according to site specific information including toxicity of wastes, waste quantities, site demographics, location with respect to sensitive habitats of wildlife, etc. Migration potential (Sm) is evaluated through the rating of factors associated with three routing modes: groundwater (Sgw), surface water (Ssw) and air (Sa). The scored value for each route is composited to determine the risk to humans and/or the environment from the migration of hazardous substances from the site (Sm).

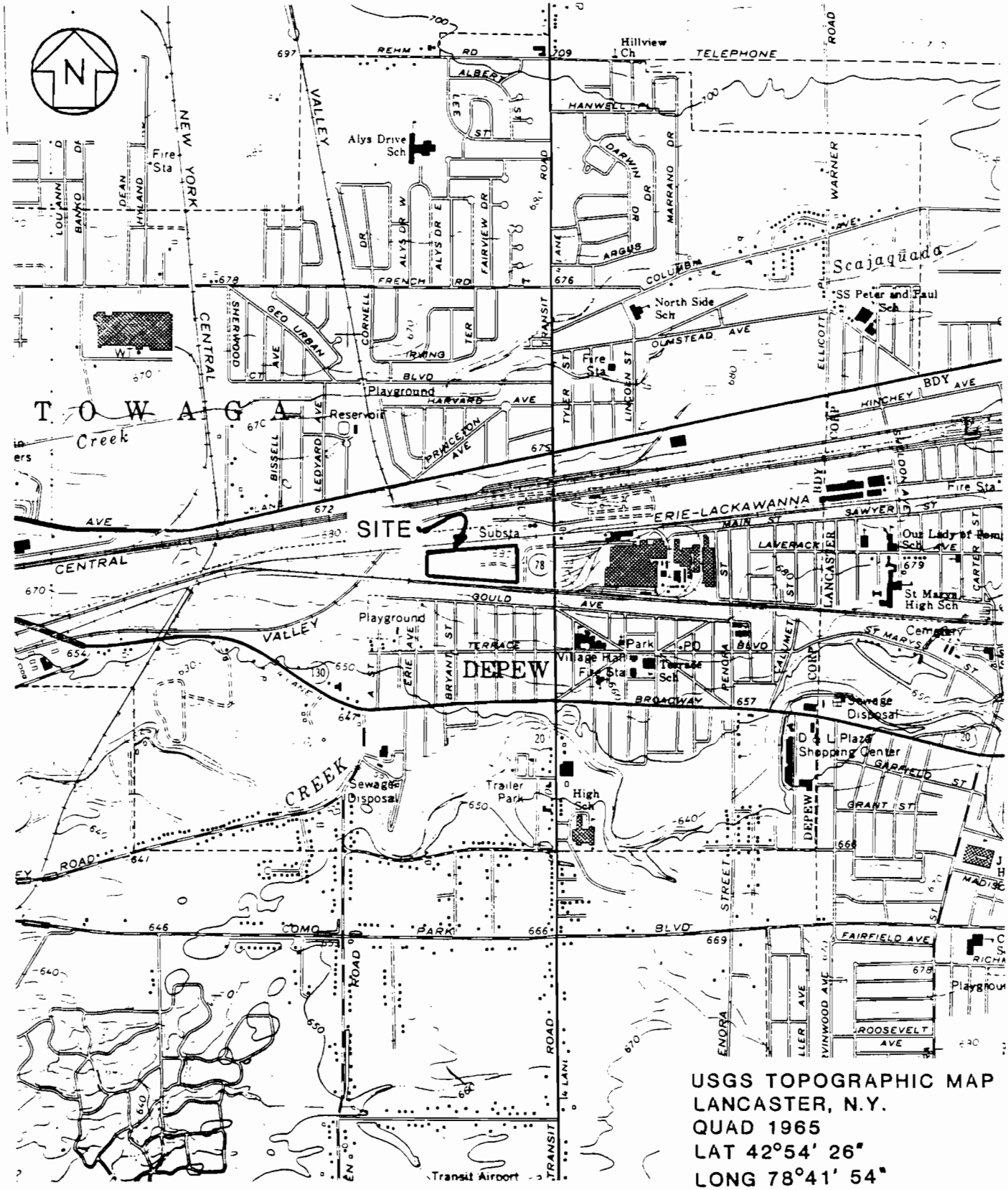
Based on the available information, the Dresser Industries site was scored according to the Mitre Corporation Hazard Ranking System (HRS) and the following scores were obtained:

Sm = 0 (Sgw = 0; Ssw = 0; Sa = 0)

Sfe = N/A

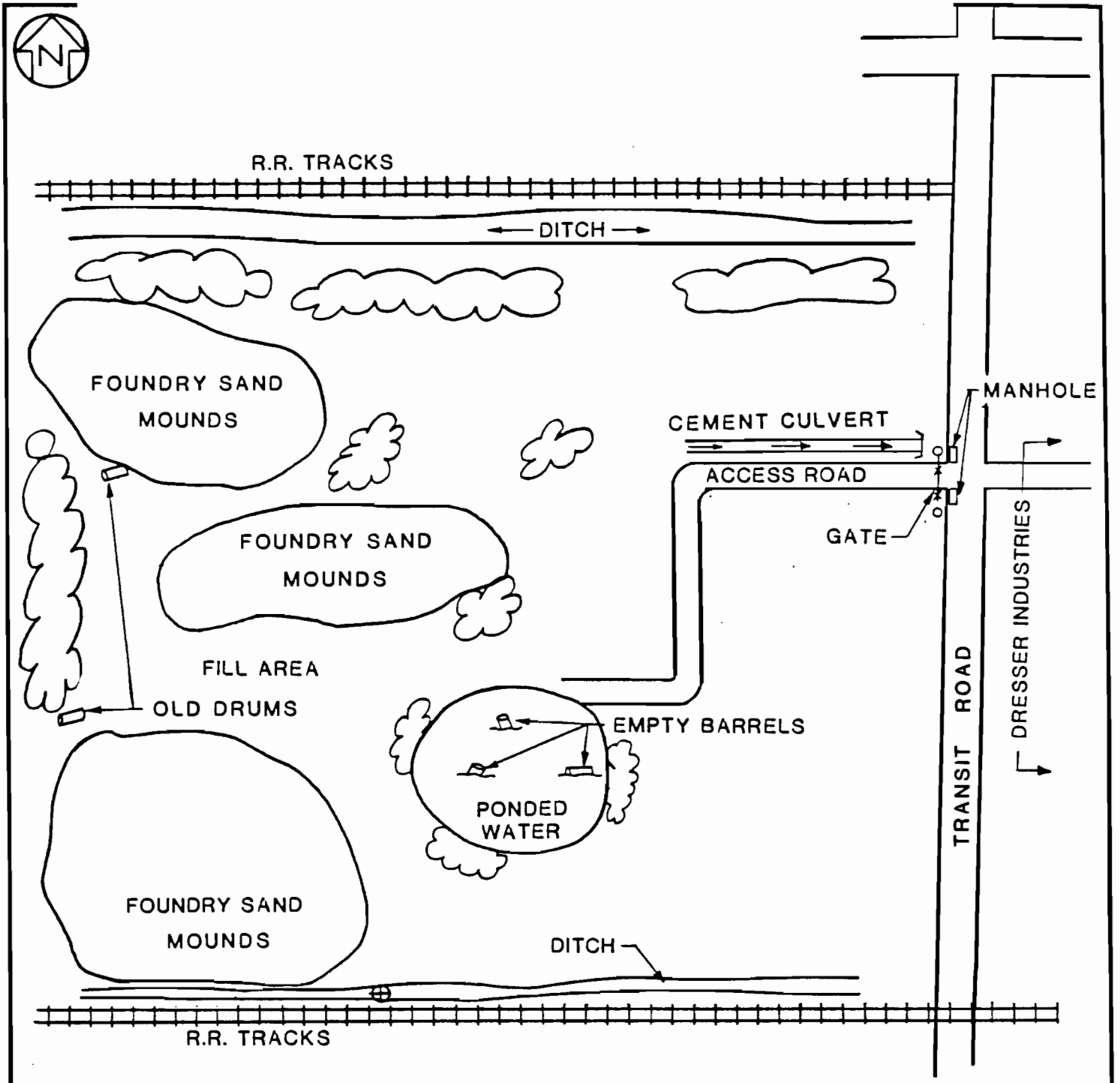
Sdc = 0

A Phase II investigation program has been proposed for the Dresser Industries site which is designed to expand the information base in order to obtain a final HRS score and facilitate the development of possible remedial alternatives.



RECRA RESEARCH INC. BUFFALO, NEW YORK	Scale: 1:24,000			DRESSER INDUSTRIES DEPEW, N.Y. N.Y.S. SUPERFUND PHASE I
		By	Date	
	Dwn.	JEM	12/85	
	Ckd.			
	Ap'vd.			
	Rev.			
	Project No. 5C280404			A FIGURE 1

BRUNING 61160-1



LEGEND

⊕ PREVIOUS SURFACE WATER (R-013-03) AND SEDIMENT SAMPLE (R-013-02)

61160-1

BRUNING

RECRA RESEARCH INC.
BUFFALO, NEW YORK

	By	Date
Scale: NTS		
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Ckd.		
Ap'vd.		
Rev.		

DRESSER INDUSTRIES
DEPEW, NEW YORK
N.Y.S. SUPERFUND
PHASE I

Project No. 5C280404

SITE MAP

A | FIGURE 2

SECTION 2

2.0 PURPOSE

The objective of this Phase I investigation is to prepare a report for the Dresser Industries site that provides a history and preliminary assessment of the site based on a review of available data, assigns a numerical value to the site through the use of the Hazard Ranking System (HRS), and develops a proposed Phase II work plan designed to address the data inadequacies identified during report preparation. The purpose of developing a Phase I report in this manner is to provide an objective assessment of the site and the potential impact it may pose to human health and the environment.

The Phase I objective was met through the following activities:

- o site inspection.
- o collection and review of available data for report preparation and preliminary scoring of the HRS.
- o evaluation of data for completeness and identification of data inadequacies.
- o development of a proposed Phase II work plan to address the data inadequacies identified.

The site inspection is an integral part of the Phase I report preparation and is conducted to confirm actual site conditions. Typically, the site visit is designed to note the general topography and geology of the site, evidence of waste disposal, form of waste disposal, visible signs of contaminant release to the environment (e.g. leachate), access to the site, and location, relative to water supplies, of population centers and sensitive environments such as wetlands.

SECTION 3

3.0 SCOPE OF WORK

In order to permit an accurate preliminary assessment of the Dresser Industries site, Recra Research, Inc. (Recra) personnel conducted an intensive search for literature and information regarding the site and site vicinity. This search included the review of general information available at area colleges and universities pertaining to regional geography, geology, and hydrogeology of the study area. The search also included review of state and county office files as well as personal interviews with parties associated and/or familiar with the site and site vicinity.

Information received from NYSDEC Region 9, located at 600 Delaware Avenue, Buffalo, New York 14202 (telephone 716/847-4600) and the Erie County Department of Environment and Planning located at 95 Franklin Street, Buffalo, New York (telephone 716/847-6370), comprises the majority of the data base utilized in developing this report. Review of these office files provided information related to past operations and site conditions during past inspections.

Recra personnel contacted Mr. Gus Shirelli, project engineer of Dresser Industries, 2 Main Street, Depew, New York (telephone 716/683-6000) who granted permission for Recra to perform a site inspection. Subsequently, inspection of the site was conducted on December 11, 1985 in order to become familiar with the site and identify the present condition of the facility. At the time of the site inspection, the weather was cloudy and the temperature was 35°F. There was no snow cover on the ground during the inspection. No air monitoring was conducted at this time.

SECTION 4

4.0 SITE ASSESSMENT

4.1 Site History

The Dresser Industries landfill, approximately 15 acres in size, is located on the west side of Transit Road directly across the street from the plant. This site has been used for the disposal of foundry sands (some with phenolic binders), slag, bentonite clay sludge, and some lube oil (References 4, 7, and 10). The site is currently used as a staging area prior to removal for disposal elsewhere (References 6 and 13).

Documentation provided by Ferry Concrete Construction Co., Inc., indicates the quantity of waste materials disposed there between 1961 and 1979 (Reference 10). Before 1961, wastes were hauled by Rayburn Smith, Inc., to an unknown site (Reference 7).

4.2 Site Area Surface Features

4.2.1 Topography and Drainage

Topography in the vicinity of the site is flat, lying in the Lake Erie Plain (Reference 15). The landfill area is quite level with a gentle westward slope toward Conrail property. Scajaquada Creek is located approximately 2400 feet to the north and Cayuga Creek is located approximately 2400 feet to the south. Designated wetland LA-7 is located approximately one mile to the southwest, along the south bank of Cayuga Creek (Reference 8). The landfill is not within either a 100 year or 500 year floodplain (Reference 14). No major drainage ditches lead away from the site (Reference 4). Recra personnel observed ponded water in a

wooded area of the site (Figure 2). The access road is sharply sloped toward the Transit Road gate so that most run-off would flow toward the storm sewer on Transit Road (Reference 4).

4.2.2 Environmental Setting

The area surrounding the site is industrial, commercial, and residential. An earlier site inspection report by the Erie County Department of Environment and Planning (DEP), stated the entire area including a section beyond the current Dresser property line had been filled (Reference 4). Recra personnel observed mounds of foundry sand and ponded water (Figure 2). The site is overgrown with grass, weeds, and trees. Rusted, empty drums were scattered throughout the site. No markings were observed on the drums during the Recra site visit.

A locked gate across the access road of Transit Road prevents any vehicle traffic to the site. The property is not fenced, thus allowing easy access to foot traffic and motorbike use.

The nearest residences are within about 1000 feet of the southern portion of the site (Figure 1). All residents in the area of the site use municipal water (Reference 5). Surface water intakes for the Erie County Water Authority are located in Lake Erie approximately ten miles west of the site (Reference 17).

As stated in Section 4.2.1, Cayuga Creek is located approximately 2400 feet south of the site and Scajaquada Creek is located approximately 2400 feet north of the site. Cayuga Creek has been classified as a Class "C" water source and has best usage for fishing and all other uses except as

a source of water supply for drinking, culinary or food processing purposes and primary contract recreation (References 11 and 12). Scajaquada Creek has been classified as a Class B water source with best usage for primary contact recreation and any other uses except as a source of water supply for drinking, culinary, or food processing purposes (References 11 and 12). New York State regulated wetland LA-7 is located along the south bank of Cayuga Creek (Reference 8). There are no critical habitats of endangered species in the vicinity of the Dresser Industries site (Reference 8).

4.3 Site Hydrogeology

4.3.1 Geology

The site is underlain by the Marcellus Formation of the middle Devonian Hamilton Group (Reference 15). In Erie County, the Marcellus is represented by the Oatka Creek Shale member which consists of black, dense fissile shale with some beds of gray shale and several concretionary layers (Reference 15). This unit ranges in thickness from 30 to 55 feet and dips generally southward at approximately 40 feet/mile. The shale is dissected by both vertical and bedding-plane joints which extend into the shale at depth (Reference 16). These joints are thin and widely spaced. LaSala reported a discontinuous fracture zone that follows the upper surface of the shale (Reference 16). Depth to bedrock was reported to be approximately 8 feet below ground surface (Reference 13). Although this may be generally true for the region, no specific information is available as to depth to bedrock at the site.

4.3.2 Soils

Soils within the site boundaries have been classified as Urban Land-Churchvile, Nearly Level (Reference 2). The Urban portion of this unit is covered by residential, commercial, or industrial developments. In these areas the underlying soil layers have been disturbed or removed. Churchill soils are clayey, glacio-lacustrine sediments that mantle loamy glacial till deposits at depths of 20 to 40 inches. The Churchill soils are somewhat poorly drained and have a seasonal high water table perched in the upper part of the subsoil during excessive wet periods. Permeability of these soils is slow to very slow ranging from $<10^{-5}$ to $\geq 10^{-7}$ cm/sec (Reference 3, Table 2).

4.3.3 Groundwater

The first encountered water bearing zone occurs in the unconsolidated glacial deposits overlying the shale (Reference 16). There is a seasonal perched water table less than 2.0 feet below ground surface (Reference 4). The initial water table lies within the shale only where the overburden is absent or thin. Groundwater occurrence within the bedrock at the site is unknown. However, based on the nature of the shale bedrock, groundwater would be expected to move along the joints, bedding planes, and especially fracture zones. Depth to bedrock has been estimated to be approximately eight feet below ground surface (Reference 13). There are no groundwater wells being used within a three mile radius of the site (References 5 and 16).

4.4 Previous Sampling and Analysis

4.4.1 Groundwater Quality Data

There is no groundwater quality data available for this site.

4.4.2 Surface Water Quality Data

A surface water sample (R-013-03) was collected on December 9, 1981 from a drainage ditch along the south edge of the fill area and analyzed for phenol (Figure 2). The phenol concentration in the sample was below the detection limits (Reference 13).

4.4.3 Air Quality Data

There is no air quality data available for this site.

4.4.4 Other Analytical Data

A sediment sample (R-013-02) was collected at the same location and time as the surface water sample (Figure 2). The analytical results indicated a phenol concentration of 9.3 mg/l in the sample (Reference 13).

5.0 PRELIMINARY APPLICATION OF THE HAZARD RANKING SYSTEM

5.1 Narrative

The Dresser Industries site is located on the west side of Transit Road directly across the street from Dresser Transportation Division, at 2 Main Street, Depew, Erie County, New York. The site covers an area approximately 15 acres in size. The site is owned by Dresser Industries of Dallas, Texas (References 4 and 7).

Records of waste disposal from 1961 to May 1, 1979 were provided by Ferry Concrete Construction Co., Inc. (Reference 10). The wastes include foundry sands (some with phenolics), slag, and bentonite clay sludge. The site is currently used as a staging area prior to removal for disposal elsewhere (References 6 and 13).

An investigation was conducted by the NYSDEC, Region 9 office on December 9, 1981 (Reference 13). A surface water and sediment sample were collected by the NYSDEC and analyzed for phenol by Recra Research, Inc. Phenol concentrations were below detection limits in the water sample and 9.3 ppm in the sediment sample (Reference 13). A site inspection by Recra personnel was performed on December 11, 1985. Mounds of foundry sand, rusted drums, and ponded water were observed at that time. No snow cover existed at the time of the Recra site inspection.

The site is located midway between Cayuga Creek and Scajaquada Creek. A NYS regulated wetland, which borders Cayuga Creek, is located approximately one mile southwest of the site (Reference 8). A seasonal water table is perched in the upper subsoil for the area (Reference 2).

Groundwater may also occur at the bedrock-overburden interface (Reference 16).

The areas immediately adjoining the site are zoned industrial and commercial (Reference 4). Population within three miles of the site is greater than 20,000 (Reference 18).

5.2 HRS WORKSHEET

Facility name: Dresser Industries, Inc.

Location: 2 Main Street, Depew, New York

EPA Region: II

Person(s) in charge of the facility: Gus Shirelli, Project Engineer

Name of Reviewer: Recra Research, Inc. Date: January 10, 1986

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.)

The disposal site is 15 acres in size and located across Transit Road from plant facilities. The site has been used for the disposal of foundry sand, some with phenolic binders. Quantities of slag, bentonite clay sludge and some lube oils are reportedly present at this site. Foundry sands were also stored on the site prior to removal for disposal elsewhere.

Scores: S_M = 0 (S_{gw} = 0 S_{sw} = 0 S_a = 0)

S_{FE} = N/A

S_{DC} = 0

FIGURE 1
HRS COVER SHEET

Ground Water Route Work Sheet						
Rating Factor	Assigned Value (Circle One)		Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0)	45	1	0	45	3.1
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	1	3	
Physical State	0 1 2 (3)		1	3	3	
Total Route Characteristics Score				12	15	
3 Containment	0 1 2 (3)		1	3	3	3.3
4 Waste Characteristics						3.4
Toxicity/Persistence	(0) 3 6 9 12 15 18		1	0	18	
Hazardous Waste Quantity	(0) 1 2 3 4 5 6 7 8		1	0	8	
Total Waste Characteristics Score				0	26	
5 Targets						3.5
Ground Water Use	(0) 1 2 3		3	0	9	
Distance to Nearest Well/Population Served	(0) 4 6 8 10 12 16 18 20 24 30 32 35 40		1	0	40	
Total Targets Score				0	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				0	57,330	
7 Divide line 6 by 57,330 and multiply by 100			S_{gw} = 0			

FIGURE 2
GROUND WATER ROUTE WORK SHEET

Surface Water Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	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	4	6	
Physical State	0 1 (2) 3	1	2	3	
Total Route Characteristics Score			8	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	0	18	
Hazardous Waste Quantity	(0) 1 2 3 4 5 6 7 8	1	0	8	
Total Waste Characteristics Score			0	26	
5 Targets					4.5
Surface Water Use	0 1 (2) 3	3	6	9	
Distance to a Sensitive Environment	0 (1) 2 3	2	2	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			8	55	
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	64,350	
7 Divide line 6 by 64,350 and multiply by 100		S_{sw} =	0		

FIGURE 7
SURFACE WATER ROUTE WORK SHEET

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_a = 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	0	3	
Toxicity	(0) 1 2 3	3	0	9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 (8)	1	8	8	
	Total Waste Characteristics Score		8	20	
[3] Targets					5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 (30)	1	30	30	
Distance to Sensitive Environment	0 (1) 2 3	2	2	6	
Land Use	0 1 2 (3)	1	3	3	
	Total Targets Score		35	39	
[4] Multiply [1] x [2] x [3]			0	35,100	
[5] Divide line [4] by 35,100 and multiply by 100			S_a = 0		

FIGURE 9
AIR ROUTE WORK SHEET

	S	S^2
Groundwater Route Score (S_{gw})	0	0
Surface Water Route Score (S_{sw})	0	0
Air Route Score (S_a)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		0
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		0
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} \,/\, 1.73 = S_M =$		0

FIGURE 10
WORKSHEET FOR COMPUTING S_M

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	15	15	8.3
[4] Waste Characteristics Toxicity	(0) 1 2 3	5	0	15	8.4
[5] Targets					8.5
Population Within a 1-Mile Radius	0 1 2 3 4 (5)	4	20	20	
Distance to a Critical Habitat	0 (1) 2 3	4	4	12	
	Total Targets Score		24	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		

FIGURE 12
DIRECT CONTACT WORK SHEET

Fire and Explosion Work Sheet						
Rating Factor	Assigned Value (Circle One)	Multi-plier	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 6 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 4 by 1,440 and multiply by 100		S_{FE} = N/A				

FIGURE 11
FIRE AND EXPLOSION WORK SHEET

June 28, 1982

5.3 HRS DOCUMENTATION RECORDS

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: Dresser Industries

LOCATION: 2 Main Street, Depew, New York

GROUND WATER ROUTE

1 OBSERVED RELEASE

Contaminants detected (5 maximum):

Groundwater not sampled at this site

Rationale for attributing the contaminants to the facility:

N/A

* * *

2 ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifers(s) of concern:

Fracture zone at top of Marcellus Shale and overburden directly above bedrock

(Ref. 16)

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

8 - 10 feet

(Ref. 13)

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

Unknown

Net Precipitation

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

36 inches

(Ref. 3, Fig. 5)

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

27 inches

(Ref. 3, Fig. 4)

Net precipitation (subtract the above figures):

9.0 inches

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Urban Land - Churchville. Somewhat poorly drained, clayey soils that mantle loamy glacial till deposits at depths of 20 to 40 inches

(Ref. 2)

Permeability associated with soil type:

$<10^{-5} \geq 10^{-7}$ cm/sec.

(Ref. 3, Table 2)

Physical State

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

Solid (foundry sand)

(Ref. 6)

* * *

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Piles of uncovered, waste unstablized and no liner

(Fig. 2 and Ref. 4)

Method with highest score:

Method as qualified above

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

Foundry sands, some with phenolic binders (ammonia and cyanide)

(Ref. 6 and 7)

Compound with highest score:

Phenol
Cyanide
For HRS scoring purposes, the presence of hazardous wastes has not been confirmed

(Ref. 3, Table 4)

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):

47,682 cu. yds. of foundry sands; the presence of hazardous wastes in the foundry sands has not been confirmed

(Ref. 6 & 10)

Basis of estimating and/or computing waste quantity:

Ferry Concrete Const. Company Records

(Ref. 10)

* * *

5 TARGETS

Ground Water Use

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

Not used (Ref. 5, 16 and 17)

Distance to Nearest Well

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

N/A

Distance to above well or building:

N/A

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:

None (Ref. 16 and 17)

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

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

None

SURFACE WATER ROUTE

1 OBSERVED RELEASE

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

None (Ref. 9)

Rationale for attributing the contaminants to the facility:

N/A

* * *

2 ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

<1.0% (Fig. 1)

Name/description of nearest downslope surface water:

The site is located approximately 2000 feet from both Scajaquada and Cayuga Creeks.

(Ref. 4, USGS quad map)

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

<1.0%

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

No (Recra site visit, 12/11/85)

Is the facility completely surrounded by areas of higher elevation?

No (Ref. 4, USGS quad map)

1-Year 24-Hour Rainfall in Inches

2.1 inches

(Ref. 3, Fig. 8)

Distance to Nearest Downslope Surface Water

Distance from site to either Scajaquada Creek or Cayuga Creek is 2100 ft.

Physical State of Waste

Solid (foundry sand)

(Ref. 6)

* * *

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Landfill

Method with highest score:

Landfill not covered and no diversion system present

(Ref. 3, Table 9)

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated

Foundry sands, some with phenolic binders (ammonia and cyanide)

(Ref. 6 and 7)

Compound with highest score:

Phenol
Cyanide
For HRS scoring purposes, the presence of hazardous wastes has not been confirmed.

(Ref. 3, Table 4)

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):

47,682 cu. yards of foundry sands; the presence of hazardous wastes in the foundry sands has not been confirmed

(Ref. 6 and 10)

Basis of estimating and/or computing waste quantity:

Ferry Concrete Construction Co. records

(Ref. 6 and 10)

* * *

5 TARGETS

Surface Water Use

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

Secondary contact recreation including casual fishing and wading

(Ref. 19)

Is there tidal influence?

No

Distance to a Sensitive Environment

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

N/A

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

4000 feet overland to New York State regulated wetland LA-7

(Ref. 8)

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

None in area of site

(Ref. 8)

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:

N/A

(Ref. 17)

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

N/A

Total population served:

N/A

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:

No analytical data available; HNU not used during Recra site visit (12/11/85)

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:

None of the reported substances possess significant reactivity potential

Most incompatible pair of compounds:

None known

Toxicity

Most toxic compound:

Phenol

(Ref. 3, Table 4)

Hazardous Waste Quantity

Total quantity of hazardous waste:

47,682 cu. yards of foundry sands; presence of hazardous waste in foundry sands not confirmed

(Ref. 6 and 10)

Basis of estimating and/or computing waste quantity:

Ferry Concrete Construction Co. records

(Ref. 10)

* * *

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 people

(Ref. 18)

Distance to a Sensitive Environment

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

None in area

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

4000 feet overland to New York State regulated wetland LA-7

(Ref. 8)

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

None in area

(Ref. 8)

Land Use

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

Immediately adjacent to site

(Ref. 4, USGS quad map)

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

None in area

(Ref. 4, USGS quad map)

Distance to residential area, if 2 miles or less:

Within 1,000 ft.

