932073

EA Report DEC31A

PRELIMINARY INVESTIGATION OF THE NIAGARA MATERIALS SITE CITY OF LOCKPORT, NIAGARA COUNTY, NEW YORK

PHASE I. SUMMARY REPORT

Prepared for

New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233

Prepared by

Ecological Analysts, Inc.
R.D. 2, Goshen Turnpike
Middletown, New York 10940

September 1984

CONTENTS

EXECUTIVE SUMMARY

The inactive Niagara Materials Site (New York ID No. 932073, EPA ID No. NYD 980654438) located in Lockport, Niagara County, New York, is believed to have been a lagoon disposal area. The site is situated on the south side of West Avenue, 1,000 feet east of the Route 93 intersection with West Ave.. The site consists of what appears to have been three lagoons located behind an old, dilapidated building.

The building was used for two years in the late fifties by the Niagara Materials Company. There are conflicting reports as to what the company manufactured. Ecological Analysts' investigation determined that Niagara Materials produced abrasive wheels and/or silicon tetrachloride. Wastes generated by Niagara Materials are not well known. It is also not known if Niagara Materials disposed of any wastes on site or if wastes came from an offsite source. Therefore, there is no certainty as to who might have disposed of waste onsite. Analytical data collected in December of 1981 revealed levels of metals, phenols, halogenated organics, and polynuclear aromatic hydrocarbons in water and silt from the onsite lagoons.

On the basis of the available data, it is believed that hazardous wastes have been disposed on site. Owing to lack of additional data, further investigation is warranted. Recommended Phase II work consists of OVA and geophysical surveys, with three test borings converted to observation wells based on survey results. Ground water from the observation wells would be analyzed for priority pollutants. The cost estimate for the Phase II work is $28,000.