(Ref. 4, USGS quad map)

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

N/A

(Ref. 4, USGS quad map)

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

N/A

(Ref. 4, USGS quad map)

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

Unknown

FIRE AND EXPLOSION

1 CONTAINMENT

Hazardous substances present:

None confirmed

Type of containment, if applicable:

No containment

(Recra site visit)

* * *

2 WASTE CHARACTERISTICS

Direct Evidence

Type of instrument and measurements:

N/A

Ignitability

Compound used:

N/A

Reactivity

Most reactive compound:

N/A

Incompatibility

Most incompatible pair of compounds:

N/A

* * *

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility:

47,682 cubic yards of foundry sands; the presence of hazardous wastes in the foundry sands has not been confirmed

(Ref. 6 and 10)

Basis of estimating and/or computing waste quantity:

Ferry Concrete Construction Company records

(Ref. 10)

* * *

3 TARGETS

Distance to Nearest Population

Less than 1000 feet

(Ref. 4, USGS quad map)

Distance to Nearest Building

Less than 1000 feet

(Ref. 4, USGS quad map)

Distance to Sensitive Environment

Distance to wetlands:

4000 feet overland to New York State regulated wetland LA-7

(Ref. 8)

Distance to critical habitat:

N/A

(Ref. 8)

Land Use

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

Immediately adjacent to site

(Ref. 4, USGS quad map)

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

N/A

(Ref. 4, USGS quad map)

Distance to residential area, if 2 miles or less:

Less than 1000 feet

(Ref. 4, USGS quad map)

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

N/A

(Ref. 4, USGS quad map)

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

N/A

(Ref. 4, USGS quad map)

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

Unknown

Population Within 2-Mile Radius

Greater than 10,000

(Ref. 18)

Buildings Within 2-Mile Radius

Greater than 500

(Ref. 4, USGS quad map)

DIRECT CONTACT

1 OBSERVED INCIDENT

Date, location, and pertinent details of incident:

No incidents reported

* * *

2 ACCESSIBILITY

Describe type of barrier(s):

Locked gate across access road off of Transit Road restricts vehicular entry to site. Access to the site is easily gained on foot or by recreational vehicles such as motorcycles

(Ref. 4 and Recra Site Visit (12/11/85)

* * *

3 CONTAINMENT

Type of containment, if applicable:

No containment

(Recra site visit)

* * *

4 WASTE CHARACTERISTICS

Toxicity

Compounds evaluated:

Foundry sands, some with phenolic binders (cyanide and ammonia)

(Ref. 6 and 7)

Compound with highest score:

Phenol
Cyanide

* * *

For HRS scoring purposes, the presence of hazardous wastes has not been confirmed

(Ref. 3, Table 4)

5 TARGETS

Population within one-mile radius

Greater than 10,000

(Ref. 18)

Distance to critical habitat (of endangered species)

N/A

(Ref. 8)

5.4 EPA PRELIMINARY ASSESSMENT
(Form 2070-12)

EPA

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

I. IDENTIFICATION
01 STATE: NY | 02 SITE NUMBER: 915064

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
DRESSER INDUSTRIES	2 MAIN STREET				
03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
DEPEW	NY	14043	ERIE		
09 COORDINATES LATITUDE: 42°54'26.0"	LONGITUDE: 078°41'54.4"				

10 DIRECTIONS TO SITE (Starting from nearest public road)
WALDEN AVENUE EAST FROM BUFFALO TO DEPEW, RIGHT ONTO TRANSIT ROAD CROSS RAILROAD TRACKS, DRESSER INDUSTRIES ON RIGHT

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)			
DRESSER INDUSTRIES	2 MAIN STREET			
03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER	
DEPEW	NY	14043	(716) 683-6000	
07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)			
SAME				
09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER	
			( )	

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 ☐ NO DATE 12/10/84 (MONTH DAY YEAR)

BY (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR ☐ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☒ F. OTHER: ERIE COUNTY DEPT ENVIR AND PLANNING (Specify)
CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one)
☐ A. ACTIVE ☒ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION
~1940 (BEGINNING YEAR) ~1977 (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
FOUNDRY SANDS
BENTONITE CLAY
STEEL FINES
IRON OXIDES
LUBE OIL
(Erie Co. Dept. of Env. and Planning, 1984)

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
UNKNOWN

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
THOMAS P. CONNARE	RECRA RESEARCH INC.			(716) 838-6200
04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Kermit Studley		Recra	(716) 838-6200	___/___/___ (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	915064

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 47,682
NO OF DRUMS _____

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

UNKNOWN

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
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
	Phenolic binders (NOT CONFIRMED)				

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)*

Ferry Concrete Construction Co. records

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	115064

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

Unknown

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

Water samples were collected from a drainage ditch along south edge of fill area. Trace levels of phenol were detected (Ref 6 & 9)

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

N/A

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

N/A

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

Unknown-Site is easily accessible

01 ☐ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) 04 NARRATIVE DESCRIPTION

Soil samples were collected from a drainage ditch along south edge of fill area. Levels of phenol in samples ranged from 8.4 to 9.3 ppm. (Ref 6 & 9)

01 ☐ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

Unknown - All water used in area is municipal supply (Ref 5)

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

None documented

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

None documented

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	915064

II. HAZARDOUS CONDITIONS AND INCIDENTS *(Continued)*

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

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

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

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

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

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

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Presence of drums not accessible for

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
N/A

III. TOTAL POPULATION POTENTIALLY AFFECTED: Unknown

IV. COMMENTS

N/A

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

NYSDEC Region 9; Erie Co. Dept. of Environmental Planning; Analytic results from Recra Research, Inc; letter dated 9 municipal water use

5.5 EPA SITE INSPECTION REPORT
(Form 2070-13)

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	915064

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
DRESSER INDUSTRIES	2 MAIN STREET

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
DEPEW	NY	14043	ERIE		

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
42° 54' 26"	078° 41' 54"	☒ A. PRIVATE ☐ B. FEDERAL _____ ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER _____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION (MONTH DAY YEAR)	02 SITE STATUS	03 YEARS OF OPERATION (BEGINNING YEAR / ENDING YEAR)
12/11/85	☐ ACTIVE ☒ INACTIVE	~1940 / ~1977 ___ 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 Recra Research Inc. (Name of firm) ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Thomas Connare	Environmental Scientist	Recra	(716) 838-6200
09 OTHER INSPECTORS	**10 TITLE**	**11 ORGANIZATION**	**12 TELEPHONE NO.**
Sheldon S. Nazik	Environmental Scientist	Recra	(716) 838-6200
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Mr. Gus Shirelli	Project Engineer	2 Main St., Depew, NY 14043	(716) 683-6000
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	11:20 AM	Cloudy, 35°F

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
THOMAS P. CONNARE	RECRA RESEARCH INC	(716) 838-6200

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE (MONTH DAY YEAR)
Kermit Stidley		Recra	(716) 838-6200	1/13/86

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	915064

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [X] 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: 47,682
- NO. OF DRUMS

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

Unknown

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
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
	Phenolic binders (Not confirmed)				

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)

Ferry Concrete Construction Co. records

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	915064

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

Unknown

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

Water samples were collected from a drainage ditch along south edge of fill area. Trace levels of phenol were detected. (Ref. 6,9)

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

N/A

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

N/A

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

Unknown-Site is easily accessible

01 ☐ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) 04 NARRATIVE DESCRIPTION

Soil samples were collected from a drainage ditch along south edge of fill area. Soil analysis showed phenol concentrations ranging between 2.6 and 9.3 ppm (Ref 6,9)

01 ☐ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

Unknown All water used in area is municipal supply. (Ref. 5)

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

None documented

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

None documented

EPA

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

I. IDENTIFICATION
01 STATE: NY | 02 SITE NUMBER: 915064

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

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

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

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

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

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

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

01 ☐ P ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Presence of barrels not accounted for.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
N/A

III. TOTAL POPULATION POTENTIALLY AFFECTED: Unknown

IV. COMMENTS
N/A

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)
NYSDEC Region 9; Erie Co. Dept. of Env. and Planning; Analytic results from Recra Research, Inc.; letter documenting municipal water use

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	9150624

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)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☒ J. NONE				PLANT [illegible]

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)		

04 TREATMENT (Check all that apply)

- ☐ A. INCINERATION
- ☐ 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

16 (Acres)

07 COMMENTS

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

Drums appeared empty and completely rusted.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE ☒ YES ☐ NO

02 COMMENTS

site is easily accessible.

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

Ferry Concrete Constr. Co. records
Reera site visit

EPA

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

I. IDENTIFICATION
01 STATE: NY | 02 SITE NUMBER: 915064

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A. X	B. ☐
NON-COMMUNITY	C. ☐	D. ☐

02 STATUS: N/A

ENDANGERED	AFFECTED	MONITORED
A. ☐	B. ☐	C. ☐
D. ☐	E. ☐	F. ☐

03 DISTANCE TO SITE: N/A
A _____ (mi)
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) X D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER: 0
03 DISTANCE TO NEAREST DRINKING WATER WELL: N/A (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
Unknown (ft)	Unknown	Unknown (ft)	Unknown (gpd)	☐ YES ☐ NO

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

10 RECHARGE AREA: ☐ YES ☐ NO — COMMENTS:

11 DISCHARGE AREA: X YES ☐ NO — COMMENTS: G.W. may discharge to north (Scajaquada Cr) or to south (Cayuga Cr.)

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

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

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME	AFFECTED	DISTANCE TO SITE
Scajaquada Creek	☐	~100 ft
Cayuga Creek	☐	~100 ft
	☐	(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. _____ NO. OF PERSONS	B. _____ NO. OF PERSONS	C. ~20,000 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION: ~100 ft

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE: _____

04 DISTANCE TO NEAREST OFF-SITE BUILDING: ~500 ft

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))

Population of Depew is approximately 20,000.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
N.Y.	9K064

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	
8-10 (ft)	Unknown (ft)	Unknown	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE		
		SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
9.0 (in)	2.1 (in)	<1.0 %	westerly	<1.0 %

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. _____ (mi)	B. ~1.0 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

N/A (mi)

ENDANGERED SPECIES: _____

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS PRIME AG LAND	AGRICULTURAL LANDS AG LAND
A. ~500ft (mi)	B. 500ft (mi)	C. _____ (mi)	D. _____ (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The site is nearly level with a gentle slope toward the west to Conrail property

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

Erie Co Dept. of Env. and Planning, USGS topographic map-Lancaster, N.Y. 1965. Uncontrolled Hazardous Waste Site Ranking System-User's manual, draft; NYSDEC wetlands and critical habitat documentation; floodplain information through FIRM map

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	915064

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER		NO SAMPLES TAKEN	
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL			
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
	NO MEASUREMENTS TAKEN

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☐ GROUND ☒ AERIAL

02 IN CUSTODY OF ERIE COUNTY DEPT ENVIR. AND PLANNING
(Name of organization or individual)

03 MAPS ☐ YES ☒ NO

04 LOCATION OF MAPS

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

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

Analytical Results from Recra Research, Inc. Jan. 28, 1982

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	915064

II. CURRENT OWNER(S) / PARENT COMPANY (If applicable)

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
Dresser Industries		Dresser Industries	
03 STREET ADDRESS (P O Box, RFD #, etc.)	**04 SIC CODE**	**10 STREET ADDRESS** (P O Box, RFD #, etc.)	**11 SIC CODE**
2 Main St.		PO Box 718	
05 CITY / 06 STATE / 07 ZIP CODE		**12 CITY / 13 STATE / 14 ZIP CODE**	
Depew, N.Y. 14043		Dallas, Tx 75221	

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
03 STREET ADDRESS (P O Box, RFD #, etc.)	**04 SIC CODE**	**10 STREET ADDRESS** (P O Box, RFD #, etc.)	**11 SIC CODE**
05 CITY / 06 STATE / 07 ZIP CODE		**12 CITY / 13 STATE / 14 ZIP CODE**	

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
03 STREET ADDRESS (P O Box, RFD #, etc.)	**04 SIC CODE**	**10 STREET ADDRESS** (P.O. Box, RFD #, etc.)	**11 SIC CODE**
05 CITY / 06 STATE / 07 ZIP CODE		**12 CITY / 13 STATE / 14 ZIP CODE**	

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
03 STREET ADDRESS (P O Box, RFD #, etc.)	**04 SIC CODE**	**10 STREET ADDRESS** (P O Box, RFD #, etc.)	**11 SIC CODE**
05 CITY / 06 STATE / 07 ZIP CODE		**12 CITY / 13 STATE / 14 ZIP CODE**	

III. PREVIOUS OWNER(S) (List most recent first) / IV. REALTY OWNER(S) (If applicable; list most recent first)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
Symington-Wayne Co.			
03 STREET ADDRESS (P O Box, RFD #, etc.)	**04 SIC CODE**	**03 STREET ADDRESS** (P O Box, RFD #, etc.)	**04 SIC CODE**
Same			
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
Symington-Gould Co			
03 STREET ADDRESS (P O Box, RFD #, etc.)	**04 SIC CODE**	**03 STREET ADDRESS** (P O Box, RFD #, etc.)	**04 SIC CODE**
Same			
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
Gould Coupler Company			
03 STREET ADDRESS (P O Box, RFD #, etc.)	**04 SIC CODE**	**03 STREET ADDRESS** (P O Box, RFD #, etc.)	**04 SIC CODE**
Same			
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

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	915064

II. CURRENT OPERATOR *(Provide if different from owner)*

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER

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)*

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

PREVIOUS OPERATORS' PARENT COMPANIES *(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

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

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

14 CITY	15 STATE	16 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

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

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

14 CITY	15 STATE	16 ZIP CODE

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

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EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	915064

II. PAST RESPONSE ACTIVITIES

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

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

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

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

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

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

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

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

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

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

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

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

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

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

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

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

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

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	915064

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
Dresser Industries	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
[illegible] Main St	

05 CITY	06 STATE	07 ZIP CODE
Depew	NY	14043

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
Ferry Concrete Const. Co.			

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
3179 Walden Ave.			

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
Depew	NY	14043			

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
Rayburn Smith, Inc.			

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

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)*

NYS DEC files; Interagency Task Force on Hazardous Wastes, Draft, Erie and Niagara Co's, N.Y.

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	915064

II PAST RESPONSE ACTIVITIES (Continued)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	9150.4

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☒ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

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

SECTION 6

6.0 ADEQUACY OF AVAILABLE DATA

Based on the available information, the Dresser Industries site was found to have a migration potential (Sm) score of 0. This Sm score was based on the information acquired through a review of available literature. During the completion of the HRS, several data inadequacies were encountered. These inadequacies include:

- o waste characterization.
- o amounts and types of waste disposed before 1961.
- o presence or absence of buried drums.
- o subsurface information including depth to the water table and/or aquifer of concern, permeability, groundwater quality and groundwater flow direction.
- o additional sampling of site soils and surface water.
- o lack of air quality information.

SECTION 7

7.0 PROPOSED PHASE II WORK PLAN

This section outlines the recommended procedures and technical means by which a Phase II investigation may be conducted. Any work plan which is submitted to NYSDEC for conducting a Phase II type study must follow the guidelines established by NYSDEC and subsequently be approved by NYSDEC.

7.1 Project Objectives

The purpose and objective of this proposed Phase II investigation is to obtain a final HRS score for the site as defined under the auspices of the New York State Superfund program, and assess environmental and potential health concerns regarding past disposal practices. The site investigation proposed herein is designed to generate data for the above identified tasks. The scope of this investigation may include:

- o waste characterization
- o waste record review
- o air monitoring
- o surface geophysics
- o test bore drilling
- o monitoring well installation
- o in-situ permeability testing
- o groundwater, leachate stream, surface water, and surface sediment sampling
- o surveying and mapping
- o chemical analytical testing
- o laboratory geotechnical testing
- o groundwater well survey

- o data analysis and reporting
- o characterizing the physical and chemical nature of the site
- o scoring the site under the Hazardous Ranking System
- o reporting.

7.2 Scope of Work

The presence of hazardous wastes at the Dresser Industries site has not been confirmed through existing historical documentation. Although foundry sands have been disposed of on site, there has been no documentation of contaminants in the sands. Prior to the implementation of a Phase II work plan that would include test borings, monitoring well installation, and groundwater sampling, waste characterization of the foundry sands at the site should be performed. In addition, a geophysical survey should be conducted to indicate the possible presence of buried drums, to identify the limits of the fill area, and to define stratigraphy beneath the site.

If warranted by the results of the waste characterization and/or the geophysical survey, consideration should be given to implementation of the Phase II work plan described in Sections 7.2.3 through 7.2.5 of this report.

7.2.1 Waste Characterization

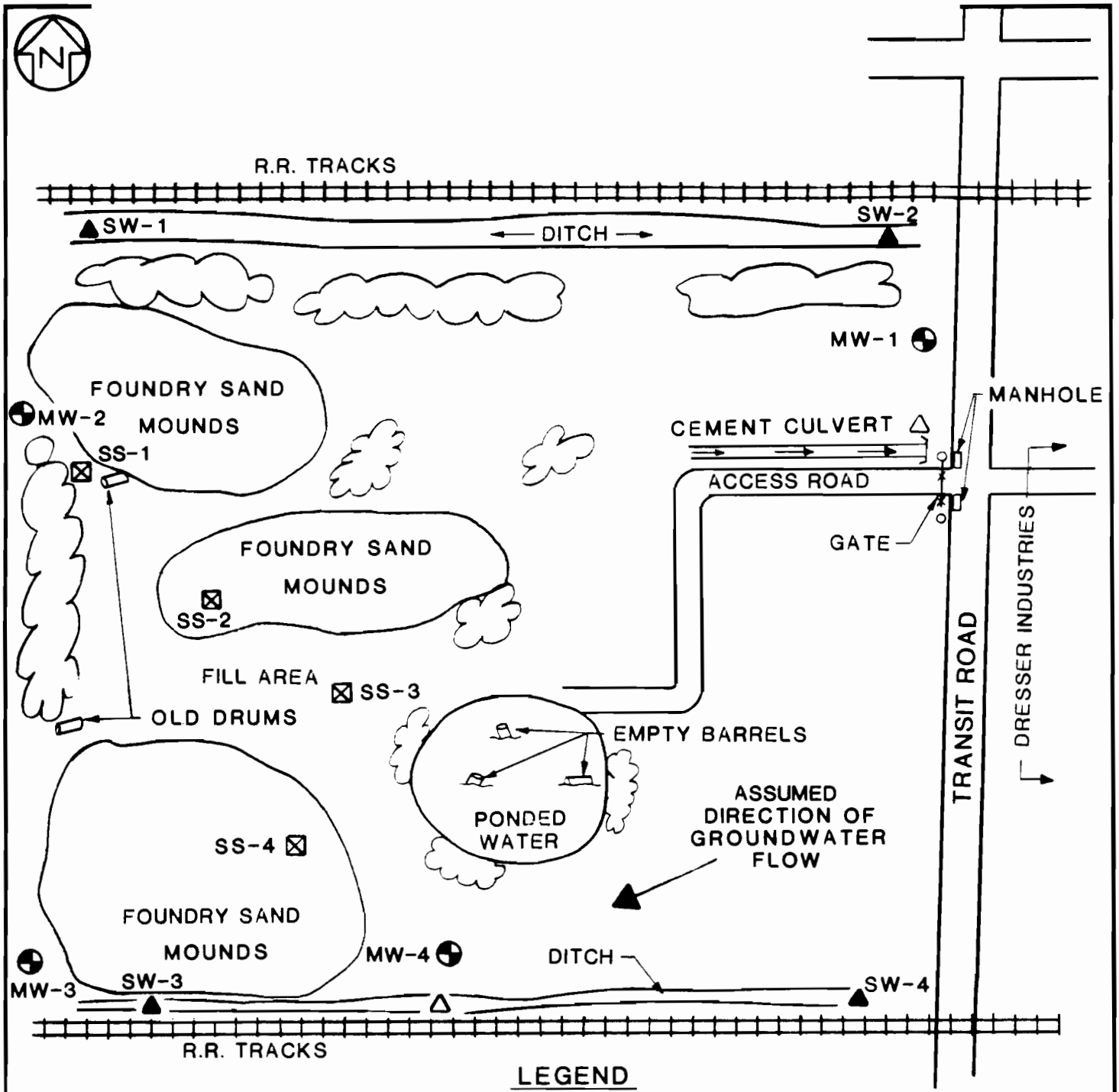
Four waste samples will be collected by hand auger from the upper six inches of the fill area at the locations shown on Figure 3. Samples will be placed in pre-cleaned, teflon-lined, screw cap glass jars and delivered under chain of custody to the Recra Environmental Laboratories in

Tonawanda, New York. Each sample will be analyzed for priority pollutant metals (Contract Laboratory Protocol), cyanide, ammonia and total recoverable phenolics. A composite of the four waste samples will be analyzed for priority pollutant organics (Contract Laboratory Protocol). GC/MS procedures will include the identification and quantification of all peaks ten percent or greater than the nearest calibrating standard. If any of the analyses indicate a high metals content, an EP toxicity test will be run on the sample with the highest metal concentration.

7.2.2 Geophysical Survey

The purpose of the geophysical survey at the Dresser Industries site is to identify buried drums, if present, define the stratigraphy beneath the site, and establish the lateral limits of the fill area. The geophysical techniques that will be employed during the investigation will include terrain conductivity, magnetometer and seismic refraction.

Terrain conductivity will be used to determine the lateral extent of the fill area and to detect metallic objects such as buried drums and tanks, if present. Readings will be obtained using a Geonics Model EM-31 conductivity meter. A twenty-meter grid system will be established over the site using a Brunton compass and tape. The size of the grid system may change depending on the actual conditions encountered at the site.



LEGEND

- △ PREVIOUS SURFACE WATER AND SEDIMENT SAMPLE
- ▲ SW-1 PROPOSED SURFACE WATER AND SEDIMENT SAMPLING POINT
- ◔ MW-1 PROPOSED MONITORING WELL LOCATION
- ⊠ SS-1 PROPOSED WASTE SAMPLING POINT

Scale: NTS			
	By	Date	
Dwn.	MS	1/3/86	
Ckd.			
Ap'vd.			
Rev.			
DRESSER INDUSTRIES DEPEW, NEW YORK N.Y.S. SUPERFUND PHASE I			SITE MAP
Project No. 5C280404		A	FIGURE 3

61160-1

BRUNING

The magnetometer survey will be used to more clearly define the presence or absence of buried metallic objects such as drums. The survey will be performed using a proton magnetometer, an instrument that measures changes in the shallow subsurface magnetic field.

Seismic refraction will be employed to develop a preliminary delineation of stratigraphy beneath the site. This technique will be used to map depths to specific horizons such as bedrock, clay layers, and possibly the water table.

7.2.3 Test Borings

If warranted by the results of the waste characterization and/or geophysical survey, four test borings will be advanced at the site, one upgradient and three downgradient of the former landfill area (Figure 3). Based on a field review of the site, tentative locations for the borings will be selected by NYSDEC. Recommendations for the final locations will be based on the results of the geophysical survey. Final locations will be determined by Recra upon review of the geophysical data and interpretations.

Prior to initiating drilling activities, the drilling rig, augers, rods, appurtenant equipment, well pipe and screens will be cleaned with steam. This cleaning procedure will also be used between each boring. These activities will be performed in a designated on-site cleaning area. Throughout the cleaning processes, direct contact between equipment and the ground surface will be avoided. Plastic sheeting and/or support structures will be used.

Test borings will be advanced with hollow stem augers, driven by truck mounted drilling equipment. During the drilling, an HNU photoionization detector will be used to monitor the gases exiting the hole. Auger cuttings will be contained and removed off-site only if readings from the HNU photoionizer are recorded at 5 ppm or above. Soil samples will be collected uisng a two inch outside diameter split-barrel sampler advanced in accordance with the standard pentration test procedures (ASTM D-1586). The sample barrel(s) will be cleaned prior to each use by the following procedure:

- o initially cleaned of all foreign matter
- o washed with a detergent and water mixture
- o rinsed with potable water
- o washed with acetone
- o rinsed with distilled water
- o allowed to air dry.

An HNU detector will be used to monitor the gases from each sample as the split barrel sampler is opened. All samples will be placed in organically pre-cleaned, teflon-lined screw cap glass jars. The cleaning of the sample jars will include:

- o soap wash
- o tap water rinse
- o acetone rinse (pesticide grade)
- o rinse with copious quantities of deionized water (at least six rinsings) until no residual acetone is detected.

Samples will be delivered daily, under chain of custody control, to the Recra Environmental Laboratories in Tonawanda, New York. A composite soil sample from each boring will be analyzed for priority pollutant metals and organics (Contract Laboratory Protocol), cyanide, ammonia, and total recoverable phenolics. GC/MS procedures will include the identification and quantification of all peaks ten percent or greater than the nearest calibrating standard.

Split-spoon samples will be taken every five feet until the water table is reached unless there is a change in geologic material or overlying waste material is discovered through visual or HNU detection. Once encountered, continuous split-spoon sampling will be conducted through the shallow water bearing zone. Geologic classification of split-spoon samples will be performed and boring logs maintained by a Recra geologist.

At a minimum, each boring log will include:

- o date, test hole identification, and project identification
- o name of individual developing the log
- o name of driller and assistant(s)
- o drill make and model, auger size
- o identification of alternative drilling methods used and justification thereof (e.g. rotary drilling with a specific bit type to remove a sand plug from within the hollow stem augers)
- o depths recorded in feet and fractions thereof (tenths or inches), referenced to ground surface
- o standard penetration test (ASTM D-1586) blow counts

- o for samples, the length of the sample interval and the length of the sample recovered
- o the first encountered water table along with the method of determination, referenced to ground surface
- o drill and borehole characteristics
- o sequential stratigraphic boundaries.

Selected split-spoon samples obtained while sampling at five foot intervals or when a change in lithology has occurred will be analyzed for Atterberg limits and moisture content. Analysis of a selected split-spoon sample from the encountered water bearing material will be performed for grain size determination. In the event that the borehole/monitoring well must be left unattended prior to completion, the borehole/monitoring well will be properly secured to ensure its integrity.

7.2.4 Groundwater Monitoring and Sampling

Four monitoring wells, one upgradient and three downgradient, will be installed (Figure 3). Wells will be constructed of 5-foot long, 2-inch I.D. threaded flushjointed PVC screen and riser casing. Well screens will be installed with the top of the well screen located approximately one foot above the encountered groundwater table, dependent upon the major geologic changes encountered. All installations will include a washed, graded, sand pack surrounding the screen and extending two feet above the screen top. A two-foot thick bentonite seal will be placed above the sand pack and the remaining annulus filled with bentonite/grout to within two feet of the ground surface. A four to six inch diameter steel casing with locking cap will be placed over each well and cemented

in place.

Well development will be performed using a pump or bottom discharge bailer at each well no sooner than 48 hours after the well grouting has been completed. Bailing will utilize pre-cleaned, dedicated galvanized steel bailers at each well. Pumping will utilize a surface peristaltic pump fitted with pre-cleaned, dedicated polyethylene tubing for each well.

Prior to water and sediment evacuation, static water level and well bottom measurements will be recorded at each well using an electric level sounder or fiberglass tape. These will be cleaned prior to and after each use. The well water/sediment volume will also be calculated.

Well evacuation will be supplemented by:

- Temperature, pH, and specific conductance measurements
- Evacuation volume measurement
- Visual identification of water clarity and color
- Visual identification of the physical characteristics of removed sediments

The development process will continue until a stabilization of pH, specific conductance, temperature, and clarity of discharge is achieved.

The well development is designed to correct any clogging of the water-bearing formation which may occur as a side effect of the drilling, and remove any drilling water (if used) from the water table such that each well will yield water which is representative of the in-situ conditions. Static water level measurements will also be made following well develop-

ment.

Groundwater sampling will be initiated one week after the well development has been completed. Each sample will be analyzed for priority pollutant metals and organics (Contract Laboratory Protocol), cyanide, ammonia, total recoverable phenolics, and specific conductance. GC/MS procedures will include the identification and quantification of all peaks ten percent or greater than the nearest calibrating standard.

At each well location, initial static water level and well bottom measurements will be recorded using an electric level sounder and/or fiberglass tape which will be cleaned between each well. Well water will be evacuated prior to sample collection by bailing or pumping to dryness or removing a minimum of three equilibrated well water volumes. Precleaned, dedicated galvanized steel bailers will be used for sampling at each well.

Permeability testing of the newly installed monitoring wells will be conducted following sampling. Initial static water level measurements will be made in each well followed by the injection of a weighted slug of specific volume. An instantaneous head displacement associated with the slug volume will be created and the subsequent decline in water level will be measured with an electric water level sounder. Once head conditions reach a static state, the slug will be removed and a negative head condition will result relative to the initial static water level. The subsequent rise in water level will be measured with an electric water level sounder.

Data analysis will involve the determination of the coefficient of permeability. The analysis will utilize a technique provided by Harry R. Cedergren in Seepage, Drainage and Flow Nets, 2nd Edition, whereby the log of head ratio (dependent variable) is plotted with respect to elapsed time (independent variable). Data points for permeability determination are obtained from a linearization of this plot and utilized in an appropriate equation.

The testing will provide data on the permeability of the materials at the top of the water table. These values will subsequently be utilized for determining approximate flow rates within the saturated zone, and extrapolated to approximate permeability in the unsaturated zone as required in the scoring under the HRS. This data will be useful in assessing the rate of groundwater flow in this area and as data input in evaluating potential remedial alternatives if required.

7.2.5 Surface Water and Sediment Sampling

Surface water and sediment samples will be collected in site drainage ditches. Locations of sampling points are indicated in Figure 3 and assume the presence of site run-off in the ditches at the time of sampling. Samples will be analyzed for priority pollutant metals (Contract Laboratory Protocol), cyanide, ammonia and total recoverable phenolics.

7.2.6 Air Monitoring

Air monitoring with an HNU photoionization detector will be performed as follows:

- o at one upwind and downwind location prior to any site work
- o during borings and monitoring well installations
- o for all split-spoon samples
- o for all surface soil and sediment samples

7.2.7 Surveying

A map will be prepared showing the location and appropriate elevations (ground surface, top of monitor well casing) for each boring sampling location monitor well installation and other key contour points as determined by Recra.

A licensed land surveyor will be used to establish the locations and elevations of each above-mentioned point, as follows:

- o Vertical Control - Elevations (0.01') will be established for the ground surface at the well, the top of monitor well casing (T.C.), and at least one other permanent object in the vicinity of the boring and well. Elevations will be relative to a regional, local or project specific datum. USGS benchmarks will be used whenever available.
- o Horizontal Control - Exploratory borings and monitor wells will be located by ties (location and distance) to at least two nearby permanent objects. USGS benchmarks will be used whenever available.

7.3 Quality Assurance and Quality Control

An overall Quality Assurance Program is essential for the production of high-quality analytical data. Such a program requires precise control of laboratory activities. For the Quality Assurance Program in effect at the Laboratories of Recra Research, Inc., the reader is referred to a document previously submitted by Recra Research, Inc., to NYSDEC, entitled, "Operation Manual - Field and Analytical Services."

7.4 Final Hazard Ranking System Score

Upon completion of all field work and laboratory analysis, the Final Hazard Ranking System score will be calculated per NYSDEC guidelines.

7.5 Phase II Report

Upon completion of the investigation, a Phase II report will be prepared in complete accordance with the NYSDEC's Phase II report format. The Phase II report will include a plot plan drawing showing the following:

- groundwater gradient
- topographic relief
- sampling locations
- physical parameters and major contaminants/concentrations identified for each sampling location
- any contaminant plumes (based on geophysical and monitoring data).

Five copies of the draft final Phase II report and fifteen copies of the final Phase II report will be submitted.

7.6 Applicable Procedures and Standards

All work performed for this project, including but not necessarily limited to, borings, monitoring well installations, monitoring, sampling, surveying, chain of custody, sample preservation, sample extraction, sample analysis, and HRS scoring, will conform to all applicable standards, guidelines, and prescribed methods and practices of the U.S. Environmental Protection Agency (USEPA), the New York State Department of Environmental Conservation (NYSDEC), and other applicable regulatory agencies. Any changes or modifications in these specifications will require approval by NYSDEC.

7.7 Estimated Cost

The estimated cost of the Phase II Work Plan is described below. This estimate is based on the placement of four monitoring wells at 30 feet below ground surface.

o Waste Characterization		
- Sampling		$ 100.00
- Analyses		3,458.00
	Total	$ 3,558.00
o Geophysics		6,000.00
o Subsurface Investigation		
- Survey		2,000.00
- Test borings and well installation		16,500.00
- Analyses		11,480.00*
	Total	$ 29,980.00
o Surface Water and Sediment Sampling		
- Sampling		100.00
- Analyses		1,628.00
	Total	$ 1,728.00
o Preliminary Engineering Evaluation, Final HRS Scoring and Report		8,000.00
	TOTAL PHASE II	$ 49,266.00

* Price includes Contract Laboratory Protocol for priority pollutant metals and/or organics. Prices will vary among contracted laboratories.

APPENDIX A

APPENDIX A

DATA SOURCES AND REFERENCES

REFERENCES

1. Preliminary Evaluation of Chemical Migration to Groundwater and the Niagara River from selected Waste Disposal Sites. EPA 905/4-85-001 March, 1985.

2. General Soil map and Interpretations. Erie County, New York. USDA Soil Conservation Service.

3. Uncontrolled Hazardous Waste Site Ranking System, Users Manual, Draft. June 10, 1982.

4. Hazardous Waste Site Profile; Dresser Industries. Prepared by the Erie County Department of Environment and Planning. December, 1984.

5. Letter to Robert Pitman, Water Commissioner, from Sheldon S. Nozik, Environmental Specialist, Recra Research, Inc., regarding water supply.

6. New York State Department of Environmental Conservation, Division of Solid and Hazardous Waste, Inactive Hazardous Waste Disposal Site Report; Dresser Industries.

7. Interagency Task Force on Hazardous Wastes, Draft Report on Hazardous Wastes in Erie and Niagara Counties, New York, March, 1979.

8. Documentation of freshwater wetlands and critical habitats from NYSDEC, Region 9. December 18, 1985.

9. Analytical Results from Recra Research, Inc., January 28, 1982.

10. Letter from John Ferry, Ferry Concrete Construction Co., Inc., to Peter J. Millock, Director, Interagency Task Force on hazardous wastes. Map 10, 1979.

11. State of New York Official Compilation of Codes, Rules, and Regulations, 1983. Article 8, Part 837.

12. New York Water Classifications and Quality Standards. Bureau of National Affairs, Inc., Part 701.

13. NYSDEC Region 9, Dresser Industries Site Profile.

14. Flood Insurance Rate Map, Village of Depew, New York, Erie County, Panel 3 of 5, 360236 003B, August 3, 1981.

REFERENCES
(Continued)

15. Buehler, E. J., and I. H. Tesmer, 1963. Geology of Erie County, New York. Buffalo Society of Natural Sciences Bulletin, Vol. 21, No. 3.

16. LaSala, A. M., Jr., 1968. Groundwater Resources of the Erie-Niagara Basin, New York. Prepared for the Erie-Niagara Basin Regional Water Resources Planning Board. Basin Planning Report, ENB-3.

17. New York State Atlas of Community Water System Sources, 1982. New York State Department of Health.

18. Bureau of the Census, 1980.Census of Population and Housing, Buffalo, New York, U.S. Department of Commerce. July, 1983.

19. Letter of Documentation to Lawrence Clare, NYSDEC Region 9 from Thomas P. Connare, Recra Environmental, Inc. June 19, 1986.

REFERENCE 1

United States
Environmental Protection
Agency

Great Lakes National
Program Office
536 South Clark Street
Chicago, Illinois 60605

EPA-905/4-85-001
March 1985

EPA

Preliminary Evaluation Of Chemical Migration To Groundwater and The Niagara River from Selected Waste-Disposal Sites

Aquifer Lithology and Water-Bearing Characteristics

The ground-water system within the Buffalo area consists of a fractured bedrock aquifer and an overlying aquifer of unconsolidated deposits.

Bedrock aquifer.--The bedrock aquifer consists of all the bedrock units discussed previously. The main sources of water are the fractures and solution cavities. The specific-capacity and transmissivity values of selected bedrock aquifer units are shown below.

Bedrock unit[1]	Specific capacity[2] (gal/min)/ft		Transmissivity[2] (gal/d)/ft	
	Min	Max	Min	Max
Akron Dolomite	2	13	4,000	25,000
Camillus Shale	4	83	7,000	70,000

[1] Position of units is shown in figure 3.
[2] Data from LaSala (1968)

The specific capacity of a well is the rate of discharge of water from the well divided by the drawdown of the water level within the well. If the specific capacity is constant except for the time variation; it is roughly proportional to the transmissivity of the aquifer. Transmissivity is the rate at which water is transmitted through a unit width of the aquifer under a unit hydraulic gradient.

The data above indicate that these two properties differ considerably within and among the units. This variation reflects the amount and size of the fractures and solution cavities.

Unconsolidated aquifer.--The unconsolidated aquifer consists of a glaciolacustrine clay and sand and gravel deposits. The thicker unit is the glaciolacustrine clay. The test drilling during the summer of 1982 encountered the water table at various depths within the clay, and saturated sand stringers up to 3 inches thick were common. These stringers were not large, however, and generally thinned out within a few feet.

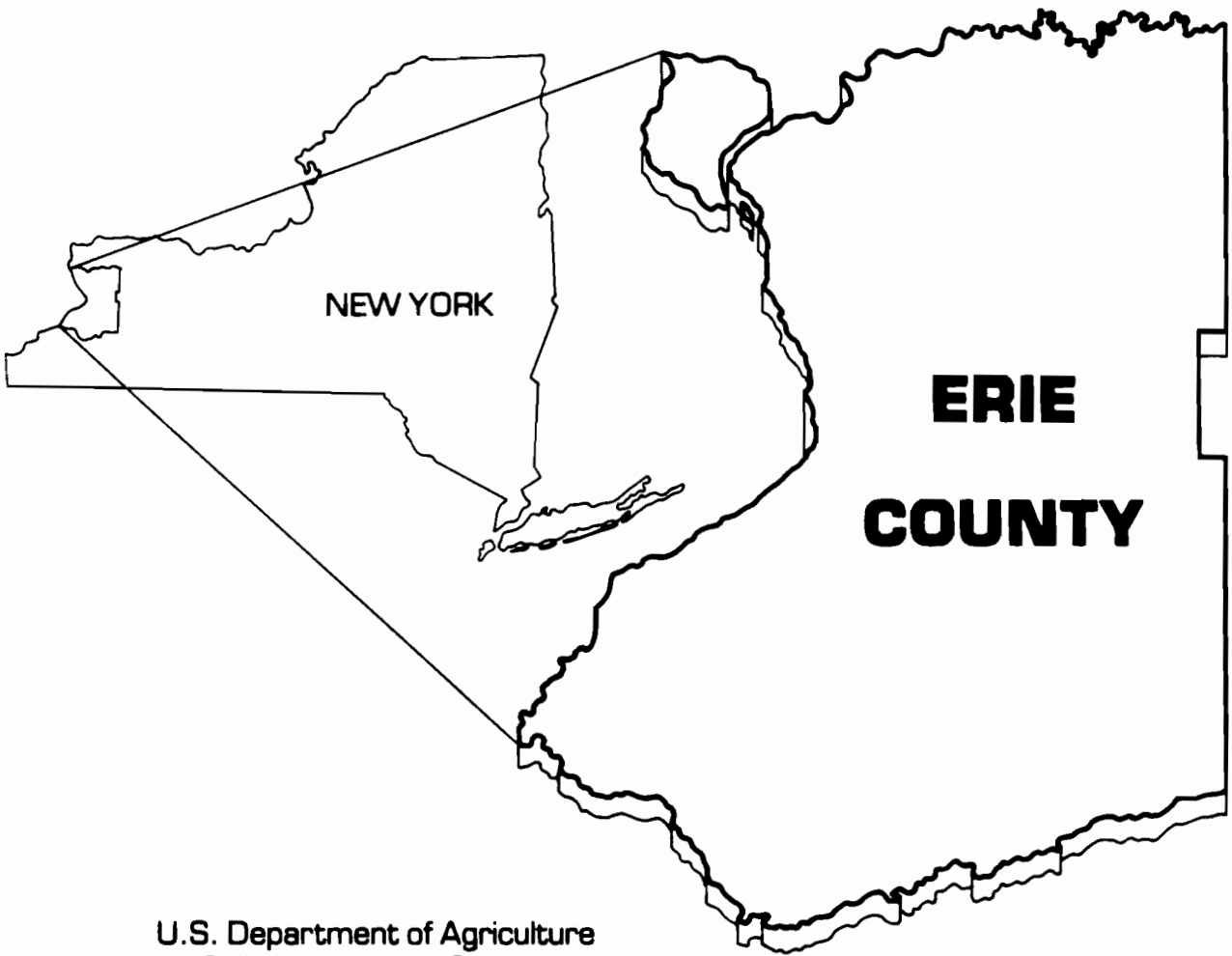
A seasonal water table above the clay unit was observed during wet periods but not during the summer. This water table is formed by the ponding of infiltrated precipitation above the relatively impermeable clay. As the water mounds upward, gradients toward natural or manmade topographic lows develop and eventually discharge to nearby surface-water bodies. As the season becomes drier and warmer, vegetation increases and takes up the remaining ground water through transpiration.

The hydrologic properties of the unconsolidated aquifer within the Buffalo area are also described in consultants' reports for Buffalo Color Corporation (sites 120-122), Bethlehem Steel Corporation (site 118), and the Alltift Landfill (site 162).

The general range of hydraulic conductivity was 0.0328 to 155.8 ft/d. The larger value can be attributed to slag fill material, which would have a considerably greater permeability than the glaciolacustrine clay. A permeability test was performed on a clay sample from the Alltift landfill; the permeability ranged from 1.6×10^{-4} to 1.8×10^{-4} ft/d.

REFERENCE 2

GENERAL SOIL MAP and INTERPRETATIONS



U.S. Department of Agriculture
Soil Conservation Service

in cooperation with

Cornell University Agricultural Experiment Station and
Erie County Soil and Water Conservation District

39. URBAN LAND-CHURCHVILLE, NEARLY LEVEL

Nonsoil areas, and deep, somewhat poorly drained, clayey soils, on low land plains

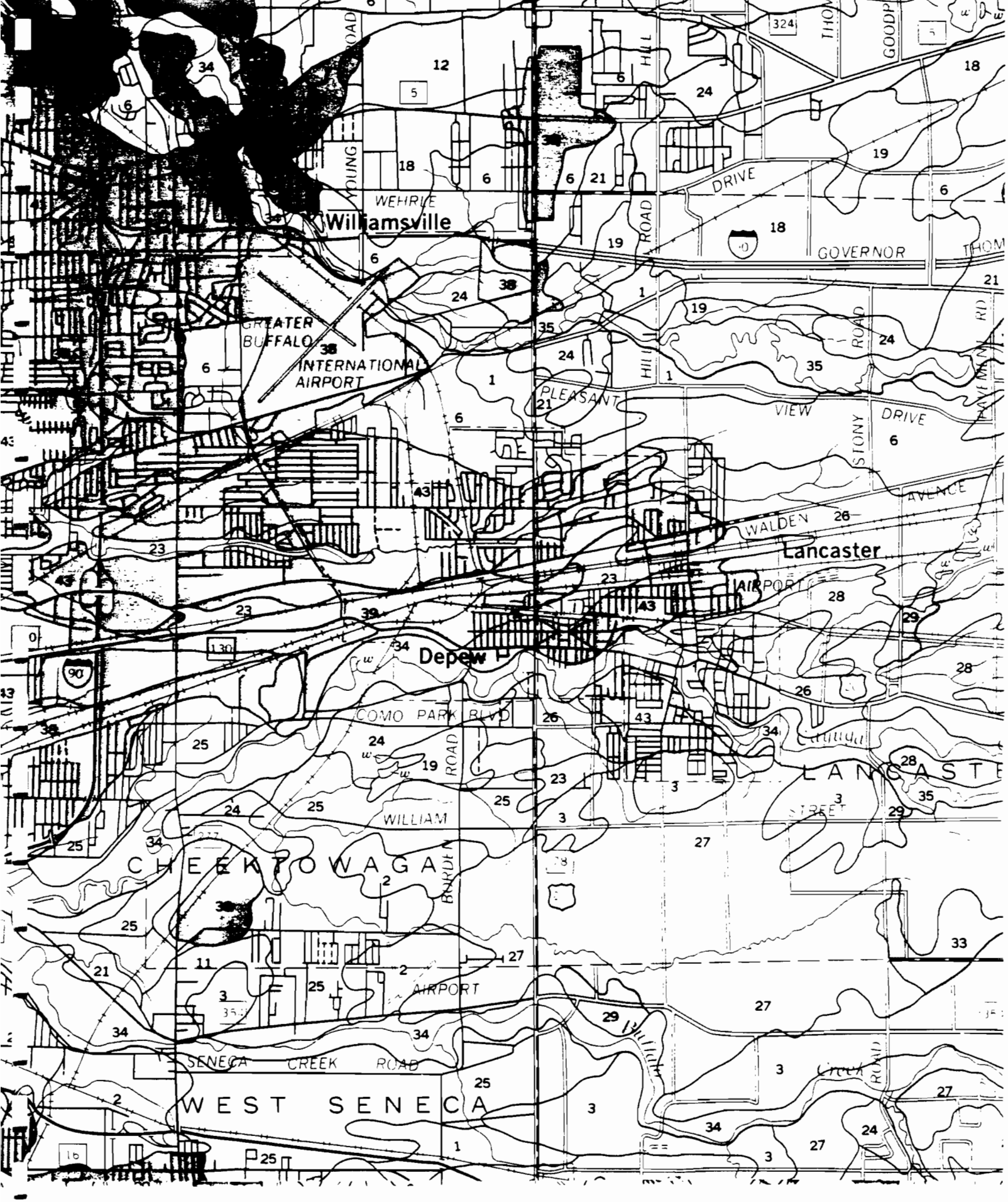
This general soil unit is in nearly level or gently sloping areas that are partially covered by residential, commercial, or industrial developments. The undisturbed soil areas are dominated by clayey sediments that overlie glacial till deposits. Slope ranges from 0 to 8 percent but is dominatly 0 to 3 percent.

This unit covers about 4,600 acres or 0.7 percent of the county. Urban land accounts for 60 percent of the unit, Churchville soils about 30 percent, and soils of minor extent the remaining 10 percent.

The urban portion of this unit is covered by houses, industrial buildings, streets, sidewalks, playgrounds, and small shopping plazas. In these areas the underlying soil layers have been disturbed or removed. Churchville soils formed in clayey, lake-laid sediments that mantle loamy glacial till deposits at depths of 20 to 40 inches. The Churchville soils are somewhat poorly drained, and have a seasonal high water table perched in the upper part of the subsoil for brief periods during the spring, and other excessively wet periods. Rate of water movement (permeability) through these soils is slow or very slow.

Soils of minor extent are those of the Ovid and Lakemont series. Ovid soils are similar to Churchville soils, but occur in areas where glacial action has mixed the clayey sediments with the underlying glacial till creating a more loamy soil. Poorly drained and very poorly drained Lakemont soils occur in depressions and along drainageways within this unit.

Most of this unit is in residential housing. A few areas are in small commercial or industrial developments. The undisturbed soil areas are mostly in lawns, gardens, and undeveloped lots. Seasonal wetness and stickiness of the clayey texture are the main features to consider for further development on these soils. Storm drains are often essential to remove the excess water that does not infiltrate into the soils readily.


Williamsville
GREATER BUFFALO INTERNATIONAL AIRPORT
Depew
Lancaster
AIRPORT
CHEEKTOWAGA
WEST SENECA
WEHRLE
DRIVE
GOVERNOR
PLEASANT VIEW DRIVE
STONY
WALDEN
AVENUE
COMO PARK BLVD
WILLIAM
STREET
SENECA CREEK ROAD
YOUNG ROAD
HILL ROAD
BORDER ROAD
GOODP
THOM
LANCASTE

45'

1,000 000 FEET

40'

16 Manlius-Rock outcrop, very steep

17 Orpark, gently sloping

18 Wassaic, nearly level

DEEP SOILS FORMED IN GLACIO-LACUSTRINE DEPOSITS

19 Canandaigua, level

20 Collamer, gently sloping

21 Galen-Elnora, gently sloping

22 Hudson, steep

23 Lakemont-Canadice, level

24 Minoa-Cosad, nearly level

25 Niagara, nearly level

26 Odessa, nearly level

27 Rhinebeck, nearly level

28 Schoharie, nearly level

DEEP SOILS FORMED IN GLACIO-FLUVIAL DEPOSITS

29 Alton-Palmyra-Phelps, gently sloping

30 Blasdell-Farnham, gently sloping

31 Chenango-Castile, gently sloping

32 Chenango-Varysburg-Blasdell, moderately steep

33 Red Hook, nearly level

DEEP SOILS FORMED IN RECENT ALLUVIAL DEPOSITS

34 Teel-Middlebury, nearly level

35 Wayland, level

36 Wayland-Farnham, nearly level

DEEP SOILS FORMED IN ORGANIC DEPOSITS

37 Palms, level

MIXED URBAN LAND AND SOIL AREAS

38 Urban land

39 Urban land-Churchville, nearly level

40 Urban land-Collamer, gently sloping

41 Urban land-Lima, gently sloping

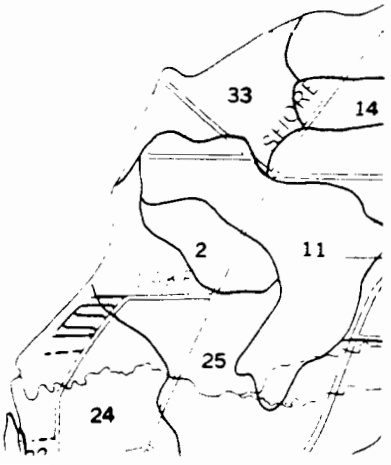
42 Urban land-Niagara, nearly level

43 Urban land-Odessa, nearly level

44 Urban land-Schoharie, nearly level

45 Urban land-Wassaic, nearly level

Compiled 1979



REFERENCE 3

DRAFT

UNCONTROLLED HAZARDOUS WASTE
SITE RANKING SYSTEM -
A USERS MANUAL

DRAFT

10 June 1982
(errata included)

TABLE 2

PERMEABILITY OF GEOLOGIC MATERIALS*

TYPE OF MATERIAL	APPROXIMATE RANGE OF HYDRAULIC CONDUCTIVITY	ASSIGNED VALUE
Clay, compact till, shale; unfractured metamorphic and igneous rocks	$< 10^{-7}$ cm/sec	0
Silt, loess, silty clays, silty loams, clay loams; less permeable limestone, dolomites, and sandstone; moderately permeable till	$< 10^{-5} \geq 10^{-7}$ cm/sec	1
Fine sand and silty sand; sandy loams; loamy sands; moderately permeable limestone, dolomites, and sandstone (no karst); moderately fractured igneous and metamorphic rocks, some coarse till	$< 10^{-3} \geq 10^{-5}$ cm/sec	2
Gravel, sand; highly fractured igneous and metamorphic rocks; permeable basalt and lavas; karst limestone and dolomite	$> 10^{-3}$ cm/sec	3

*Derived from:

Davis, S. N., Porosity and Permeability of Natural Materials in Flow-Through Porous Media, R.J.M. DeWest ed., Academic Press, New York, 1969

Freeze, R.A. and J.A. Cherry, Groundwater, Prentice-Hall, Inc., New York, 1979

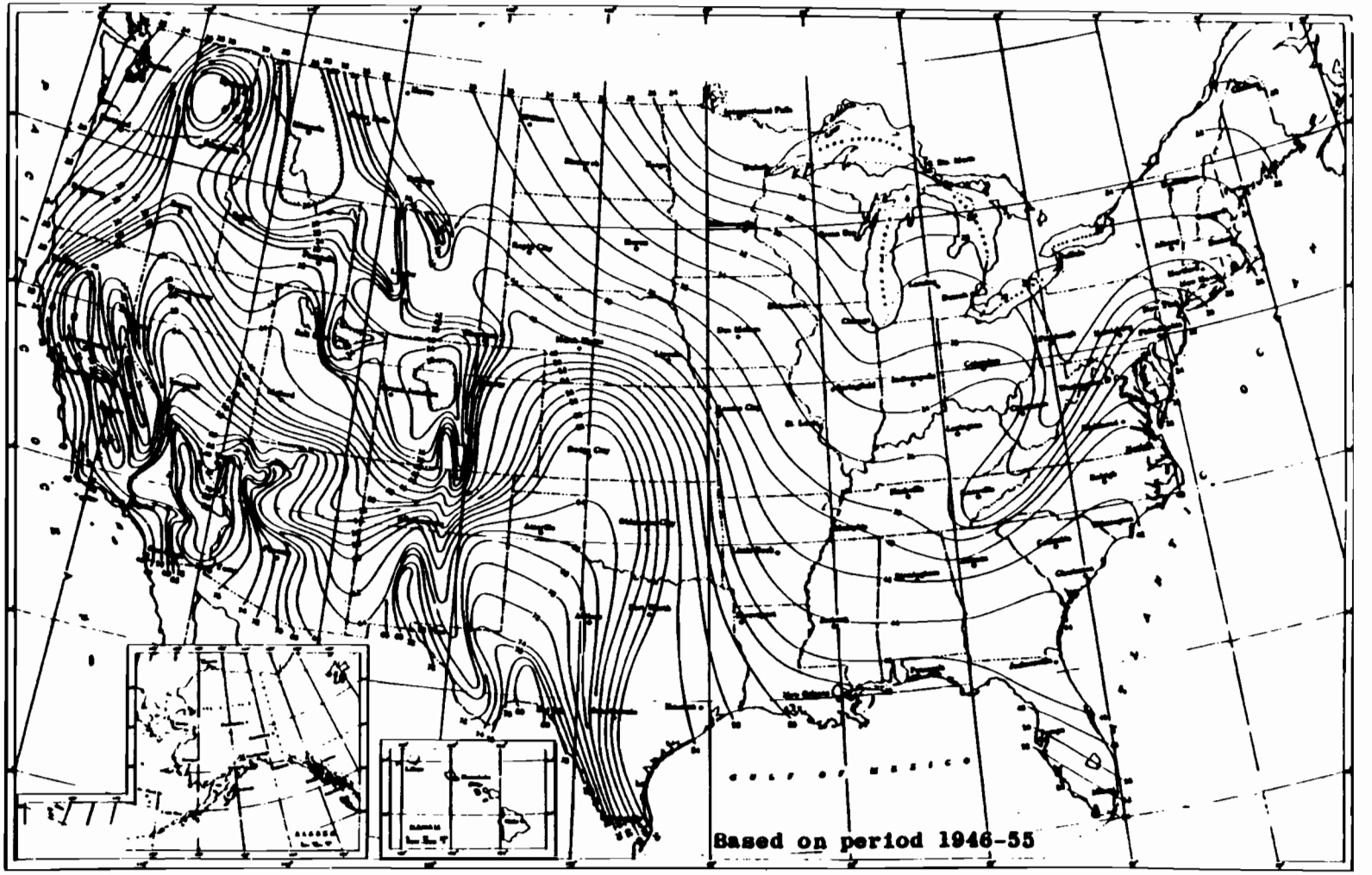


Figure 4

Mean Annual Lake Evaporation (In Inches)

Source: Climatic Atlas of the United States, U.S. Department of Commerce, National Climatic Center, Ashville, N.C., 1979.

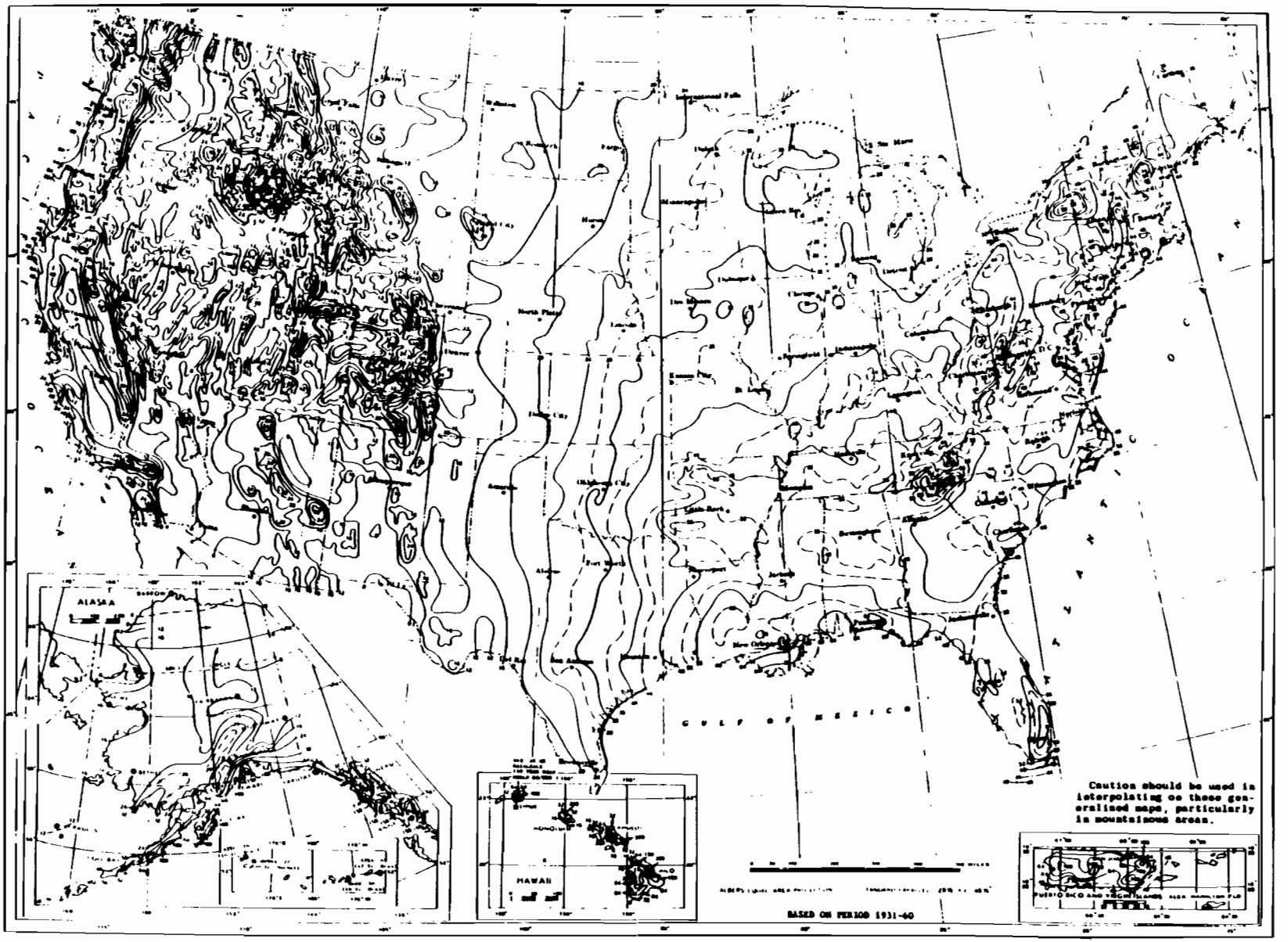


Figure 5

Normal Annual Total Precipitation (inches)

Source: Climatic Atlas of the United States, U.S. Department of Commerce, National Climatic Center, Ashville, N.C., 1979.

TABLE 4

WASTE CHARACTERISTICS VALUES FOR SOME COMMON CHEMICALS

CHEMICAL/COMPOUND	TOXICITY [1]	PERSISTENCE [2]	IGNITABILITY [3]	REACTIVITY [3]
Acetaldehyde	3	0	3	2
Acetic Acid	3	0	2	1
Acetone	2	0	3	0
Aldrin	3	3	1	0
Ammonia, Anhydrous	3	0	1	0
Aniline	3	1	2	0
Benzene	3	1	3	0
Carbon Tetrachloride	3	3	0	0
Chlordane	3	3	0*	0*
Chlorobenzene	2	2	3	0
Chloroform	3	3	0	0
Cresol-O	3	1	2	0
Cresol-M&P	3	1	1	0
Cyclohexane	2	2	3	0
Endrin	3	3	1	0
Ethyl Benzene	2	1	3	0
Formaldehyde	3	0	2	0
Formic Acid	3	0	2	0
Hydrochloric Acid	3	0	0	0
Isopropyl Ether	3	1	3	1
Lindane	3	3	1	0
Methane	1	1	3	0
Methyl Ethyl Ketone	2	0	3	0
Methyl Parathion in Xylene Solution	3	0Δ	3	2
Naphthalene	2	1	2	0
Nitric Acid	3	0	0	0
Parathion	3	0Δ	1	2
PCB	3	3	0Δ	0Δ
Petroleum, Kerosene (Fuel Oil No. 1)	3	1	2	0
Phenol	3	1	2	0
Sulfuric Acid	3	0	0	2
Toluene	2	1	3	0
Trichlorobenzene	2	3	1	0
1,1,1-Trichloroethane	2	2	1	0
Xylene	2	1	3	0

[1] Sax, N. I., Dangerous Properties of Industrial Materials, Van Nostrand Rheinhold Co., New York, 4th ed., 1975. The highest rating listed under each chemical is used.

[2] JRB Associates, Inc., Methodology for Rating the Hazard Potential of Waste Disposal Sites, May 5, 1980.

[3] National Fire Protection Association, National Fire Codes, Vol. 13, No. 49, 1977.

* Professional judgment based on information contained in the U.S. Coast Guard CHRIS Hazardous Chemical Data, 1978.

Δ Professional judgment based on existing literature.

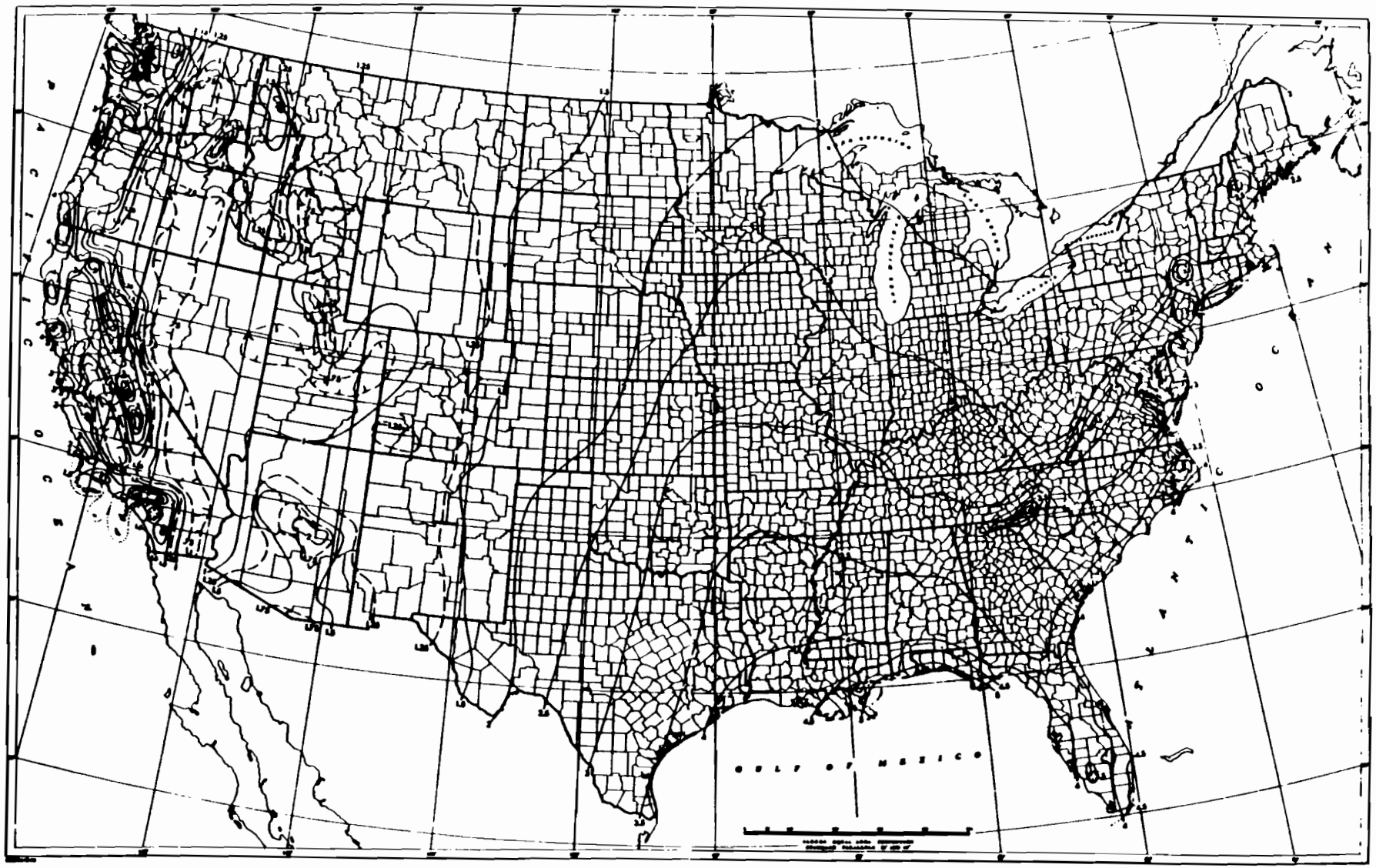


FIGURE 8

1-Year 24-Hour Rainfall (Inches)

Source: Rainfall Frequency Atlas of the United States, Technical Paper No. 40, U.S. Department of Commerce, U.S. Government Printing Office, Washington, D.C., 1963.

REFERENCE 4

DRESSER INDUSTRIES

2 MAIN STREET

DEPEW, NEW YORK

SITE #915064

PREPARED BY:

Erie County Department of
Environment and Planning

December 1984

DISCLAIMER

The information contained in this document is presented to show environmental conditions, comparisons to ambient environmental standards and criteria and compliance status relative to applicable environmental regulations.

Any use of this information to assess the risks to personal or public health, identify potential personal or public liability or to estimate the costs of remedial activity should only be done after consultation with appropriate government agencies or private consultants.

DRESSER INDUSTRIES

BACKGROUND

The Dresser Transportation Division, at 2 Main Street, Depew, manufactures car couplers and steel castings for the railroad industry. The company originally called the Gould Coupler Corporation was in business prior to 1940. At peak employment during the early 1950's, the company employed more than 2000 people. As the railroad industry declined so did employment at Dresser, so that in 1980 employment had dropped to about 1200. In 1981, a drastic cutback reduced employment to about 200. The current labor force is down to 75 people. The company has stopped production and is now finishing up castings to complete remaining orders. A complete shutdown will occur early in 1985.

Waste material sent to the landfill consisted mainly of used foundry sand, bentonite clay, and a small amount of steel fines and iron oxides. The company also uses a sand reclaimer in the plant. The water used to wash the sand runs into a series of lagoons and then to a storm sewer on Transit Road. These lagoons are dredged periodically. The sand fines and bentonite clay removed are dried and also landfilled.

LOCATION

The site is located on the west side of Transit Road directly across the street from the plant. Village of Depew tax records show the parcel owned by the company to be 697 feet of frontage on Transit Road with a depth of 933 feet (approximately 15 acres). The area is bounded on the north and south by Conrail tracks and on the west by an open parcel of land owned by Conrail.

AERIAL PHOTOGRAPHY

A 1951 photo shows a disturbed area along the north Conrail tracks beyond the current Dresser property line. A 1968 photo shows the entire area to a point about 1800 feet west of transit road had been used for landfill. The photos do not show any evidence of any barrels being buried at this site.

SITE SURVEY

Site inspections were conducted on December 4, 1984 and December 10, 1984. The entire area including a section beyond the current Dresser property line has been filled in. It is overgrown with grass, weeds and fair sized trees. There were a few small ponds

observed that were overgrown with cattails. The top cover appears to be mainly dark gray to black foundry sand. There were three 55-gallon drums and two other small drums scattered throughout the landfill. All drums were empty and completely rusted. The large drums had the tops cut out. The rusted remains of a baghouse was also in evidence.

The landfill area is quite level with a gentle slope toward the west to Conrail property. There are no streams or major drainage ditches leading away from the site. The access road is sharply sloped toward the Transit Road gate so that most runoff would flow toward the storm sewer on Transit.

Company correspondence and records and information from company personnel indicate that use of site ceased sometime in 1976. After 1976, material was hauled to Lancaster Reclamation landfill

ENVIRONMENTAL DATA

Soil

Silty and clayey, with 18-35% clay. Permeability is very slow.

Bedrock

Fissile shale at a depth of greater than 10 feet.

Water

The natural water table is perched 0.5 ft. to 2 ft. below the surface.

There is a minimal potential of overland flow of surface water to nearby drainage ways. Flooding potential is slight.

Potential for pollution of regional internal water table is minimal. There are no known water supply wells near the site area.

Land Use

The areas immediately adjoining the site to the north and south are zoned industrial and commercial. The area to the west is undeveloped Conrail property. The possibility of the landfill having any adverse effects on the nearest residential area is minimal.

SAMPLING

There are no records of soil sampling at this site, however, the company provided the New York State DEC with analysis of effluent from the settling lagoons until mid 1984. The effluent subsequently discharged into the Transit Road storm sewer.

Typical analysis of weekly composite samples as required by under DEC permit reported in PPM were as follows:

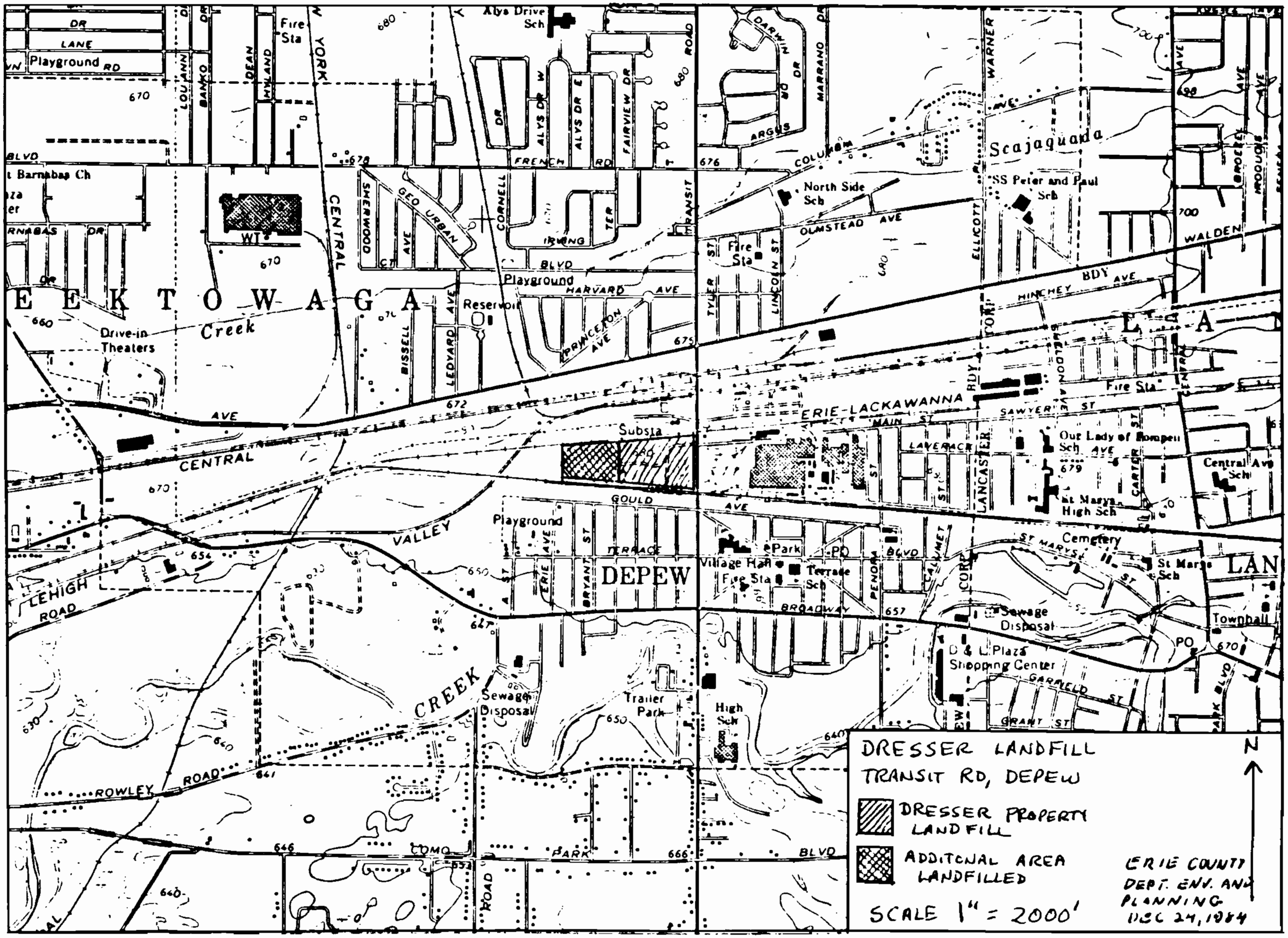
Oil & Grease	0.49
Total Suspended Solids	2.0
Total Cyanide	0.02
Phenols	0.048
Total Iron	0.162
Cadmium	0.001
Chromium	0.066
Lead	0.025
Mercury	0.004

DIRECT CONTACT

A locked gate across the access road off of Transit Road prevents any vehicle traffic to the site. There are no fences around the property thus allowing easy access to foot traffic.

CONCLUSIONS

There is no evidence that any toxic or hazardous materials were buried at this site. The nature of the landfill material should pose no current or future problems for the area.


DRESSER LANDFILL
TRANSIT RD, DEPEW
DRESSER PROPERTY LANDFILL
ADDITONAL AREA LANDFILLED
SCALE 1" = 2000'
N
ERIE COUNTY
DEPT. ENV. AND
PLANNING
DEC 24, 1984
DEPEW
CHEEKTOWAGA
ERIE-LACKAWANNA
NEW YORK CENTRAL
Scajaquada Creek
Substa
Sewage Disposal
Trailer Park
High Sch
Townhall
Cemetery
D & L Plaza Shopping Center

REFERENCE 5

KJ

RECRA RESEARCH, INC.

Hazardous Waste And Toxic Substance Control

December 20, 1985

Mr. Robert Pitman
Water Commissioner
Municipal Building
85 Manitai St.
Depew, NY 14043

Dear Mr. Pitman:

Thank you for your assistance in the Phase I Superfund investigation we are conducting presently.

As part of the background search requirements for the NYSDEC Superfund investigations, we the consultants are required to have all of our interviews, personal or by telephone, documented. Below is an account of our conversation on December 19, 1985. Would you please read the account, sign at the bottom, and return the original to me. This is only to serve as documentation that the conversation took place.

° There are no wells in use in the Village of Depew.

° The water supply for the village is divided between the Erie County Water Authority - 70% and the Village of Depew - 30%.

° The village buys water from the authority and resells this to the village.

Thank you for your cooperation.

Sincerely,

RECRA RESEARCH, INC.

Sheldon S. Nozik

Sheldon S. Nozik
Environmental Specialist

SSN/jlo
cc: T. Connare
K. Studley

Mr. Robert Pitman

4248 Ridge Lea Road, Amherst, New York 14226 Telephone (716) 838-6200

REFERENCE 6

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
INACTIVE HAZARDOUS WASTE DISPOSAL SITE REPORT

CLASSIFICATION CODE: 2a **REGION: 9** **SITE CODE: 915064**

NAME OF SITE : Dresser Industries
STREET ADDRESS: Transit Road

TOWN/CITY:	**COUNTY:**	**ZIP:**
Depew	Erie	14207

SITE TYPE: Open Dump-X Structure- Lagoon- Landfill- Treatment Pond-
ESTIMATED SIZE: 16 Acres

SITE OWNER/OPERATOR INFORMATION:
CURRENT OWNER NAME....: Dresser Industries
CURRENT OWNER ADDRESS.: 2 Main St., Depew, NY 14207
OWNER(S) DURING USE...: Dresser Industries
OPERATOR DURING USE...: Same
OPERATOR ADDRESS.....: Same as above
PERIOD ASSOCIATED WITH HAZARDOUS WASTE: From Unknown To Present

SITE DESCRIPTION:
Foundry sand used to fill over 10 acres. The site is currently used as foundry sand storage prior to removal for disposal elsewhere. Filled areas are grassed. Soil and water samples were taken from the site in 1981.

HAZARDOUS WASTE DISPOSED: **Confirmed-X** **Suspected** -

TYPE	QUANTITY (units)
Foundry sand, some with phenolics	47,682 cu. yards
Slag	3730 cu. yards
Bentonite clay sludge	35,824 cu. yards
Lube oil	Unknown

ANALYTICAL DATA AVAILABLE:

Air- Surface Water-X Groundwater- Soil-X Sediment- None-

CONTRAVENTION OF STANDARDS:

Groundwater- Drinking Water- Surface Water- Air-

LEGAL ACTION:

TYPE.,: None State- Federal-
STATUS: In Progress- Completed-

REMEDIAL ACTION:

Proposed- Under Design- In Progress- Completed-
NATURE OF ACTION: None

GEOTECHNICAL INFORMATION:
SOIL TYPE: Not known
GROUNDWATER DEPTH: Not known

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

No evidence of any environmental problem as water samples did not indicate presence of phenolics. Soil samples, however, contained phenolics in low levels.

ASSESSMENT OF HEALTH PROBLEMS:

Insufficient information.

PERSON(S) COMPLETING THIS FORM:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

NAME.: Abul Barkat
TITLE: Sr. Sanitary Engr.

NAME.: Peter Buechi
TITLE: Assoc. Sanitary Engr.

DATE.: 01/24/85

NEW YORK STATE DEPARTMENT OF HEALTH

NAME.: R. Tramontano
TITLE: Bur. Tox. Subst. Assess.

NAME.:
TITLE:

DATE.: 01/24/85

REFERENCE 7

INTERAGENCY TASK FORCE ON HAZARDOUS WASTES

DRAFT REPORT

ON

HAZARDOUS WASTE DISPOSAL

IN

ERIE AND NIAGARA COUNTIES, NEW YORK

ERRATA

1. The Village of Depew, Ed Ball, Eden Sanitation and Empire Waste sites on page II-38 of the Draft Report should all be in the Priority III category.

2. The two Shanco Plastics disposal sites identified on pages II-15 and II-16 of the Draft Report are located at 2716 Kenmore Avenue, Tonawanda, and not at 111 Wales Avenue, Tonawanda.

3. Hooker's V-80 Area site identified on page II-29 of the Draft Report should be in the Priority I category.

March 1979

"Donner-Hanna employs no waste haulers or disposer other than Downing Container Service, which provides and exchanges containers for garbage such as paper, wood, etc. which was previously burned. Products which Donner-Hanna make that might be candidates for waste disposal operations are now and have been recycled with raw material coal, so as to be reconstituted as saleable products. The sludge from our waste water pathway is principally insoluable calcium carbonate. It is not hazardous and has not warranted analysis.

"Once each year, we have dug calcium carbonate and earthen sediment from our waste water pathway to the Buffalo River and deployed it on the surface (of filled property which we use for coke storage) as is appropriate for non-hazardous material not requiring burial."

Erie County records indicate that ammonia still waste containing phenol was at one time discharged to the "black" water stratum some 145 feet below ground level at the Donner-Hanna facility until, after four years of use, the wells plugged and the project was abandoned. This discharge took place before 1953.

DRESSER INDUSTRIES, INC.
Dresser Transportation Equipment Division
Two Main Street
Depew

Dresser Industries began operations in Erie County in 1892. The company has been known since 1930 under the names Gould Coupler Company, Symington-Gould Corporation, Symington-Wayne Corporation and, since 1968, as the Dresser Transportation Equipment Division of Dresser Industries of Dallas, Texas.

The company produces steel castings by the foundry process. It generates spent bentonite clay (since 1938), Manley sand (since 1938), slag (since 1930), lubricating oil and small amounts of brick and phenolic binders (ammonia and cyanide) as waste products.

In 1976, the company estimated that it was generating 8800 tons per year of the wastes identified above. Since 1976, 15,000 cubic yards of such wastes have been generated each year.

From 1961 to 1976, all wastes were disposed of at Stocks Pond at the southeast corner of Broadway and Transit Road in Depew. Since 1976, all such wastes have been disposed of at the Lancaster Reclamation site by the Ferry Construction Company. Wastes are also dumped at a staging area on Dresser's own property west of Transit Road.

Dresser Industries, Inc

Before 1961, sand and clay wastes were hauled by Rayburn Smith, Inc. to an unknown site.

From 1942 until after World War II, the company operated an Army owned facility in Depew for the production of steel armor castings for tanks. The wastes generated at this facility, silica and bentonite clay casting cores and scrap metals from chipping and grinding operations, were probably hauled by Rayburn Smith.

DUNLOP TIRE AND RUBBER CORPORATION
Sheridan and River Roads
Tonawanda

Dunlop Tire and Rubber Corporation began operations in Buffalo in 1920. Dunlop has manufactured a wide variety of products including foam rubber (1942 to 1960), duthane (1959 to 1968), urethane foam (1959 to 1960), nylon (1962 to 1963), tire tubes (1938 to 1960), tennis balls, tennis rackets and golf balls (1940 to 1960), tires (since 1923), balata (since 1940), and blimps (1942 to 1945) using milling, mixing, extruding, calendering, tire building, curing and finishing processes.

Waste products generated include carbon black and powders, scrap wood, fly ash, scrap tires, wire tire beads, golf balls, scrap rubber, latex rubber, foam rubber, sulphur, plastics, oils, grease, oily sludge and tank residue, general refuse, chemical wastes (amines and nitrogen-containing compounds) and waste organic solvents (toluene and xylene).

All of these wastes have been disposed of at three sites on plant premises since 1921. In addition, (a) some solvents and degreasers (110 gallons/yr.) have been hauled by Downing Container and Elmwood Tank Cleaning to unknown sites, (b) carbon black, scrap wood, general refuse, oily sludge and tank residues were disposed of at Seaway Industrial Park in Tonawanda in 1976 and (c) some wastes have been hauled since 1930 by at least 20 haulers identified by the company.

The company does not know how much wastes it has generated. However, in 1976 the company indicated that it was generating the following amounts of wastes per year:

Waste oil and sludge	32,000 gallons
Oil skimmings	3,000 gallons
Solvent	13,750 gallons
Tank residue	2,750 gallons
Carbon black dust	40 tons
Scrap tires	660 tons

REFERENCE 8

New York State Department of Environmental Conservation
600 Delaware Avenue, Buffalo, NY 14202-1073 716/847-4560

Henry G. Williams
Commissioner

December 18, 1985

Mr. Sheldon S. Nozik
RECRA Research, Inc.
4248 Ridge Lea Road
Amherst, NY 14226

Dear Mr. Nozik:

Tentative Erie County and final Niagara County freshwater wetlands are shown directly on your site maps for the Superfund sites you are studying. Please be sure to examine all the maps since I did not copy all wetland boundaries if a given area was shown on another map.

Also, our maps show only those wetlands which exceed 5 ha in size. We have no information compiled for wetlands less than 5 acres in size.

To my knowledge, we have no "critical habitats" within one mile of the sites in question. Further, I am not aware of endangered or threatened species occupying these sites.

If you need some specific information on the wetlands within your study area, you will need to come to Regional Headquarters to compile those data.

Sincerely,

Gordon Batcheller

Gordon R. Batcheller
Senior Wildlife Biologist
Region 9

GRB:ls

Enc.

cc: Mr. Pomeroy

RECRA RESEARCH, INC.

Hazardous Waste And Toxic Substance Control

December 13, 1985

Mr. James Pomeroy
Habit Protection Biologist
NYSDEC Fish and Wildlife Office
128 South Street
Olean, NY 14760

Dear Mr. Pomeroy:

As per our telephone conversation on December 3, 1985, enclosed are sections of the topographic maps for the NYSDEC Phase I Superfund sites we are presently working on. Below is a list of these sites:

1. Exolon Company
2. Pennwalt-Lucidal
3. Mollenberg-Betz Co.
4. Empire Waste
5. Bisonite Paint Co.
6. Stocks Pond
7. Aluminum Matchplate
8. Otis Elevator (Stimm Assoc.)
9. LaSalle Reservoir
10. Tonawanda City Landfill
11. Union Road Site
12. Central Auto Wrecking (Diarsonal Co.)
13. Procknal and Katra
14. Consolidated Freightway
15. U.S. Steel (Stimm Assoc.)
16. Ernst Steel
17. American Brass (Anaconda)
18. Erie-Lackawanna Site
19. Dresser Industries
20. W. Seneca Transfer Station
21. Old Land Reclamation
22. Northern Demolition
23. Lackawanna Landfill
24. South Stockton Landfill*
25. Chadakoin River Park*
26. Dunkirk Landfill*
27. Felmont Oil Co.*
28. NFTA**
29. Walmore Road Site**
30. Schreck's Scrapyard**

* Chautaugua County
** Niagara County

As part of the search requirements for the NYSDEC Superfund sites, each of these sites must be documented as follows:

- if there are any coastal wetlands within two (2) miles of the site
- if there are any freshwater wetlands within one (1) mile of the site (5 acre min.
- if there are any critical habitats within one (1) mile of the site (endangered species or wildlife refuges)

Continued . . .

4248 Ridge Lea Road, Amherst, New York 14226 Telephone (716) 838-6200

Would you please forward information on sites 1-10 as soon as possible, as we have a January 15, 1986 deadline for submittal of these reports to Albany.

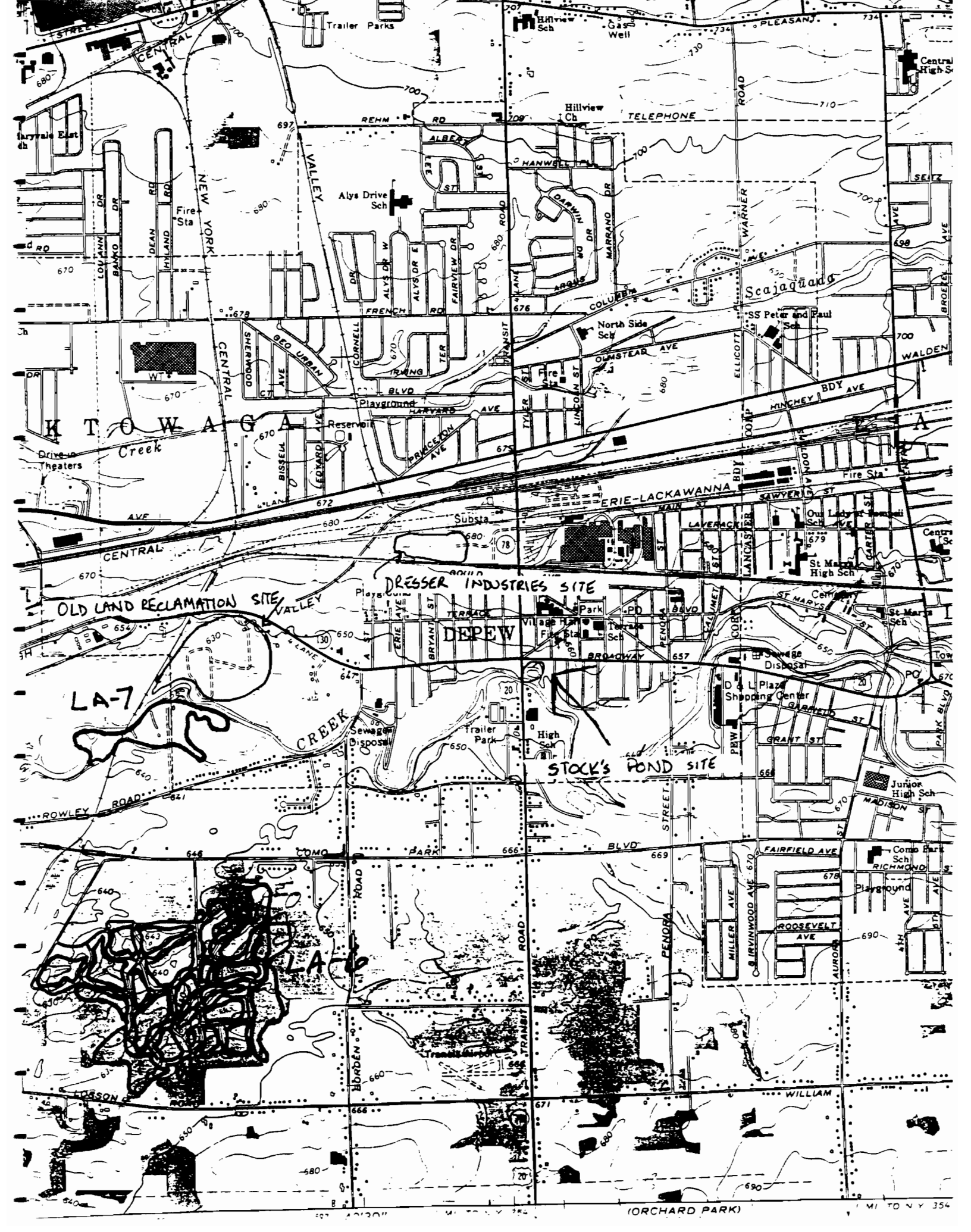
Thank you very much for your assistance and promptness in these matters. Should you have any questions or comments, please do not hesitate to call.

Sincerely,

RECRA RESEARCH, INC.

Sheldon S. Nozik
Environmental Specialist

SSN/jlo
Enclosure


DRESSER INDUSTRIES SITE
OLD LAND RECLAMATION SITE
STOCK'S POND SITE
LA-7
LA-6
CREEK
DEPEW
K T O W A G A
Creek
Scajaquada
Trailer Parks
Hillview Sch
Gas Well
Hillview Ch
Alys Drive Sch
Fire Sta
Reservoir
Playground
Drive-in Theaters
Substa
Trailer Park
High Sch
Sewage Disposal
Village Hall
Fire Sta
Terrace Sch
PO
D & L Plaza Shopping Center
North Side Sch
SS Peter and Paul Sch
Our Lady of Pompeii Sch
St Mary's High Sch
St Mary's Sch
Junior High Sch
Como Park Sch
Playground
Transit Airport
NEW YORK CENTRAL
ERIE-LACKAWANNA
TELEPHONE ROAD
WARNER ROAD
VALLEY ROAD
TRANSIT ROAD
PENORA STREET
FRENCH RD
REHM RD
PLEASANT
HANWELL
SEITZ
WALDEN
HINCHEY BDY AVE
MAIN ST
BROADWAY
TERRACE
ROWLEY ROAD
COMO PARK BLVD
FAIRFIELD AVE
ROOSEVELT AVE
MADISON ST
GRANT ST
GARFIELD ST
ST MARYS ST
WILLIAM
(ORCHARD PARK)

REFERENCE 9

600 Delaware Avenue, Buffalo, NY 14202-1073

March 12, 1984

Mr. Ernest J. Norman
Gibraltar Steel
2545 Walden Avenue
Buffalo, New York 14225

Dear Mr. Norman:

In response to our discussion on Friday, March 9, 1984 regarding disposal sites utilized by Dresser Industries, I have enclosed analytical data from a sampling program undertaken by this office at the following sites:

- Dresser Industries, west of Transit Road, Site #915064
- Stocks Pond, southeast corner of Broadway and Transit Road intersection, Site #915082.

A soil sample and a surface water sample were collected and analyzed from the Dresser Industries site, while soil and leachate samples were collected and analyzed from the Stocks Pond site.

Feel free to contact this office at 847-4590 should you have any questions on the enclosed material.

Yours truly,

Peter J. Buechi, P.E.
Associate Sanitary Engineer

PJB:cag
Enc.

cc: Ahmad Tayyebi

ANALYTICAL RESULTS

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Report Date: 1/28/82
Date Received: 12/9/81

WATER ANALYSES

SAMPLE IDENTIFICATION	SAMPLE DATE	PARAMETER (UNITS OF MEASURE) TOTAL RECOVERABLE PHENOLICS (mg/l)
R-013-03	12/9/81	<0.01
R-014-03	12/9/81	0.020
R-014-07	12/9/81	<0.01

Lesser Stonk Land

COMMENTS: Values reported as "less than" (<) indicate the working detection limit for the particular sample or parameter.

FOR RECRA RESEARCH, INC. R. V. Finn

DATE 1/29/82

RECRA RESEARCH INC
I.D. #81-1131

ANALYTICAL RESULTS

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Report Date: 1/28/82
Date Received: 12/9/81

SOIL ANALYSES

SAMPLE IDENTIFICATION	SAMPLE DATE	PARAMETER (UNITS OF MEASURE)	
		TOTAL RECOVERABLE PHENOLICS (µg/g DRY)	DRY WEIGHT (%)
R-013-02	12/9/81	9.3	14
R-014-01	12/9/81	9.0	50
R-014-05	12/9/81	8.4	57

COMMENTS: Analyses were performed according to U.S. Environmental Protection Agency methodologies where applicable.

FOR RECRA RESEARCH, INC. Q. V. Finn

DATE 1/29/82

RECRA RESEARCH INC
I.D. #81-1131

REFERENCE 10

Ferry Concrete Construction Co., Inc.

3179 Walden Avenue . . :-: . . Depew, New York 14043

Phone: 684-1703

May 10, 1979

Peter J. Millock, Director
Interagency Task Force on Hazardous Wastes
50 Wolf Road
Albany, New York 12233 518-457-6695

Dear Sir,

I am writing this letter in reference to your agency's Draft Report on Hazardous Waste Disposal in Erie and Niagara Counties, dated March 1979.

As removal Contractor for Dresser Industries, Inc. Depew, New York, since 1961, we were involved with two of the sites listed in your report and are currently involved with a third site (Lancaster Reclamation). I will address these sites individually in the following order:

1.) Lancaster Reclamation Company
403 Pavement Road
Lancaster, New York

2.) Stock's Pond
Broadway and Transit
Depew, New York

3.) Dresser Industries, Inc.
West End
Transit Road
Depew, New York

1.) LANCASTER RECLAMATION:

As discussed in our telephone conversation of 4/18/79, we are questioning the priority rating of this site. The report contains some misinformation regarding industries using this site; specifically Allied Chemical Dye Plant and Buffalo Color.

I am confirming the fact that no wastes from either of these industries have been disposed here.

We have accepted wastes from the following companies:

1.) Dresser Industries, Inc.
2.) Chevrolet
3.) Fabritron
4.) Pohlman Foundry

Ferry Concrete Construction Co., Inc.

3179 Walden Avenue . . :-: . . Depew, New York 14043

Phone: 684-1703

1.) LANCASTER RECLAMATION (con't)

Waste stream reports have been filed with the N.Y.S.D.E.C. office in Buffalo regarding all waste disposed of here with the exception of foundry sand from Pohlman Foundry. This material was accepted on a temporary basis with approval from John Beecher of the Buffalo Office.

As per your request, I am hereby listing the information regarding quantities of materal disposed of at this site from the different industries serviced.

Dresser Industries, Inc. -	Sludge -	1976	6,525 cu yds
		1977	16,200 cu yds
		1978	20,565 cu yds
	as of ~~5/1 1979~~ 6-1-79		7,500 cu yds 9,000 cu yds
	Core Sand -	1976	-0-
		1977	-0-
		1978	-0-
	as of 5/1	1979	165 cu yds
Chevrolet	Sludge -	1976	-0-
		1977	-0-
		1978	1,736,000 gals
		1979	-0-
Fabritron	Sludge -	1976	-0-
		1977	-0-
		1978	-0-
		1979	6,800 gals
Pohlman Foundry	Sand -	1979	15 cu yds

#2) STOCK'S POND

Concerning the report on this location, we would like to clarify the description of wastes which were disposed of here. First of all, we did no disposing of lubricating oil at this location. Secondly, phenolic binders were not disposed of at this site. However, sand which had been mixed with phenolic binders in the core making process was used for fill in this area. It is my understanding that the phenols, due to high temperature baking and exposure of this sand to molten metal, are generally dissipated. Therefore, the amounts of phenolic binders present in this location would be infinitesimal. Sand, Slag & Bentonite clay sludge were disposed at this location.

Ferry Concrete Construction Co., Inc.

3179 Walden Avenue . . :-: . . Depew, New York 14043

Phone: 684-1703

2.) STOCK'S POND (con't)

I am including time periods and quantities of materials as you requested. The following are wastes from Dresser Industries.

	Sand	Slag	Sludge
1967	5,545 cu yds	-0-	3,994 cu yds
1968	892 cu yds	17 cu yds	2,198 cu yds
1969	3,499 cu yds	2,465 cu yds	4,935 cu yds
1970	2,759 cu yds	1,894 cu yds	1,699 cu yds
1971	1,358 cu yds	890 cu yds	1,165 cu yds
1972	1,138 cu yds	558 cu yds	1,205 cu yds
1973	2,494 cu yds	80 cu yds	3,420 cu yds
1974	3,690 cu yds	966 cu yds	4,335 cu yds
1975	2,625 cu yds	8 cu yds	6,780 cu yds
1976	4,899 cu yds	225 cu yds	4,680 cu yds
1977	1,208 cu yds	210 cu yds	-0-
1978	-0-	-0-	-0-

We have not done any disposing at this site since 1977.

3.) DRESSER INDUSTRIES, INC. WEST END PROPERTY

This area was used for disposing of Dresser Industries waste material as described in site #2. Time periods and amounts disposed there are as follows.

	Sand	Slag	Sludge
1961	-0-	-0-	3,008 cu yds
1962	4,219 cu yds	-0-	1,724 cu yds
1963	1,479 cu yds	476 cu yds	1,561 cu yds

Ferry Concrete Construction Co., Inc.

3179 Walden Avenue . . :-: . . Depew, New York 14043

Phone: 684-1703

3.) DRESSER INDUSTRIES, INC. WEST END PROPERTY (con't)

	Sand	Slag	Sludge
1964	283 cu yds	140 cu yds	5,467 cu yds
1965	606 cu yds	699 cu yds	6,137 cu yds
1966	2,207 cu yds	-0-	4,737 cu yds
1967	3,479 cu yds	152 cu yds	2,811 cu yds
1968	9,760 cu yds	169 cu yds	-0-
1969	5,891 cu yds	318 cu yds	-0-
1970	-0-	-0-	-0-
1971	1,812 cu yds	-0-	1,707 cu yds
1972	6,752 cu yds	-0-	1,823 cu yds
1973	-0-	-0-	-0-
1974	4,060 cu yds	1,460 cu yds	-0-
1975	2,279 cu yds	261 cu yds	2,154 cu yds
1976	-0-	15 cu yds	4,695 cu yds
1977	3,430 cu yds	40 cu yds	-0-
1978	825 cu yds	-0-	-0-
1979 (as of 5/1)	600 cu yds	-0-	-0-

We hope that this information will be beneficial to your endeavor and instrumental in acquiring priority III ratings for these sites.

If we can be of any further help, feel free to contact this office at (716) 684-1703.

Sincerely,

John Ferry

REFERENCE 11

STATE OF NEW YORK

OFFICIAL COMPILATION

OF

CODES, RULES AND REGULATIONS

MARIO M. CUOMO
Governor

GAIL S. SHAFFER
Secretary of State

Published by
DEPARTMENT OF STATE
162 Washington Avenue
Albany, New York 12231

1/83

ARTICLE 8

Lake Erie — Niagara River Drainage Basin Series

PART

835 Big Sister Creek Drainage Basin

836 Silver Creek Drainage Basin

837 Lake Erie (East End)—Niagara River Drainage Basin

838 Cattaraugus Creek Drainage Basin

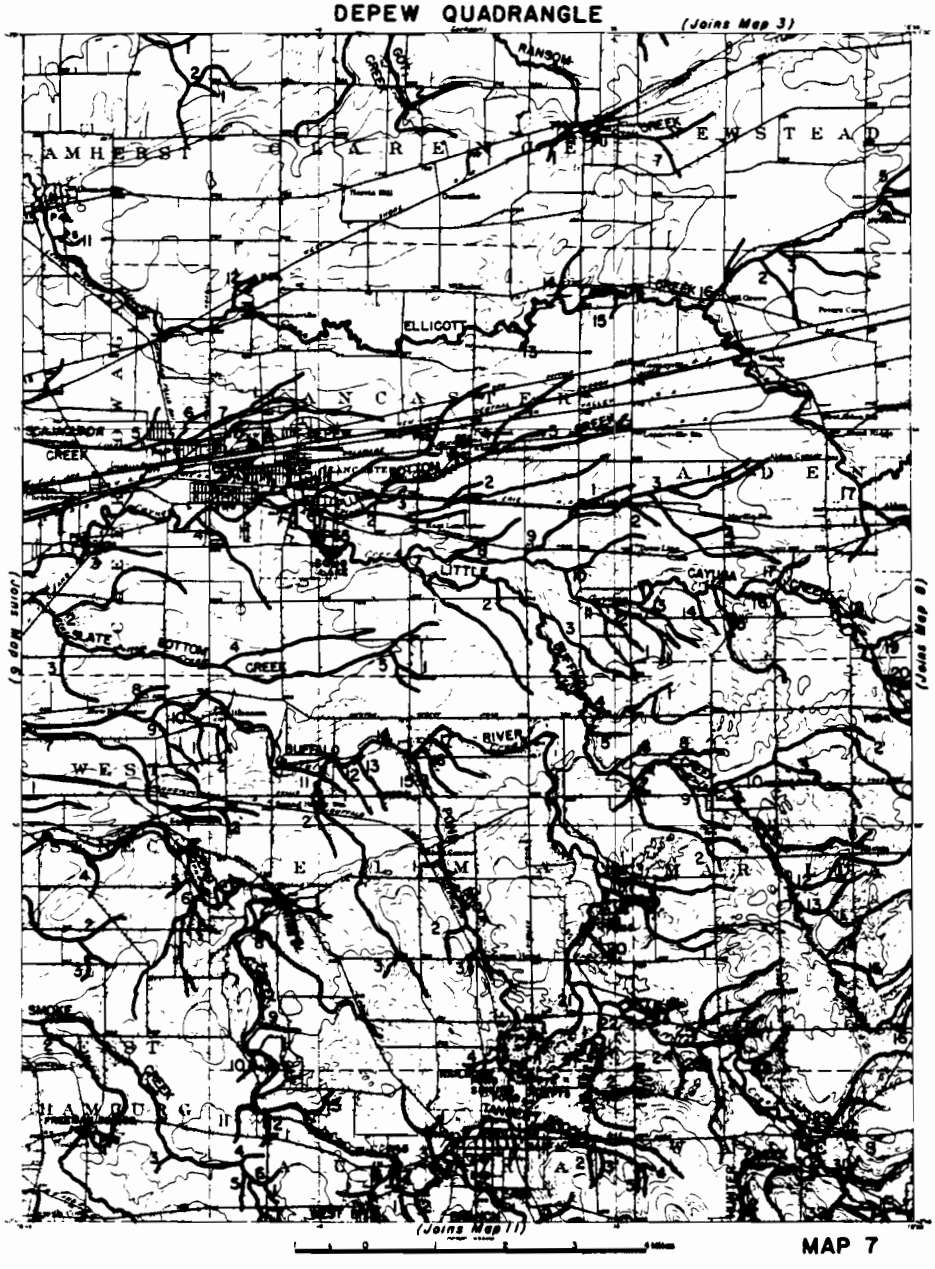
839 Lake Erie (West End) and Tributary Drainage Basins

TABLE I (contd.)

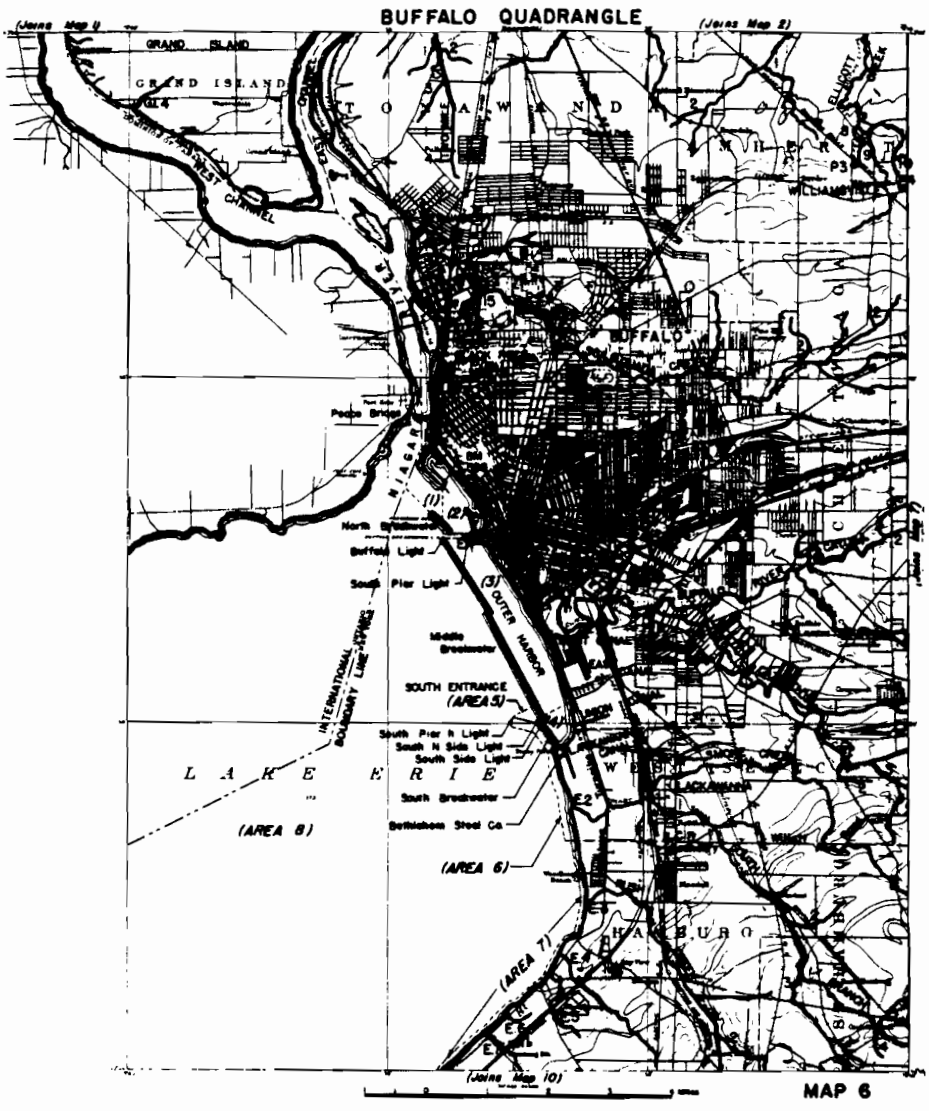
Item No.	Waters Index Number	Name	Description	Map Ref. No.	Class	Standards
171	E-1-4-15-22 and tribs. as shown on reference map	Spencer Brook	Enters West Branch Cazenovia Creek from east approximately 2.5 miles above Colden-Concord town line.	11	B	B
172	E-1-4-15-23	Graff Brook	Enters West Branch Cazenovia Creek from east approximately 4.0 miles above Colden-Concord town line.	11	B	B
173	E-1-6 portion as described	Cayuga Creek	Enters Buffalo River from east approximately 1.0 mile east of City of Buffalo-Cheektowaga town line. Mouth to Plumb Bottom Creek, item no. 178.	6,7	C	C
174	E-1-6 portion as described including P 65 (Como Lake)	Cayuga Creek	From Plumb Bottom Creek, item no. 178, to source.	7,8,12	B	B
175	E-1-6-1	Tributary of Cayuga Creek	Enters Cayuga Creek from west approximately 0.5 mile above mouth.	6	D	D
176	E-1-6-2 and tribs. as shown on reference map	Slate Bottom Creek	Enters Cayuga Creek from east approximately 2.0 miles above mouth.	6,7	D	D
177	E-1-6-3,4 and 5	Tributaries of Cayuga Creek	Enter Cayuga Creek between Slate Bottom Creek, item no. 176, and western boundary of Village of Lancaster.	7	D	D

TABLE I (contd.)

Item No.	Waters Index Number	Name	Description	Map Ref. No.	Class	Standards
117	0-158-15 portion as described	Scajaquada Creek	From crossing of Main Street, City of Buffalo to trib. 4 which is in line with continuation of Frederick Drive, Town of Cheektowaga.	6	D	D
118	0-158-15 portion as described	Scajaquada Creek	From trib. 4 which is in line with continuation of Frederick Drive, Town of Cheektowaga to source.	6,7	B	B
119	0-158-15-1,2,3, 4,5,6, and 7 and tribs. as shown on reference map	Tribs. of Scajaquada Creek	Enter Scajaquada Creek from north and northeast between mouth and source.	6,7	D	D
120	Big Burnt Ship Creek	Big Burnt Ship Creek	Seperates Grand Island from Buckhorn Island.	2	B	B
121	G.I. 1	Trib. of Big Burnt Ship Creek	Enters Big Burnt Ship Creek from east opposite eastern end of Buckhorn Island.	2	B	B
122	G.I. 2 and trib. as shown on reference map	Gun Creek	Enters Niagara (East Channel) from Grand Island at Edgewater.	2	B	B
123	G.I. 3 and trib. as shown on reference map	Spicer Creek	Enters Niagara (East Channel) from Grand Island opposite North Tonawanda water intake light.	2	B	B


DEPEW QUADRANGLE
(Joins Map 3)
AMHERST
CLARENCE
EWSTEAD
ELLICOTT
LANCASTER
ALDEN
WEST
SENECA
HAMBURG
RANSOM CREEK
SCAJAQUADA CREEK
SLATE BOTTOM CREEK
LITTLE
CAYUGA CREEK
BUFFALO RIVER
SMOKE
(Joins Map 2)
(Joins Map 6)
(Joins Map 11)

MAP 7


BUFFALO QUADRANGLE
GRAND ISLAND
GRAND ISLAND
TONAWANDA
BUFFALO
NIAGARA
Peace Bridge
North Breakwater
Buffalo Light
South Pier Light
(3) OUTER HARBOR
Middle Breakwater
SOUTH ENTRANCE
(AREA 5)
INTERNATIONAL BOUNDARY LINE
South Pier N Light
South N Side Light
South Side Light
LAKE ERIE
South Breakwater
Bethlehem Steel Co.
(AREA 8)
(AREA 6)
(AREA 7)
HAMBURG
(Joins Map 10)
MAP 6

REFERENCE 12

ENVIRONMENT REPORTER

TAB SECTION CONTENTS — 844-866

The state water laws of New Hampshire, New Jersey, New Mexico, New York, and North Carolina should be filed in this tab section. The page numbers will begin with prefixes from 844 to 866.

	Page
New Hampshire Water Pollution Control Law	846:0101
New Hampshire Oil Pollution Law	846:0141
New Hampshire Oil Spillage Regulations	846:0541
New Hampshire Wastewater Discharge Permit Rules	846:0581
New Hampshire Pretreatment Standards	846:0601
New Hampshire Water Quality Standards	846:1001
New Jersey Department of Environmental Protection Act of 1970	851:0081
New Jersey Water Pollution Control Laws	851:0101
New Jersey Water Quality Planning Act	851:0141
New Jersey Wetlands Act of 1970	851:0201
New Jersey Environmental Rights Act	851:0301
New Jersey Water Pollution Control Regulations	851:0501
New Jersey Point Source Discharge Regulations	851:0581
New Jersey Pollutant Discharge Elimination System Regulations	851:0601
New Jersey Surface Water Quality Standards	851:1001
New Mexico Water Quality Act	856:0101
New Mexico Water Quality Regulations	856:0501
New Mexico Water Quality Standards	856:1001
New York Environmental Conservation Law	861:0101
New York Water Pollution Control Regulations	861:0501
New York Rules on SPDES Program Fees	861:0601
New York Regulations on State Pollutant Discharge Elimination System	861:0841
New York Regulations on Oil Spill Prevention and Control	861:0881
New York Water Classifications and Quality Standards	861:1001
North Carolina Water and Air Resources Acts	866:0101
North Carolina Oil Pollution Control Act of 1973	866:0301
North Carolina Water Pollution Control Regulations	866:0501
North Carolina Water Quality Standards	866:1001

NEW YORK WATER CLASSIFICATIONS AND QUALITY STANDARDS

(Official Codes, Rules, and Regulations of the State of New York, Chapter X — Division of Water Resources, Article 2, Parts 700 through 704; Adopted April 28, 1972; Amended February 21, 1974; September 20, 1974; Part 703 Amended August 2, 1978; Effective September 1, 1978)

CONTENTS

700 Tests or Analytical Determinations
701 Classifications and Standards of Quality and Purity
702 Special Classifications and Standards
703 Ground Water Classifications, Quality Standards and Effluent Standards and/or Limitations
704 Criteria Governing Thermal Discharges

PART 700

TESTS OR ANALYTICAL DETERMINATIONS

Section 700.1 Collection of samples. In making any tests or analytical determinations to determine compliance or noncompliance of sewage, industrial wastes or other waste discharges with established standards, samples shall be collected in such manner and at such locations as are approved by the commissioner. In approving such locations the commissioner shall be guided by the fact that (a) there must be prompt mixing of the discharge with the receiving waters; (b) that the mixing will not interfere with biological communities to a degree which is damaging to the ecosystem; (c) that the mixing will not diminish other beneficial uses disproportionately.

700.2 Tests or analytical determinations. Tests or analytical determinations to determine compliance or noncompliance with standards shall be made in accordance with the latest edition of (a) *Standard Methods for the Examination of Water and Wastewater* prepared by American Public Health Association (APHA), American Water Works Association (AWWA) and Water Pollution Control Federation (WPCF); (b) *Methods for Chemical Analysis of Water and Wastes* prepared by Environmental Protection Agency (EPA); (c) *Water Standards of the American Society for Testing and Materials* (ASTM); or (d) by other methods approved by the commissioner and the administrator as giving results equal to or superior to methods listed in any of the other documents.

PART 701

CLASSIFICATIONS AND STANDARDS OF QUALITY AND PURITY

(April 28, 1972; Amended February 21, 1974; September 20, 1974)

Section 701.1 Definitions. The terms, words or phrases used in Parts 700, 701, 702 and 704 shall have the following meaning:

(a) *Commissioner* shall mean the Commissioner of the Department of Environmental Conservation.

(b) *Administrator* shall mean the Administrator of the United States Environmental Protection Agency.

(c) *Best usage of waters* as specified for each qlass shall be those uses as determined by the commissioner and the administrator in accordance with the considerations prescribed by the Environmental Conservation Law and Public Law 92-500.

(d) *Approved treatment* as applied to water supplies shall mean treatment accepted as satisfactory by the authorities responsible for exercising supervision over the sanitary quality of water supplies.

(e) *Source of water supply for drinking, culinary or food processing purposes* shall mean any source, either public or private, the waters from which are used for domestic consumption or used in connection with the processing of milk, beverages or foods. (When water is taken for public drinking, culinary or food processing purposes, refer to New York State Department of Health regulations 10 NYCRR 170.)

(f) *Primary contact recreation* shall mean recreational activities where the human body may come in direct contact with raw water to the point of complete body submergence. Such uses include swimming, diving, water skiing, skin diving and surfing.

(g) *Secondary contact recreation* shall mean recreational activities where contact with the water is minimal and where ingestion of the water is not probable. Such uses include but are not limited to fishing and boating.

(h) *Saline surface waters* shall mean all waters which are so designated by the commissioner.

(i) *International boundary waters* shall mean those waters to which the water quality standards developed and adopted pursuant to the Boundary Water Treaty of 1909 and the Great Lakes Quality Agreement of 1972 apply.

(j) *Sewage, industrial waste and other wastes* shall have the meanings given in section 17-0105 of the Environmental Conservation Law.

(k) *Estuary* shall mean the tidal portion of a river or stream.

(l) A *thermal discharge* is one which results or would result in a temperature change of the receiving water.

(m) *Heat of artificial origin* shall mean all heat from other than natural sources including but not limited to, cumulative effects of multiple and proximate thermal discharges.

CLASS C

Best usage of waters. Suitable for fishing and all other uses except as a source of water supply for drinking, culinary or food processing purposes and primary contact recreation.

Quality Standards for Class C Waters

Item: 1. Coliform.

Specifications: The monthly geometric mean total coliform value for 100 ml of sample shall not exceed 10,000 and the monthly geometric mean fecal coliform value for 100 ml of sample shall not exceed 2,000 from a minimum of five examinations. This standard shall be met during all periods when disinfection is practiced.

Item: 2. pH.

Specifications: Shall be between 6.5 and 8.5.

Item: 3. Total dissolved solids.

Specifications: None at concentrations which will be detrimental to the growth and propagation of aquatic life. Waters having present levels less than 500 milligrams per liter shall be kept below this limit.

Item: 4. Dissolved oxygen.

Specifications: For cold waters suitable for trout spawning, the DO concentration shall not be less than 7.0 mg/l from other than natural conditions. For trout waters, the minimum daily average shall not be less than 6.0 mg/l. At no time shall the DO concentration be less than 5.0 mg/l. For nontrout waters, the minimum daily average shall not be less than 5.0 mg/l. At no time shall the DO concentration be less than 4.0 mg/l.

Note 1: Refer to note 1 under Class AA which is also applicable to Class C standards.

CLASS D

Best usage of waters. These waters are suitable for secondary contact recreation, but due to such natural conditions as intermittency of flow, water conditions not conducive to propagation of game fishery or stream bed conditions, the waters will not support the propagation of fish.

Conditions related to best usage of waters. The waters must be suitable for fish survival.

Quality Standards for Class D Waters

Item: 1. pH.

Specifications: Shall be between 6.0 and 9.5.

Item: 2. Dissolved oxygen.

Specifications: Shall not be less than three milligrams per liter at any time.

Note 1: Refer to note 1 under Class AA which is also applicable to Class D standards.

701.5 Classes and standards for saline surface waters. The following items and specifications shall be the standards applicable to all New York Saline Surfaces Waters which are assigned the classification of SA, SB, SC or SD, in addition to the specific standards which are found in this Part under the heading of each such classification.

Quality Standards for Saline Surface Waters

Items: 1. Garbage, cinders, ashes, oils, sludge or other refuse.

Specifications: None in any waters of the marine district as defined by Environmental Conservation Law (§17-0105).

Item: 2. pH.

Specifications: The normal range shall not be extended by more than 0.1 pH unit.

Item: 3. Turbidity.

Specifications: No increase except from natural sources that will cause a substantial visible contrast to natural conditions. In cases of naturally turbid waters, the contrast will be due to increased turbidity.

Item: 4. Color.

Specifications: None from man-made sources that will be detrimental to anticipated best usage of waters.

Item: 5. Suspended, colloidal or settleable solids

Specifications: None from sewage, industrial wastes or other wastes which will cause deposition or be deleterious for any best usage determined for the specific waters which are assigned to each class.

Items: 6. Oil and floating substances.

Specifications: No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules of grease.

Item: 7. Thermal discharges.

Specifications: (See Part 704 of this Title.)

CLASS SA

Best usage of waters. The waters shall be suitable for shellfishing for market purposes and primary and secondary contact recreation.

Quality Standards for Class SA Waters

Item: 1. Coliform.

Specifications: The median MPN value in any series of samples representative of waters in the shellfish growing area shall not be in excess of 70 per 100 ml.

Item: 2. Dissolved oxygen.

Specifications: Shall not be less than 5.0 mg/l at any time.

Items: 3. Toxic wastes and deleterious substances.

Specifications: None in amounts that will interfere with use for primary contact recreation or that will be injurous to edible fish or shellfish or the culture or propagation thereof, or which in any manner shall adversely affect the flavor, color, odor or sanitary condition thereof or impair the waters for any other best usage as determined for the specific waters which are assigned to this class.

CLASS SB

Best usage of waters. The waters shall be suitable for primary and secondary contact recreation and any other use except for the taking of shellfish for market purposes.

Quality Standards for Class SB Waters

Item: 1. Coliform

Specifications: The monthly median coliform value for 100 ml of sample shall not exceed 2,400 from a minimum of five examinations and provided that not more than 20 percent of the samples shall exceed a coliform value of 5,000 for 100 ml of sample and the monthly geometric mean fecal coliform value for 100 ml of sample shall not exceed 200 from a minimum of five examinations. This standard shall be met during all periods when disinfection is practiced.

Item: 6. Radioactivity.

a. Gross beta.

Specifications: Shall not exceed 1,000 picocuries per liter in the absence of Sr^{90} and alpha emitters.

b. Radium 226.

Specifications: Shall not exceed three picocuries per liter.

c. Strontium 90.

Specifications: Shall not exceed 10 picocuries per liter.

Note 1: With reference to certain toxic substances affecting fish life, the establishment of any single numerical standard for waters of New York State would be too restrictive. There are many waters, which because of poor buffering capacity and composition will require special study to determine safe concentrations of toxic substances. However, most of the nontrout waters near industrial areas in this State will have an alkalinity of 80 milligrams per liter or above. Without considering increased or decreased toxicity from possible combinations, the following may be considered as safe stream concentrations for certain substances to comply with the above standard for this type of water. Waters of lower alkalinity must be specifically considered since the toxic effect of most pollutants will be greatly increased.

Ammonia or ammonium compounds — Not greater than 2.0 milligrams per liter expressed as NH_3 at pH of 8.0 or above.

Cyanide — Not greater than 0.1 milligrams per liter expressed as CN.

Ferro- or ferricyanide — Not greater than 0.4 milligrams per liter expressed as Fe(CN)6.

Copper — Not greater than 0.2 milligrams per liter expressed as Cu.

Zinc — Not greater than 0.3 milligrams per liter expressed as Zn.

Cadmium — Not greater than 0.3 milligrams per liter expressed as Cd.

CLASS A

Best usage of waters. Source of water supply for drinking, culinary or food processing purposes and any other usages.

Conditions related to best usage of waters. The waters, if subjected to approved treatment equal to coagulation, sedimentation, filtration and disinfection, with additional treatment if necessary to reduce naturally present impurities will meet New York State Department of Health drinking water standards and will be considered safe and satisfactory for drinking water purposes.

Quality Standards for Class A Waters

Item: 1. Coliform.

Specifications: The monthly median coliform value for 100 ml of sample shall not exceed 5,000 from a minimum of five examinations and provided that not more than 20 percent of the samples shall exceed a coliform value of 20,000 for 100 ml of sample and the monthly geometric mean fecal coliform value for 100 ml of sample shall not exceed 200 from a minimum of five examinations.

Item: 2. pH.

Specifications: Shall be between 6.5 and 8.5.

Item: 3. Total dissolved solids.

Specifications: Shall be kept as low as practicable to maintain the best usage of waters, but in no case shall it exceed 500 milligrams per liter.

Item: 4. Dissolved oxygen.

Specifications: For cold waers suitable for trout spawning, the DO concentration shall not less than 7.0 mg/l from other than natural conditions. For trout waters, the minimum daily average shall not be less than 6.0 mg/1. At no time shall the DO concentration be less than 5.0 mg/1. For nontrout waters, the minimum daily average shall not be less than 5.0 mg/1. At no time shall the DO concentration be less than 4.0 mg/1.

Item: 5. Phenolic compounds.

Specifications: Shall not be greater than 0.005 milligrams per liter (phenol).

Item: 6. Radioactivity.

a. Gross beta.

Specifications: Shall not exceed 1,000 picocuries per liter in the absence of Sr^{90} and alpha emitters.

b. Radium 226.

Specifications: Shall not exceed three picocuries per liter.

c. Strontium 90.

Specifications: Shall not exceed 10 picocuries per liter.

Note 1: Refer to note 1 under Class AA which is also applicable to Class A standards.

CLASS B

Best usage of waters. Primary contact recreation and any other uses except as a source of water supply for drinking, culinary or food processing purposes.

Quality Standards for Class B Waters

Item: 1. Coliform.

Specifications: The monthly median coliform value for 100 ml of sample shall not exceed 2,400 from a minimum of five examinations and provided that not more than 20 percent of the samples shall exceed a coliform value of 5,000 for 100 ml of sample and the monthly geometric mean fecal coliform value for 100 ml of sample shall not exceed 200 from a minimum of five examinations. This standard shall be met during all periods when disinfection is practiced.

Item: 2. pH.

Specifications: Shall be between 6.5 and 8.5.

Item: 3. Total dissolved solids.

Specifications: None at concentrations which will be detrimental to the growth and propagation of aquatic life. Waters having present levels less than 500 milligrams per liter shall be kept below this limit.

Item: 4. Dissolved oxygen.

Specifications: For cold waters suitable for trout spawning, the DO concentration shall not be less than 7.0 mg/1 from other than natural conditions. For trout waters, the minimum daily average shall not be less than 6.0 mg/1. At no time shall the DO concentration be less than 5.0 mg/1. For nontrout waters, the minimum daily average shall not be less than 5.0 mg/1. At no time shall the DO concentration be less than 4.0 mg/1.

Note 1: Refer to note 1 under Class AA which is also applicable to Class B standards.

(n) *Coastal waters* shall mean those marine waters within the territorial limits of the State other than estuaries and enclosed bays. Long Island Sound is designated as coastal waters for the purposes of thermal discharges.

(o) *Enclosed bays* shall mean those marine waters within the territorial limits of New York State, other than coastal waters or estuaries, in which exchange of sea water is severely limited by barrier beaches. For the purposes of thermal discharges, the following are designated as enclosed bays: Jamaica Bay, Hempstead Bay, Great South Bay, Moriches Bay, Shinnecock Bay and Mecox Bay.

701.2 Conditions applying to all classifications and standards. (a) In any case where the waters into which sewage, industrial wastes or other wastes effluents discharge are assigned a different classification than the waters into which such receiving waters flow, the standards applicable to the waters which receive such sewage or wastes effluents shall be supplemented by the following: "The quality of any waters receiving sewage, industrial wastes or other wastes discharges shall be such that no impairment to the best usage of waters in any other class shall occur by reason of such sewage, industrial wastes or other wastes discharges."

(b) Natural waters may on occasion have characteristics outside of the limits established by the standards. The standards adopted herein relate to the condition of waters as affected by the discharge of sewage, industrial wastes or other wastes.

701.3 Class N. Best usage of waters. Enjoyment of water in its natural condition and, where compatible, as source of water for drinking or culinary purposes, bathing, fishing and fish propagation, recreation and any other usages except for the discharge of sewage, industrial wastes or other wastes or any sewage or waste effluent.

Quality Standards for Class N Waters

Items: 1. Sewage, industrial wastes, or other wastes, waste effluents or any sewage effluents not having had filtration resulting from at least 200 feet* of lateral travel through unconsolidated earth.

Specifications: None.

Items: 2. Deleterious substances, hydrocarbons, substances which would contribute to eutrophication or surface runoff containing any of such substances.

Specifications: None.

*A greater distance may be required if an inspection shows that due to peculiar geological conditions this distance is inadequate to protect the water from pollution.

701.4 Classes and standards for fresh surface waters. The following items and specifications shall be the standards applicable to all New York fresh waters which are assigned the classification of AA, A, B, C, or D, in addition to the specific standards which are found in this Part under the heading of each such classification.

Quality Standards for Fresh Surface Waters

Item: 1. Turbidity.

Specifications: No increase except from natural sources that will cause a substantial visible contrast to natural conditions. In cases of naturally turbid waters, the contrast will be due to increased turbidity.

Item: 2. Color.

Specifications: None from man-made sources that be detrimental to anticipated best usage of waters.

Item: 3. Suspended, colloidal or settleable solids.

Specifications: None from sewage, industrial wastes or other wastes which will cause deposition or be deleterious for any best usage determined for the specific waters which are assigned to each class.

Items: 4. Oil and floating substances.

Specifications: No residue attributable to sewage, industrial wastes or other wastes nor visible oil film nor globules of grease.

Items: 5. Taste and odor-producing substances, toxic wastes and deleterious substances.

Specifications: None in amounts that will be injurious to fishlife or which in any manner shall adversely affect the flavor, color or odor thereof, or impair the waters for any best usage as determined for the specific waters which are assigned to each class.

Item: 6. Thermal discharges.

Specifications: (*See Part 704 of this Title.*)

Class AA

Best usage of waters. Source of water supply for drinking, culinary or food processing purposes and any other usages.

Conditions related to best usage of waters. The waters, if subjected to approved disinfection treatment, with additional treatment if necessary to remove naturally present impurities, will meet New York State Department of Health drinking water standards and will be considered safe and satisfactory for drinking water purposes.

Quality Standards for Class AA Waters

Item: 1. Coliform.

Specifications: The monthly median coliform value for 100 ml of sample shall not exceed 50 from a minimum of five examinations and provided that not more than 20 percent of the samples shall exceed a coliform value of 240 for 100 ml of sample.

Item: 2. pH.

Specifications: Shall be between 6.5 and 8.5.

Item: 3. Total dissolved solids.

Specifications: Shall be kept as low as practicable to maintain the best usage of waters, but in no case shall it exceed 500 milligrams per liter.

Item: 4. Dissolved oxygen.

Specifications: For cold waters suitable for trout spawning, the DO concentration shall not be less than 7.0 mg/l from other than natural conditions. For trout waters, the minimum daily average shall not be less than 6.0 mg/l. At no time shall the DO concentration be less than 5.0 mg/l. For nontrout waters, the minimum daily average shall not be less than 5.0 mg/l. At no time shall the DO concentration be less than 4.0 mg/l.

Item: 5. Phenolic compounds.

Specifications: Shall not be greater than 0.001 milligrams per liter (phenol).

REFERENCE 13

NAME OF LANDFILL: Dresser Industries

LOCATION: Transit Road, Depew, Erie County

CURRENT OWNER: Dresser Industries

HISTORY

This site has been used for the disposal of foundry sand, some with phenolic binders. It is currently used as a foundry sand storage area prior to removal for disposal elsewhere. There are also quantities of slag, bentonite clay sludge, and some lube oil present at this site.

INVESTIGATION

An investigation was conducted at this site on December 9, 1981 by Messrs. Christoffel, Tygert, and Wozniak of DEC-Region 9. Water and silt samples were collected from a drainage ditch along the south edge of the fill area. Augering a hole in the fill area was unsuccessful because the drill bit broke. No leachate breakouts were observed along the perimeter of the site.

SOILS AND GEOLOGICAL INFORMATION

This site is located on a Hudson-Rhineback soil association. It is an association of moderately well to somewhat poorly drained, moderately fine textured, medium lime, grayish brown soils developed in lake laid sediments.

The material of the dominant soils of the association are high in silt and clay, and too dense to have much pore space to hold water. The underlying rock is a tightly packed shale with no solution chambers or open joint planes.

The site is located on a Marcellus formation bedrock. In Western New York the Marcellus consists of black, fissile shale. The approximate depth to bedrock is 8 feet.

SAMPLE ANALYSIS

The soil analysis showed a small concentration of phenol. The concentration in the water sample was below the detection limit.

DISCUSSION OF RESULTS

From the analyses, it appears that phenol is present at the site, but probably is not contaminating the runoff.

This site has been classified "F" meaning no further action is required; subsequent investigation has shown that no in-place toxics are present in dangerous amounts and the sites do not present a toxics hazard.

The site is 16 acres in size and is above the 100 year flood level.

RECOMMENDATION

Because of the low concentrations of phenol in both the soil and the runoff no further action appears to be necessary at this site.

PARAMETER	SOIL	WATER
Phenol	9.3 ug/g dry	<0.01 mg/l
Dry Weight	14%	

Schedule I

Applicability. The following effluent standards and/or limitations shall apply to all Class GA waters in New York State.

Biological organisms. Coliform and/or pathogenic organisms shall not be discharged in amounts sufficient to render fresh ground waters detrimental to public health, safety or welfare.

Chemical Characteristics

	Substance	Maximum Allowable Concentration in mg/l (unless otherwise noted)
(1)	Aluminum	2.0
(2)	Arsenic	0.05
(3)	Barium	2.0
(4)	Cadmium	0.02
(5)	Chloride	500
(6)	Chromium (C_r) (Hexavalent)	0.10
(7)	Copper	1.0
(8)	Cyanide	0.40
(9)	Fluoride	3.0
(10)	Foaming Agents[1]	1.0
(11)	Iron[2]	0.6
(12)	Lead	0.05
(13)	Manganese[2]	0.6
(14)	Mercury	0.004
(15)	Nickel	2.0
(16)	Nitrate (as N)	20
(17)	Oil and Grease	15
(18)	Phenols	0.002
(19)	Selenium	0.04
(20)	Silver	0.1
(21)	Sulfate	500
(22)	Sulfide	1.0
(23)	Zinc	5.0
(24)	pH Range[3]	6.5-8.5
(25)	Aldrin, or 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-endo-1,4-exc-5,8-dimethanonaphthalene	not detectable[4]
(26)	Chlordane, or 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-4,7-methanoindene.	0.1 ug/l
(27)	DDT, or 2,2-bis-(p-chlorophenyl)-1,1,1-trichloroethane and metabolites	not detectable[4]
(28)	Dieldrin, or 6,7-epoxy aldrin	not detectable[4]
(29)	Endrin, or 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo-1,4-endo-5,8-dimethanonaphthalene	not detectable[4]
(30)	Heptachlor, or 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-4,7-methanoindene and metabolites	not detectable[4]
(31)	Lindane and other Hexachlorocyclohexanes or mixed isomers of 1,2,3,3,5,6-hexachloro-cyclohexane	not detectable[4]

Facility ID. No.:

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

ing the period beginning and lasting until
discharges from the permitted facility shall be limited and monitored by the
mittee as specified below:

tfall Effluent her Parameter	Discharge Limitations kg/day (lbs/day) Daily Avg.	Daily Max.	Other Units (Specify) Daily Avg.	Daily Max.	Monitoring Reqmts. Measurement Frequency	Sample Type
Surface Waters						
Flow (1,5)					Continuous	Meter
BOD_5				45 mg/l	Once per batch	Grab
Total Kjeldahl Nitrogen	Monitoring Required only - No limits				"	"
UOD (1)					"	"
Total Settleable Residue				0.2 ml/l	"	"
Total Suspended Residue				45 mg/l	"	"
Total Dissolved Residue					"	"
Chromium - VI (Hexavalent)				0.1 mg/l	"	"
Chromium - Total				1.0 mg/l	"	"
Cadmium - Total				0.2 mg/l	"	"
Copper - Total				0.4 mg/l	"	"
Iron - Total				4.0 mg/l	"	"
Lead - Total				0.2 mg/l	"	"
Zinc - Total				1.0 mg/l	"	"
Phenols				1.0 mg/l	"	"
Fluoride				15.0 mg/l	"	"
Oil and Grease				15.0 mg/l	"	"
Barium				4.0 mg/l	"	"
Sulfide				4.0 mg/l	"	"
Coliform Bacteria				400 per 100 ml	"	"
Total Halogenated Hydrocarbons				0.025 mg/l	"	"
Arsenic - Total				0.1 mg/l	"	"
Aluminum - Total				4.0 mg/l	"	"
Nickel - Total				2.0 mg/l	"	"
Mercury - Total				0.1 mg/l	"	"
Manganese - Total				2.0 mg/l	"	"

shall not be less than 6.0 standard units nor greater than 9.0 standard units and
be monitored as follows: once per batch, before discharge; outfall 001.

taken in compliance with the monitoring requirements specified above shall be taken
e following location(s): once per batch, before discharge; outfall 001.

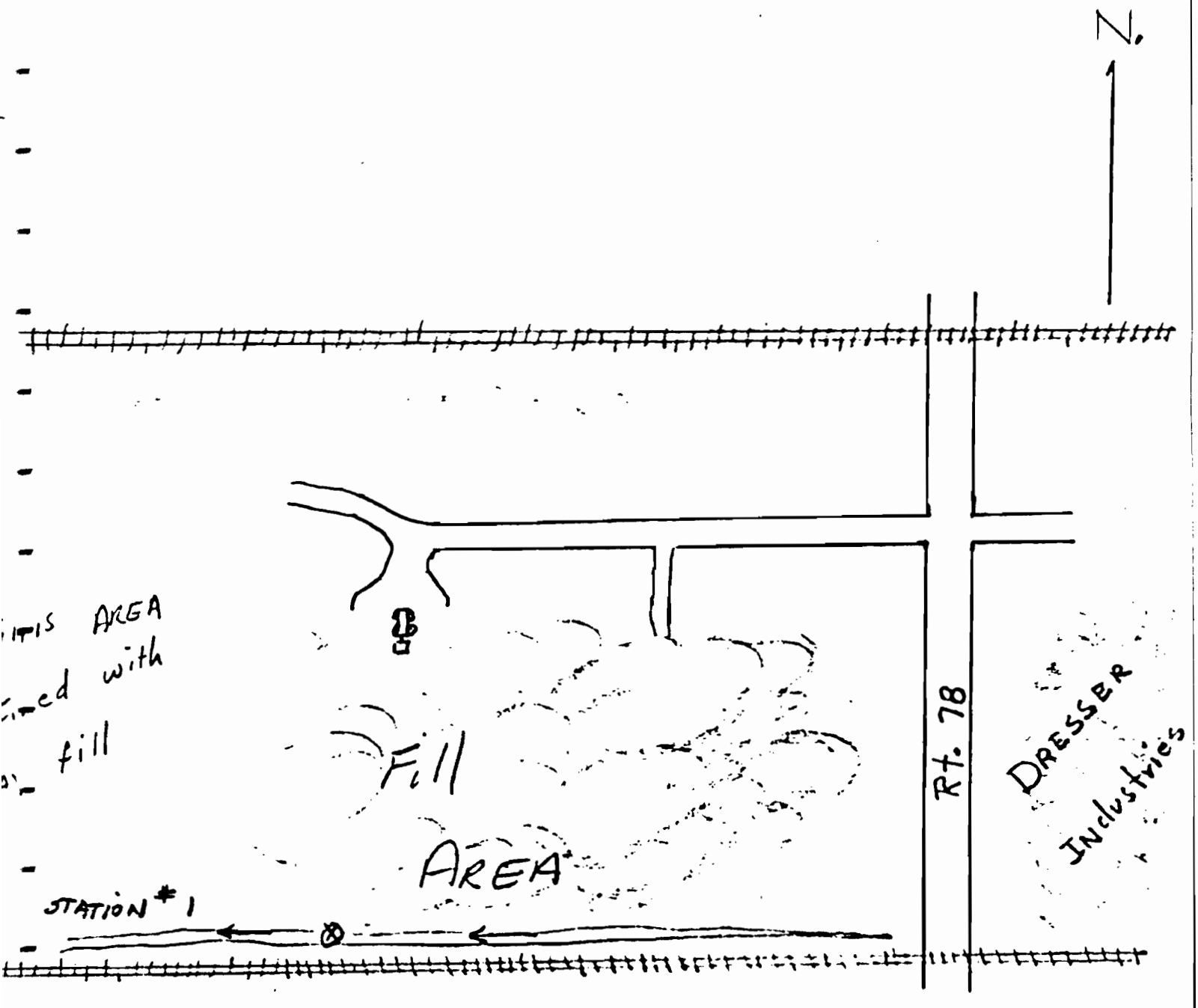
ily average discharge is the total discharge by weight or in other appropriate units
ified herein, during a calendar month divided by the number of days in the month
production or commercial facility was operating. Where less than daily sampling
uired by this permit, the daily average discharge shall be determined by the summation
the measured daily discharges in appropriate units as specified herein divided by the
of days during the calendar month when the measurements were made.

ily maximum discharge means the total discharge by weight or in other appropriate units
ified herein, during any calendar day.

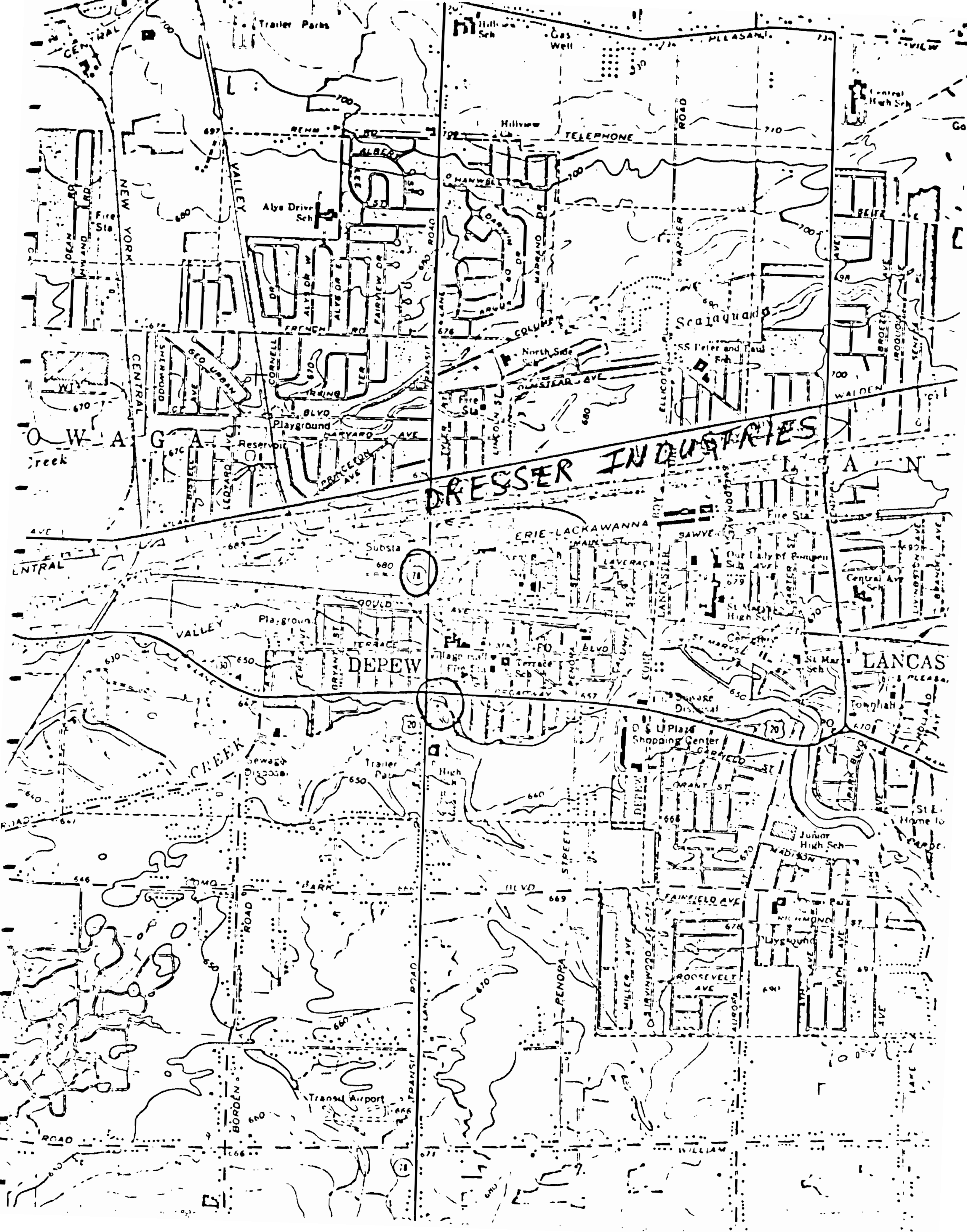
DRESSER Industries

12-7-31

STATION # 1 - WATER & SILT SAMPLE at south west Ca. from ditch draining south edge of fill AREA - ditch parrallels RAIL ROAD TRACKS flowing WEST

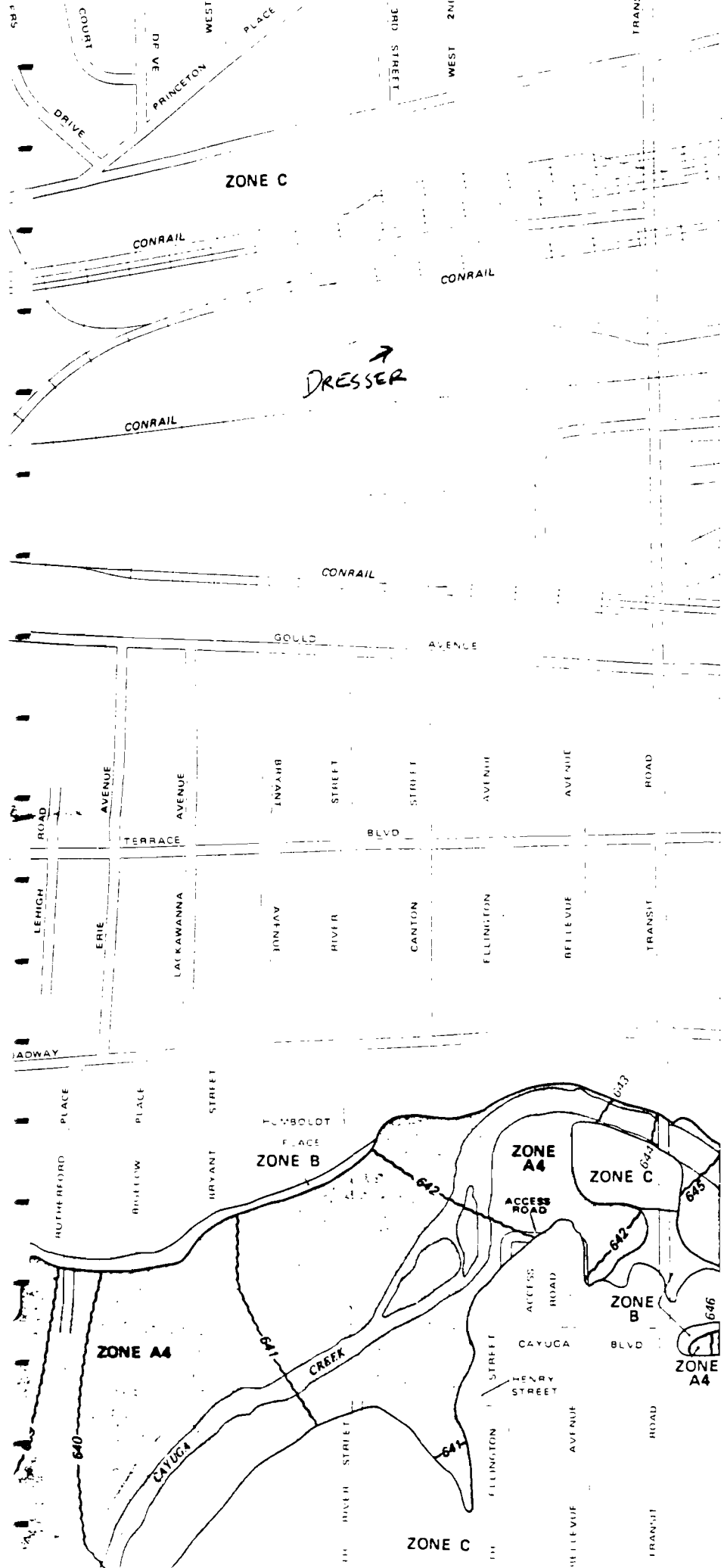


ITIS AREA
ed with
fill



Trailer Parks
Hillview Sch
Gas Well
PLEASANT
VIEW
Central High Sch
REHM RD
ALBERT
Hillview
TELEPHONE
710
700
NEW YORK CENTRAL
VALLEY
Fire Sta
Alys Drive Sch
DARWIN DR
MARRANO
WARNER
ROAD
FRENCH RD
COLUMBIA
TRANSIT
Scajaquada
SS Peter and Paul Sch
North Side Sch
OLMSTEAD AVE
ELLICOTT
WALDEN
SHERWOOD
CORNELL
GEO URBAN
IRVING
BLVD
Playground
Reservoir
Fire Sta
LINCOLN ST
PRINCETON AVE
DRESSER INDUSTRIES
Creek
ERIE-LACKAWANNA
MAIN ST
Fire Sta
SAWYER
Substa
Our Lady of Pompeii Sch
Central Ave Sch
St Mary's High Sch
Cemetery
GOULD
LANCASTER
Playground
VALLEY
TERRACE
DEPEW
Village Hall
Terrace Sch
LANCASTER
St Mary Sch
Townhall
CREEK
Sewage Disposal
Trailer Park
High Sch
O & H Plaza Shopping Center
GARFIELD ST
GRANT ST
PARK BLVD
Junior High Sch
MADISON ST
COMO PARK BLVD
STREET
PENORA
ROAD
FAIRFIELD AVE
RICHMOND
Playground
ROOSEVELT AVE
AURORA
BORDEN ROAD
Transit Airport
ROAD
WILLIAM
LAKE
660
650
670
680

REFERENCE 14



INITIAL IDENTIFICATION
FEBRUARY 22, 1974
FLOOD HAZARD BOUNDARY MAP REVISIONS
JULY 30, 1976

FLOOD INSURANCE RATE MAP EFFECTIVE
AUGUST 3 1981
FLOOD INSURANCE RATE MAP REVISIONS

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program at (800) 638-6620.

APPROXIMATE SCALE
400 0 400 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

VILLAGE OF
DEPEW,
NEW YORK
ERIE COUNTY

PANEL 3 OF 5
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
360236 0003 B

EFFECTIVE DATE:

REFERENCE 15

GEOLOGY

OF

ERIE COUNTY

New York

By

EDWARD J. BUEHLER

Professor of Geology
State University of New York at Buffalo

AND

IRVING H. TESMER

Professor of Geology
State University College at Buffalo

BUFFALO SOCIETY OF NATURAL SCIENCES
BULLETIN

Vol. 21. No. 3 Buffalo, 1963

Surficial Geology

PHYSIOGRAPHY

Both the altitude and relief of the land surface tend to increase from north to south. The lowest elevation is 565 feet above sea level at the northern tip of Grand Island and the highest, 1,945 feet above sea level, is in Sardinia township, southeastern Erie County. On the basis of physiography the county may be divided into three parts: the flat Lake Tonawanda plain in the north, followed by the Lake Erie plain, and the Allegheny plateau in the south.

The Onondaga escarpment is a conspicuous topographic feature. This north-facing cliff, formed by the outcropping northern edge of the resistant Onondaga Limestone and Upper Silurian dolostone, can be traced from Buffalo eastward through Akron. In Erie County it seldom exceeds 40 feet in height. Some of the streams which cross the escarpment form waterfalls, but many of the smaller streams disappear in fissures and caves and reappear on the plain to the north.

Between the Onondaga escarpment and the parallel Niagara escarpment to the north is the Lake Tonawanda plain, so named because in late Pleistocene time it was occupied by now extinct Lake Tonawanda. This plain actually is a shallow east-west trending trough, 10 to 15 miles in width, which is drained along its axis by Tonawanda Creek.

The Lake Erie plain, so called because it was covered by glacial lakes ancestral to the present Lake Erie, is an area 6 to 12 miles in width between the Onondaga escarpment and the hilly region to the south. This plain is smooth or gently rolling and rises in elevation toward its southern border where much of it is 900 to 1,000 feet above sea level.

The southern third of the county lies within the maturely dissected Allegheny plateau, the northern border of which is sometimes referred to as the Lake Erie or Portage escarpment. The hilly topography of this region appears to be largely the result of stream erosion for there are no appreciable folds or faults. Glacial erosion has modified the shape of some of the larger valleys and has produced a general rounding of the topography. The amount of glacial drift is commonly so great as to obscure the topography of the underlying bedrock.

MOLLUSKS

Gastropods

Euryzone rugulata (Hall)
Loxonema breviculum Hall
Platyostoma lineata var. *sinuosa* Hall
Pleurotomaria planidorsalis Hall
P. itys var. *tenuispira* Hall
Ptomatis patulus Hall

Cephalopods

Cyrtogomphus lunatus (Hall)
Geisonoceras aulax (Hall)
Michelinoceras (?) *emaceratum* (Hall)
M. (?) *eriense* (Hall)
M. (?) *uniconstrictum* (Miller)
Nautilus barrandi Hall
Nephriticeras magister (Hall)
Orthoceras sp.
*Probeloceras luther*i (Clarke)
Spyroceras nuntium (Hall)

Pelecypods

Aviculopecten insignis Hall
Conocardium crassifrons (Conrad)
Elymella nuculoides Hall
Gosselettia retusa Hall
Leiopteria conradi Hall
L. laevis Hall
Panenka hero Hall
Schizodus appressus (Conrad)

ARTHROPODS

Aechmina marginata Ulrich (Ludlowville)
Bairdia legumimoides Ulrich (Ludlowville)
Barychilina rhomboidea (Jones) (Ludlowville)
Ctenobolbina minima Ulrich (Ludlowville)
Strepula plantaris Jones
Primitiella fabacea (Jones)

ECHINODERMS

Clathrocoelia eborica Hall (now recognized as wing of *Actinopteria decussata* (Treatise, W: 139)
Platycrinus eriensis Hall

INCERTAE SEDIS

Clathrocoelia eborica Hall
Coleolus crenatocinctus Hall

Trilobites

Cordania gemmaea Hall and Clarke
Otarion halli
O. ornata (Hall)

MARCELLUS FORMATION

TYPE REFERENCE: Hall (1839, pp. 295-296).

TYPE LOCALITY: Slate Hill, one mile south of Marcellus, Onondaga County, New York; Skaneateles quadrangle.

TERMINOLOGY: See Vanuxem (1840, pp. 379-380), Wood (1901) and Cooper (1930). Early students included much of the overlying Skaneateles Formation in the Marcellus. Luther (1914) and others excluded the Marcellus from the Hamilton Group. In Erie County, the Marcellus is represented by a single member, the Oatka Creek Shale Member.

AGE: Middle Devonian (Erian).

THICKNESS: 30-55 feet.

LITHOLOGY: In western New York, the Marcellus consists of black, fissile shale.

PROMINENT OUTCROPS: Cayuga Creek in and near Lancaster (pl. 7, lower), and at the entrance to Como Lake Park.

CONTACTS: The lower contact of the Marcellus Formation with the Onondaga Limestone cannot be seen in Erie County. The upper contact is transitional into the Stafford Limestone Member of the Skaneateles Formation.

PALEONTOLOGY: The faunal content of the Marcellus is varied, consisting of brachiopods, bryozoans, pelecypods, gastropods, cephalopods, and arthropods.

Oatka Creek Shale Member

TYPE REFERENCE: Cooper (1930, pp. 130-131).

TYPE LOCALITY: Near the Main Street bridge over Oatka Creek, Leroy, Genesee County, New York; Caledonia quadrangle.

TERMINOLOGY: See Cooper (1930, pp. 130-131).

AGE AND CORRELATION: Middle Devonian (Erian). Correlates in part with the Cardiff Shale Member of the Finger Lakes region.

THICKNESS: 30-55 feet. Clarke (1901, p. 121) gives 49.6 feet and Luther (1906, p. 14) lists 55 feet.

LITHOLOGY: A dense black, fissile shale with a petroliferous odor. There are some beds of gray shale and several concretionary layers. Nodules of pyrite occur in the black shale near the base.

PROMINENT OUTCROPS: Cayuga Creek in and near Lancaster (pl. 7, lower), and at the entrance to Como Lake Park.

CONTACTS: The lower contact of the Oatka Creek with the Onondaga Limestone cannot be observed in Erie County. The contact between the Oatka Creek Shale Member and the overlying Stafford Limestone Member of the Skaneateles Formation is often transitional.

PALEONTOLOGY: Beds with abundant *Leiorhynchus limitare* can be observed near the top of the member in Como Lake Park. The following faunal list was modified from Wood (1901):

BRYOZOANS

Onychocheilus (?) *nitidulus* Conrad
Reptaria stolonifera Rolle

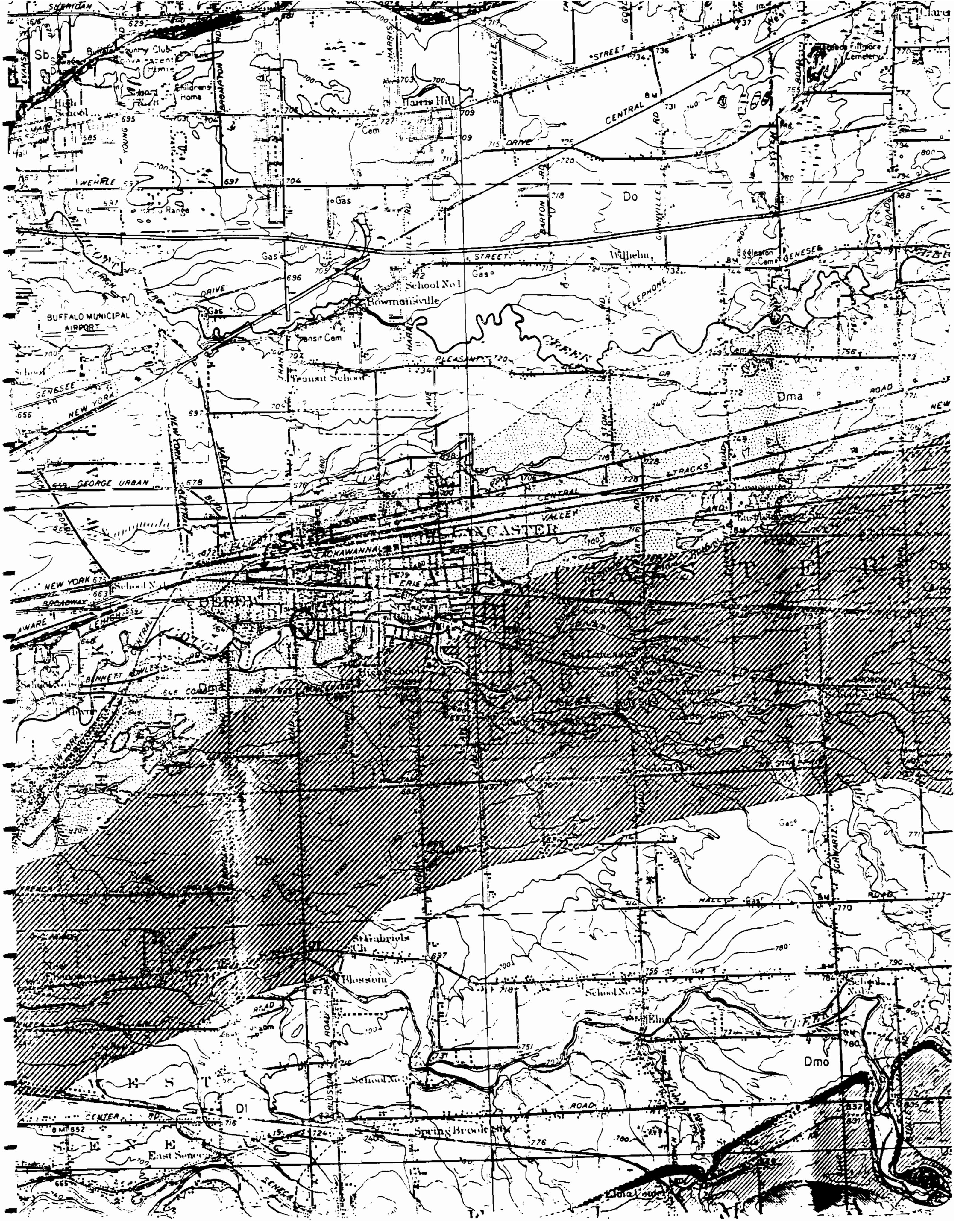
BRACHIOPODS

Ambocoelia nana Grabau
A. praeumbona Hall
Chonetes mucronatus Hall
C. scitulus Hall
Leiorhynchus limitare (Vanuxem)
Tropidoleptus carinatus (Conrad)
Truncalosia truncata (Hall)

MOLLUSKS

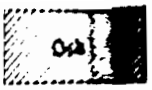
Gastropod

Pleurotomaria regulata Hall


SHERIDAN
Buffalo Country Club
Childrens Home
High School
Harris Hill
Cem
CENTRAL
STREET
DRIVE
WEHRLE
Do
BARTON
Gas
STREET
GENESEE
School No 1
Bowmansville
TELEPHONE
BUFFALO MUNICIPAL AIRPORT
PLEASANT
ROAD
Dma
NEW YORK
GEORGE URBAN
VALLEY
TRACKS
LANCASTER
LACKAWANNA
ERIE
NEW YORK
BROADWAY
LEHIGH
High School
HALL
St Gabriels Ch
Blossom
Dmo
CENTER
ROAD
Dl
Spring Brook
East Seneca
SENECA

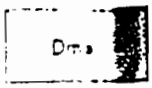
Middle Devonic

Ha



Skaneateles Formation

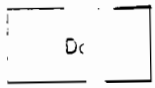
Levanna Shale Member, dark-gray calcareous shale, Stafford Limestone Member, massive, fossiliferous limestone at base.



Marcellus Formation

Oatka Creek Shale Member, black calcareous shale with some calcareous concretions.

50'

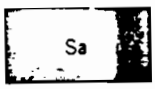


Onondaga Limestone

Moorehouse Limestone Member, light-gray limestone containing numerous corals and considerable dark-gray chert nodules; Nedrow Member, intermixed light-gray limestone and dark-gray chert; Edgecliff Member, light-gray limestone with some light-gray chert nodules, locally represented by a coral bioherm.

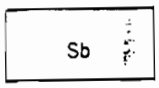
UNCONFORMITY

Upper Silurian



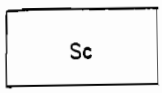
Akron Dolostone

Light-gray dolostone



Bertie Formation

Williamsville Member, light-gray argillaceous limestone; Scajaquada Member, interbedded dark-gray shale and argillaceous limestone; Falkirk Member, light-gray dolostone; Oatka Member, dark-gray shale with argillaceous limestone at base containing eurypterids.



Camillus Shale

Gray shale containing large amounts of gypsum

SILURIAN

Contact

Inferred Contact

45'

GEOLOGIC MAP OF ERIE COUNTY, NEW YORK BEDROCK GEOLOGY

by Edward J. Buehler and Irving H. Tesmer

1963

Scale 1/62500

1 0 1 2 3 4 Miles

CONTOUR INTERVAL 20 FEET

REFERENCE 16

GROUND-WATER RESOURCES OF THE ERIE-NIAGARA BASIN, NEW YORK

Prepared for the
Erie-Niagara Basin Regional Water Resources
Planning Board

by

A. M. La Sala, Jr.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

in cooperation with

THE NEW YORK STATE CONSERVATION DEPARTMENT
DIVISION OF WATER RESOURCES

STATE OF NEW YORK
CONSERVATION DEPARTMENT
WATER RESOURCES COMMISSION

Basin Planning Report ENB-3

1968

SHALE

Bedding and lithology

The Marcellus Shale and all overlying formations are distributed through the southern half of the Erie-Niagara basin. They are predominantly shale but include a few thin limestone members at various stratigraphic positions (fig. 2). Thin beds of fine-grained sandstone are also interbedded with the shale in the upper part of the section. The rocks dip southward at about 40 feet per mile. They underlie the upland part of the basin and also a broad plain along Lake Erie in the southern part of the basin. Streams eroded deep valleys in the uplands prior to glaciation. The rocks were further eroded during glaciation and later these valleys were partly filled with stratified glacial deposits and the hills were veneered with till. The rocks on the lake plain are thinly covered with till and clay. In postglacial time Cattaraugus and Eighteenmile Creeks, where they cross the lake plain, cut spectacular gorges in the shale.

Water-bearing openings

The shale formations are cut by both vertical and bedding-plane joints along which are hairline openings. Locally, openings along thin limestone beds may be widened by solution. An important feature of the shale is a discontinuous zone of fracturing that follows the upper surface of the rock. In places, this zone consists only of shallow tension cracks caused by the movement of glacial ice over the rock. At other places, the zone is as much as 10 feet thick and consists of crumpled and broken rock. Some exposures show convoluted beds interfolded with glacial deposits.

Hydrologic characteristics

Water enters the shale almost exclusively by percolation from the overlying glacial deposits in interstream areas. Generally, the water table or top of the saturated zone lies in the glacial deposits above the shale. The water table lies within the shale only where the glacial deposits are absent or thin. The fracture zone at the top of the rock is directly connected to the glacial deposits and, therefore, is most advantageously positioned to receive water. At places, the fracture zone is overlain by a thin section of coarse-grained till which is, in turn, overlain by clayey till of much lower permeability. The coarse-grained till and fracture zone then act as a single water-bearing zone. The vertical and bedding joints, which extend into the shale at depth, receive water where they intersect the fracture zone along the top of the rock or intersect the overlying glacial deposits. The joints are thin and widely spaced. The shale at depth, therefore, has a much lower permeability than the fracture zone at the top of the shale.

Yields of wells

The shale formations generally yield only small supplies of water to wells. Individual wells provide adequate and dependable supplies for numerous homes and farms in the area. Yields of as much as 40 gpm are obtained from the Hamilton Group, probably because it contains limestone with openings that have been enlarged by solution. Elsewhere, the maximum yields of wells are generally 10 to 15 gpm from the fracture zone. If the fracture zone is absent, water is obtained from joints deeper in the rock and the yields of wells are much smaller. The small number of applicable data in table 6 indicate that the yields of wells drawing from the deeper fractures range from 1 to 7 gpm. However, dry holes or wells with inadequate yields are not uncommon and are not restricted to any stratigraphic unit or geographic area. The data are sparse by which to study the relationship of topography to yields. It does appear that the wells drilled in valleys, particularly if the shale is overlain by thick unconsolidated deposits, have somewhat larger yields than those wells on hills.

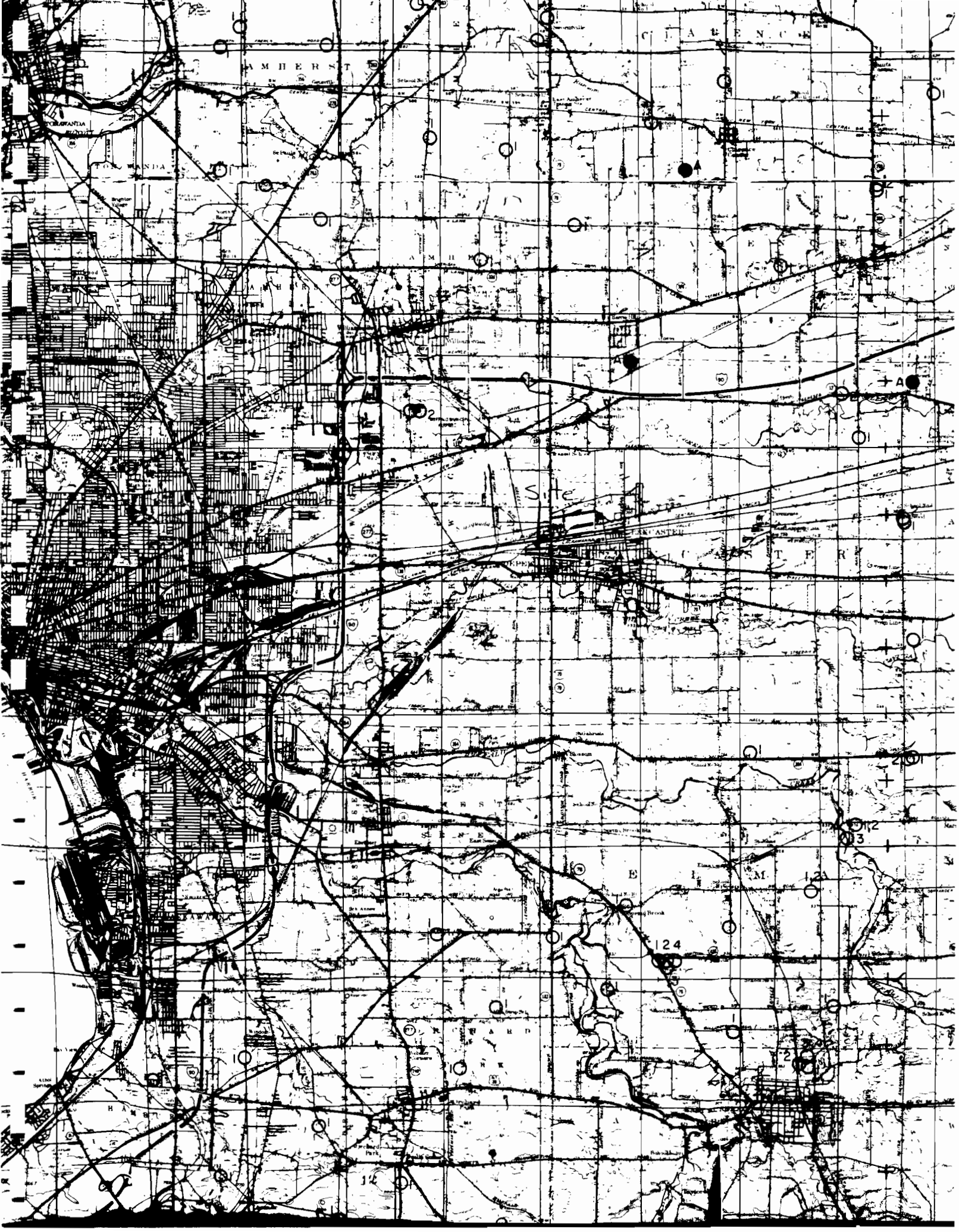

Site

Table 6.--Records of selected wells in the Erie-Niagara basin

Well number: See "Well-Numbering and Location System" in text for explanation.

Year completed: a - about
b - before

Type of well: Drl - drilled
Drv - driven

Depth of well: All depths below land surface.
a - about
r - reported
all others measured

Diameter of well: Diameters of dug wells are approximate.
Where two or more sizes of casings were used, they are shown in descending order.

Depth to bedrock: All depths below land surface
a - about
m - measured
all others reported

Water-bearing material: Gravel, sand, silt, and till - glacial deposits of Pleistocene age.
Camillus Shale - Camillus Shale of Silurian age.
Limestone - limestone unit consisting of the Onondaga Limestone of Devonian age and the Bertie Limestone and Akron Dolomite of Silurian age.
Lockport Dolomite - Lockport Dolomite of Silurian age.
Shale - Hamilton Group and Conneaut Group of Chadwick (1934) and intervening units, all of Devonian age.

Altitude above sea level: Estimated from topographic maps to nearest 5 feet.

Water level: All water levels are below land surface except those preceded by a (+) sign, which are above land surface.
a - about
p - pumping effect is probable
Flow - water flows above land surface but static head could not be measured.
r - reported
all others measured by U.S.G.S. personnel

Method of lift: AL - air lift
Dw - deep well cylinder pump
Jet - deep well jet pump
Sub - submersible pump
Sw - shallow-well pump
Tur - turbine pump

Type of power is indicated as -- I - internal combustion engine
M - manual
all others are electrically powered

Estimated pumpage: Average daily pumpage supplied by owner, tenant, or operator, or computed on basis of per capita consumption of 50 gpd per person or 20 gpd per milk cow.

Use: A - abandoned
Ag - agricultural
C - commercial
D - domestic
F - dairy farm
GT - gas test
I - industrial
In - institutional
Ir - irrigation only
PS - public supply
T - test
U - unused
X - destroyed

Remarks: anal - chemical analysis in this report
dd - drawdown
est - estimated
gas - flammable gas issues from well
gpd - gallons per day
gpm - gallons per minute
H_2S - hydrogen sulfide gas present in ground water
iron - water has noticeable iron content
LS - land surface
OW - observation well, series of water-level measurements available
r - reported
swl - static water level
temp - temperature, in degrees Fahrenheit, measured by U.S.G.S. on same day water level was measured unless otherwise noted

Table 6.—Records of selected wells in the Erie-Niagara basin (Continued)

Well number	County	Owner	Year completed	Type of well	Depth of well (feet)	Diameter (inches)	Depth to bedrock (feet)	Water-bearing material	Altitude above sea level (feet)	Water level: Below land surface (feet)	Water level: Date	Method of lift	Estimated pumpage or flow (gallons per day)	Use	Remarks
251-850-1	Erie	Donner-Hanna Coke Corp.	1928	Drl	r119	6	--	Limestone	585	--	--	AL	35,000	I	H_2S; yield 30 gpm (r); in use about 150 days per year during summer and early fall; a test boring nearby penetrated 62.5 ft of silty clay, refusal at 62.5 ft.
-2	do.	do.	1928	Drl	r116	6	--	do.	585	--	--	Al	35,000	I	Anal; also see remarks for well 251-850-1.
252-814-1	Genesee	A. Waite	1963	Drl	99	6	--	Sand and gravel	1,125	p46.3	6-18-64	Jet	500	F	Bailed 5 gpm (r).
252-815-1	do.	F. Stevens	1963	Drl	88	5 5/8	80	Shale	975	23.8	6-18-64	Jet	--	D	
252-818-1	do.	E. Snyder	1959	Drl	r23.5	6	a19	do.	1,040	r8	--	Sw	200	D	Anal; iron; H_2S; yield 5 gpm (r).
252-850-1	Erie	Artic Ice Co.	a1900	Drl	r180	6	a20	Limestone; Camillus Shale	590	r20	1951	Tur	--	U	Anal; yield 300 gpm (r); supplied 300,000 gpd.
252-852-1	do.	New York Telephone Co.	1955	Drl	r80	12	53	Limestone	605	30	3-20-63	Tur	--	U	H_2S; pumping test 85 gpm, swl 28 ft, dd 7 ft after 34 hours of pumping.
-2	do.	W & F Manufacturing Co.	1947	Drl	r101	8	8	do.	590	r,p37	1951	Tur	--	I	H_2S; water-bearing zones from 89 to 101 ft depth, underlying cherty beds in Onondaga Limestone; pumping data, 30 gpm, dd 17 ft (r).
-3	do.	Fairmont Foods Co., Inc.	1925	Drl	r127	8	30	do.	580	rFlow	1951	Tur	40,000	I	Anal; H_2S.
253-813-1	Genesee	D. Lapp	--	Drl	65.3	6	--	Sand and gravel	930	14.1	6-12-64	Jet	250	D	
253-820-1	do.	F. Pieri	1963	Drl	63.7	6	--	do.	1,060	19.3	7-30-64	Sw	250	D	
253-824-1	do.	A. Baginski	1960	Drl	41.1	6	--	do.	995	5.7	8- 8-63	Jet	150	D	Anal; yield 3 gpm (r).
253-829-1	Erie	J. Murray	1961	Drl	26.1	8	--	Shale	900	p11.3	7-31-63	Sw	250	D	Anal; iron; water level occasionally is pumped down to bottom of suction pipe at 24 ft.
-2	do.	do.	1961	Drl	22.0	6	--	do.	900	9.18	7-31-63	Sw	--	U	Iron.
-3	do.	Village of Alden	1961	Drl	r27	60, 18	27	Sand and gravel	840	--	--	Tur	75,000	PS	Concrete tile from 0-16 ft installed 1947; 18-inch diameter screen, gravel packed, from 16-27 ft installed 1961.
253-832-1	do.	D. Klinkman	1957	Drl	47.8	6	a40	Shale	830	11.3	7-31-63	Jet	250	D	Anal; iron; yield 10 gpm (r).
253-834-1	do.	J. Gilbride	1962	Drl	61.7	6	--	do.	775	28.8	7-31-63	Jet	250	D	Anal; iron; H_2S; yield 10 gpm (r).
253-840-1	do.	D. Klock	--	Drl	24.3	5	m8	do.	660	9.3	6-27-63	Sw	--	U	Anal; temp 49.
253-850-1	do.	Rivoli Theater	1941	Drl	r110	8	20	Limestone	605	r,p40	1951	Tur	50,000	C	Air-conditioning use; water is returned to ground through a disposal well 150 ft away; pumping data, 150 gpm, dd 4 ft (r).
-2	do.	Roosevelt Theater	1936	Drl	r60	8	20	do.	605	r,p30	1951	Tur	60,000	C	H_2S; air-conditioning use; water is returned to ground through a disposal well 150 ft away.
254-812-1	Genesee	E. Rhodes	1959	Drl	33.3	6	--	Sand and gravel	985	13.0	6-16-64	Jet	1,250	F	Iron; yield 15 gpm (r).
254-826-1	do.	F. Kaczmarek	1950	Drl	67.5	6	a50	Shale	940	11.8	8- 9-63	Jet	1,250	F	Anal; iron; H_2S; yield 8 gpm (r).
254-829-1	Erie	Village of Alden	1957	Drl	r35.7	16, 8	34	Sand and gravel	830	r7.1	1-31-58	Tur	100,000	PS	Iron; H_2S; screen, 8-inch diameter, 125-slot from 29-34 ft; gravel packed from 22-34 ft; pumping test, 220 gpm, swl 8.6 ft, dd 11.1 ft after 8 hours pumping.
-2	do.	do.	--	Dug	r14	140	--	do.	825	--	--	Sw	9,000	PS	One of a group of three dug wells at Alden No. 1 pumping plant; total pumpage from these three wells is about 27,000 gpd.

REFERENCE 17

DEC - 5

New York State Atlas of Community Water System Sources 1982

NEW YORK STATE DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL PROTECTION
BUREAU OF PUBLIC WATER SUPPLY PROTECTION

ERIE COUNTY

ID NO	COMMUNITY WATER SYSTEM	POPULATION	SOURCE
Municipal Community			
	Akron Village (See No 1 Wyoming Co, Page 10).	3640	
1	Alden Village.	3460.	Wells
2	Angola Village.	8500.	Lake Erie
3	Buffalo City Division of Water.	357870.	Lake Erie
4	Caffee Water Company.	210.	Wells
5	Collins Water District #3.	704.	Wells
6	Collins Water Districts #1 and #2.	1384.	Wells
7	Erie County Water Authority (Sturgeon Point Intake).	375000.	Lake Erie
8	Erie County Water Authority (Van OeWater Intake).	NA.	Niagara River - East Branch
9	Grand Island Water District #2.	9390.	Niagara River
10	Holland Water District.	1670.	Wells
11	Lawtons Water Company.	138.	Wells
12	Lockport City (Niagara Co).		Niagara River - East Branch
13	Niagara County Water District (Niagara Co).		Niagara River - West Branch
14	Niagara Falls City (Niagara Co).		Niagara River - West Branch
15	North Collins Village.	1500.	Wells
16	North Tonawanda City (Niagara Co).		Niagara River - West Branch
17	Orchard Park Village.	3671.	Pipe Creek Reservoir
18	Springville Village.	4169.	Wells
19	Tonawanda City.	18538.	Niagara River - East Branch
20	Tonawanda Water District #1.	91269.	Niagara River
21	Wanakah Water Company.	10750.	Lake Erie
Non-Municipal Community			
22	Aurora Mobile Park.	125.	Wells
23	Bush Gardens Mobile Home Park.	270.	Wells
24	Circle B Trailer Court.	50.	Wells
25	Circle Court Mobile Park.	125.	Wells
26	Creekside Mobile Home Park.	120.	Wells
27	Donnelly's Mobile Home Court.	99.	Wells
28	Gowanda State Hospital.	NA.	Clear Lake
29	Hillside Estates.	160.	Wells
30	Hunters Creek Mobile Home Park.	150.	Wells
31	Knox Apartments.	NA.	Wells
32	Maple Grove Trailer Court.	72.	Wells
33	Millgrove Mobile Park.	100.	Wells
34	Perkins Trailer Park.	75.	Wells
35	Quarry Hill Estates.	400.	Wells
36	Springville Mobile Park.	114.	Wells
37	Springwood Mobile Village.	132.	Wells
38	Taylors Grove Trailer Park.	39.	Wells
39	Valley View Mobile Court.	42.	Wells
40	Villager Apartments.	NA.	Wells

LOCATION OF COMMUNITY WATER SYSTEM SOURCES - 1982

ERIE and NIAGARA COUNTIES

DIVISION OF ENVIRONMENTAL PROTECTION
BUREAU OF PUBLIC WATER SUPPLY PROTECTION

REFERENCE 18

1980

Census of Population and Housing

Census Tracts

BUFFALO, N.Y.

STANDARD METROPOLITAN STATISTICAL AREA

PHC80-2-106

Issued July 1983

U.S. Department of Commerce
Malcolm Baldrige, Secretary
Robert G. Dederick,
Under Secretary for
Economic Af

BUREAU OF THE CE
Bruce Chapman, D

[For changes in boundaries of incorporated places since 1970, see table 4. For meaning of symbols, see introduction]

Incorporated Places Census Designated Places	Counties	1980	1970	1960
Cotram Hill (CDP)	Dutchess	1 380	...	...
Country Knolls (CDP)	Saratoga	2 497	2 082	...
Cove Neck village	Nassau	331	344	299
...ssackie village	Greene	2 786	2 399	2 849
...ghan village	Lewis	703	765	821
...ton-on-Hudson village	Westchester	6 889	7 523	6 812
...wn Heights (CDP)	Dutchess	3 225	3 292	...
Cuba village	Allegany	1 739	1 735	1 949
Cutchogue–New Suffolk (CDP)	Suffolk	2 788	...	...
Dannemora village	Clinton	3 770	3 735	4 835
...nsville village	Livingston	4 979	5 436	5 460
...er Park (CDP)	Suffolk	30 394	32 274	16 726
...ternet village	Jefferson	326	347	470
Delanson village	Schenectady	448	508	398
Delevan village	Cattaraugus	1 113	994	777
Delhi village	Delaware	3 374	3 017	2 307
...elmar (CDP)	Albany	8 423	...	...
...epew village	Erie	19 819	22 158	13 580
...epaug village	Total	1 897	2 061	2 025
	Broome (pt in)	1 017	1 119	1 187
	Delaware (pt in)	880	942	838
Deming Harbor village	Suffolk	16	24	19
...e Ruyter village	Madison	542	643	627
...e Witt (CDP)	Onondaga	9 024	10 032	...
Dexter village	Jefferson	1 053	1 061	1 009
Dix Hills (CDP)	Suffolk	26 693	10 050	...
Dobbs Ferry village	Westchester	10 053	10 353	9 260
Dolgeville village	Total	2 602	2 872	3 058
	Fulton (pt in)	162	175	185
	Herkimer (pt in)	2 440	2 697	2 873
Dover Plains (CDP)	Dutchess	1 753	...	...
Dresden village	Yates	378	450	437
Dryden village	Tompkins	1 761	1 490	1 263
Dundee village	Yates	1 556	1 539	1 468
Dunkirk city	Chautauqua	15 310	16 855	18 205
Earlville village	Total	985	1 050	1 004
	Chenango (pt in)	363	377	370
	Madison (pt in)	622	673	634
East Aurora village	Erie	6 803	7 033	6 791
East Bloomfield village	Ontario	587	643	488
East Cayuga Heights (CDP)	Tompkins	2 630	2 611	...
Eastchester (CDP)	Westchester	20 305	23 750	...
East Farmingdale (CDP)	Suffolk	5 522	...	...
East Glenville (CDP)	Schenectady	6 537	5 898	...
East Hampton village	Suffolk	1 886	1 753	1 772
East Hills village	Nassau	7 160	8 624	7 184
East Islip (CDP)	Suffolk	13 852	6 861	...
East Massapequa (CDP)	Nassau	13 987	15 926	14 779
East Meadow (CDP)	Nassau	39 317	46 290	46 036
East Middletown (CDP)	Orange	4 330	2 640	1 752
East Northport (CDP)	Suffolk	20 187	12 392	8 381
East Patchogue (CDP)	Suffolk	18 139	8 092	...
East Quogue (CDP)	Suffolk	3 668	1 143	...
East Randolph village	Cattaraugus	655	636	594
East Rochester village	Monroe	7 596	8 347	8 152
East Rockaway village	Nassau	10 917	11 795	10 721
East Syracuse village	Onondaga	3 412	4 333	4 708
East Williston village	Nassau	2 708	2 808	2 940
Eatons Neck (CDP)	Suffolk	1 574	...	...
Eden (CDP)	Erie	3 000	2 962	2 366
Edwards village	St Lawrence	561	576	658
Elba village	Genesee	750	752	739
Elbridge village	Onondaga	1 099	1 040	828
Elizabethtown village	Essex	659	607	779
Ellenville village	Ulster	4 405	4 482	5 003
Ellicottville village	Cattaraugus	713	955	1 150
Ellisburg village	Jefferson	307	337	328
Elma Center (CDP)	Erie	2 459	2 784	...
Elmira city	Chemung	35 327	39 945	46 517
Elmira Heights village	Chemung	4 279	4 906	5 157
Elmira Heights North (CDP)	Chemung	2 659	2 906	2 528
Elmont (CDP)	Nassau	27 592	29 363	30 138
Elmsford village	Westchester	3 361	3 911	3 795
Elwood (CDP)	Suffolk	11 847	15 031	...
Endicott village	Broome	14 457	16 556	18 775
Endwell (CDP)	Broome	13 745	15 999	...
Esperance village	Schoharie	374	408	314
Evans Mills village	Jefferson	651	714	618
Fabius village	Onondaga	367	374	378
Fair Haven village	Cayuga	976	859	764
Fairmount (CDP)	Onondaga	13 415	15 317	...
Fairport village	Monroe	5 970	6 474	5 507
Fairview (CDP)	Dutchess	5 852	8 517	8 626
Falconer village	Chautauqua	2 778	2 983	3 343
Farmingdale village	Nassau	7 946	9 297	6 128
Farmingville (CDP)	Suffolk	13 398	...	...
Farnham village	Erie	404	546	422
Fayetteville village	Onondaga	4 709	4 996	4 311
Fernwood (CDP)	Saratoga	3 640	3 659	2 108
Fillmore village	Allegany	563	537	522
Firthcliffe (CDP)	Orange	4 430	4 025	2 824
Fishkill village	Dutchess	1 555	913	1 033
Flenschmanns village	Delaware	346	434	450
Floral Park village	Nassau	16 805	18 466	17 499
Florida village	Orange	1 947	1 674	1 550
Flower Hill village	Nassau	4 558	4 486	4 594
Fonda village	Montgomery	1 006	1 120	1 004
Forestville village	Chautauqua	804	908	905
Fort Ann village	Washington	509	562	453
Fort Edward village	Washington	3 561	3 733	3 737
Fort Johnson village	Montgomery	646	711	876
Fort Montgomery (CDP)	Orange	1 396	...	...
Fort Plain village	Montgomery	2 555	2 809	2 809
Fort Salonga (CDP)	Suffolk	9 550	...	...
Frankfort village	Herkimer	2 995	3 305	3 872
Franklin village	Delaware	440	552	525
Franklin Square (CDP)	Nassau	29 051	32 156	32 483
Franklinville village	Cattaraugus	1 887	1 948	2 124
Fredonia village	Chautauqua	11 126	10 326	8 477
Freeport village	Nassau	38 272	40 374	34 419
Freeville village	Tompkins	449	664	471
Frewsburg (CDP)	Chautauqua	1 908	1 772	1 623
Friendship (CDP)	Allegany	1 461	1 285	1 231
Fulton city	Oswego	13 312	14 003	14 261
Fultonville village	Montgomery	777	812	815
Gainesville village	Wyoming	334	385	369
Galway village	Saratoga	245	270	309
Gang Mills (CDP)	Steuben	2 300	1 258	...
Garden City village	Nassau	22 927	25 373	23 948
Garden City Park (CDP)	Nassau	7 712	7 488	...
Gardnertown (CDP)	Orange	4 238	4 614	...
Gasport (CDP)	Niagara	1 339	...	...
Gates–North Gates (CDP)	Monroe	15 244	...	...
Geneseo village	Livingston	6 746	5 714	3 284
Geneva city	Total	15 133	16 793	17 286
	Ontario (pt in)	15 133	16 793	17 286
	Seneca (pt in)	–	–	–
Gilbertsville village	Otsego	455	552	522
Glasco (CDP)	Ulster	1 179	1 169	...
Glen Cove city	Nassau	24 618	25 770	23 817
Glenham (CDP)	Dutchess	2 832	2 720	...
Glen Park village	Jefferson	504	587	561
Glens Falls city	Warren	15 897	17 222	18 580
Glens Falls North (CDP)	Warren	6 956	...	...
Gloversville city	Fulton	17 836	19 677	21 741
Golden's Bridge (CDP)	Westchester	1 367	1 101	...
Goshen village	Orange	4 874	4 342	3 906
Gouverneur village	St Lawrence	4 285	4 574	4 946
Gowanda village	Total	2 713	3 110	3 352
	Cattaraugus (pt in)	1 864	2 098	2 273
	Erie (pt in)	849	1 012	1 079
Grand View-on-Hudson village	Rockland	312	325	330
Granville village	Washington	2 696	2 784	2 715
Great Neck village	Nassau	9 168	10 798	10 171
Great Neck Estates village	Nassau	2 936	3 131	3 262
Great Neck Plaza village	Nassau	5 604	6 043	4 948
Greece (CDP)	Monroe	16 177	...	...
Greene village	Chenango	1 747	1 874	2 051
Green Island village	Albany	2 696	3 297	3 533
Greenlawn (CDP)	Suffolk	13 869	8 493	5 422
Greenport village	Suffolk	2 273	2 481	2 608
Greenport West (CDP)	Suffolk	1 571	...	...
Greenville (CDP)	Westchester	8 706	...	...
Greenwich village	Washington	1 955	2 092	2 263
Greenwood Lake village	Orange	2 809	2 262	1 236
Groton village	Tompkins	2 313	2 112	2 123
Hagaman village	Montgomery	1 331	1 410	1 292
Hamburg village	Erie	10 582	10 215	9 145
Hamilton village	Madison	3 725	3 636	3 348
Hammond village	St. Lawrence	271	273	314
Hammondsport village	Steuben	1 065	1 066	1 176
Hampton Bays (CDP)	Suffolk	7 256	1 862	1 431
Hampton Park (CDP)	Suffolk	1 331	...	...
Hancock village	Delaware	1 526	1 688	1 830
Hannibal village	Oswego	680	686	611
Harriman village	Orange	796	955	752
Harriman South (CDP)	Orange	1 254	...	...
Harris Hill (CDP)	Erie	5 087	...	...
Harrison village	Westchester	23 046	...	...
Harrisville village	Lewis	937	836	842
Hartsdale (CDP)	Westchester	10 216	12 226	...
Hastings-on-Hudson village	Westchester	8 573	9 479	8 979
Hauppauge (CDP)	Suffolk	20 960	13 957	...
Haverstraw village	Rockland	8 800	8 198	5 771
Haviland (CDP)	Dutchess	3 578	3 447	...
Hawthorne (CDP)	Westchester	5 010	...	...
Head of the Harbor village	Suffolk	1 023	943	524
Hempstead village	Nassau	40 404	39 411	34 641
Herkimer village	Herkimer	8 383	8 960	9 396
Hermon village	St Lawrence	490	521	612
Hernicks (CDP)	Nassau	8 123	9 112	...
Herrings village	Jefferson	170	137	171
Heuvelton village	St Lawrence	777	770	810
Hewlett (CDP)	Nassau	6 986	6 796	...
Hewlett Bay Park village	Nassau	489	586	520
Hewlett Harbor village	Nassau	1 331	1 512	1 610
Hewlett Neck village	Nassau	472	529	507
Hicksville (CDP)	Nassau	43 245	49 820	50 405
Highland (CDP)	Ulster	3 967	2 184	2 931
Highland Falls village	Orange	4 187	4 638	4 469
Highland Mills (CDP)	Orange	2 034	...	...
Hillburn village	Rockland	926	1 058	1 114
Hillcrest (CDP)	Rockland	5 733	5 357	...

REFERENCE 19

RECRA ENVIRONMENTAL, INC.

Hazardous Waste And Toxic Substance Control

June 19, 1986

Mr. Lawrence Clare, P.E.
New York State Department of
Environmental Conservation
Region 9
Bureau of Solid and Hazardous Waste
600 Delaware Avenue
Buffalo, NY 14202

Dear Mr. Clare:

As part of the background information search requirements for the NYSDEC Superfund sites, we, the consultants, are required to have all our interviews, personal or telephone, documented.

Below is a synopsis of our telephone conversation which took place on June 19, 1986. I would like to request that you read the account, sign at the bottom of the page, and return it to the undersigned. This request is only to serve as documentation that our conversation took place.

- To the best of your knowledge, the only usages of Cayuga Creek and Scajaquada Creek within three miles downstream of Transit Road in Depew is for secondary contact recreation such as occasional fishing and wading.

Should you have any further comments, please feel free to contact the undersigned. Thank you for your time and effort.

Sincerely,

RECRA ENVIRONMENTAL, INC.

Thomas P. Connare

Thomas P. Connare
Environmental Analyst

TPC:pal

_____
Lawrence Clare

4248 Ridge Lea Road, Amherst, New York 14226, Telephone (716) 838-6200

APPENDIX B

APPENDIX B

REVISED NYSDEC INACTIVE HAZARDOUS WASTE DISPOSAL SITE REPORT

(47-15-11 (10/83)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DIVISION OF SOLID AND HAZARDOUS WASTE

INACTIVE HAZARDOUS WASTE DISPOSAL SITE REPORT

PRIORITY CODE: _____ SITE CODE: 915064

NAME OF SITE: Dresser Industries REGION: 9

STREET ADDRESS: Transit Road

TOWN/CITY: Depew COUNTY: Erie

NAME OF CURRENT OWNER OF SITE: Dresser Industries

ADDRESS OF CURRENT OWNER OF SITE: 2 Main Street, Depew, NY 14207

TYPE OF SITE: OPEN DUMP [X] STRUCTURE [ ] LAGOON [ ]
LANDFILL [ ] TREATMENT POND [ ]

ESTIMATED SIZE: 16 ACRES

SITE DESCRIPTION:

Foundry sand used to fill over 10 acres. The site is currently used as a foundry sand storage area prior to removal for disposal elsewhere. Filled areas are grassed. Soil and water samples were taken from the site in 1981.

HAZARDOUS WASTE DISPOSED: CONFIRMED [X] SUSPECTED [ ]

TYPE AND QUANTITY OF HAZARDOUS WASTES DISPOSED:

TYPE	QUANTITY (POUNDS, DRUMS, TONS, GALLONS)
Foundry Sand, some Phenolics	47,682 cu. yards
Slag	3,730 cu. yards
Bentonite Clay Sludge	35,824 cu. yards
Lube Oil	Unknown

TIME PERIOD SITE WAS USED FOR HAZARDOUS WASTE DISPOSAL:

Unknown, 19 ___ TO Present, 19 ___

OWNER(S) DURING PERIOD OF USE: Same

SITE OPERATOR DURING PERIOD OF USE: Same

ADDRESS OF SITE OPERATOR: Same

ANALYTICAL DATA AVAILABLE: AIR ☐ SURFACE WATER ☒ GROUNDWATER ☐
SOIL ☒ SEDIMENT ☐ NONE ☐

CONTRAVENTION OF STANDARDS: GROUNDWATER ☐ DRINKING WATER ☐
SURFACE WATER ☐ AIR ☐

SOIL TYPE: Urban Land - Churchville, Nearly Level

DEPTH TO GROUNDWATER TABLE: Natural water table perched in upper subsoil

LEGAL ACTION: TYPE: None STATE ☐ FEDERAL ☐
STATUS: IN PROGRESS ☐ COMPLETED ☐
REMEDIAL ACTION: PROPOSED ☐ UNDER DESIGN ☐
IN PROGRESS ☐ COMPLETED ☐

NATURE OF ACTION: None

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

One of three water samples contained phenol in low levels. Soil samples contained phenols in low levels.

ASSESSMENT OF HEALTH PROBLEMS:

Insufficient Information

PERSON(S) COMPLETING THIS FORM:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Recra Research, Inc.

NAME Kermit Studley
TITLE Staff Geologist
NAME
TITLE
DATE: January 14, 1986

NEW YORK STATE DEPARTMENT OF HEALTH

NAME
TITLE
NAME
TITLE
DATE: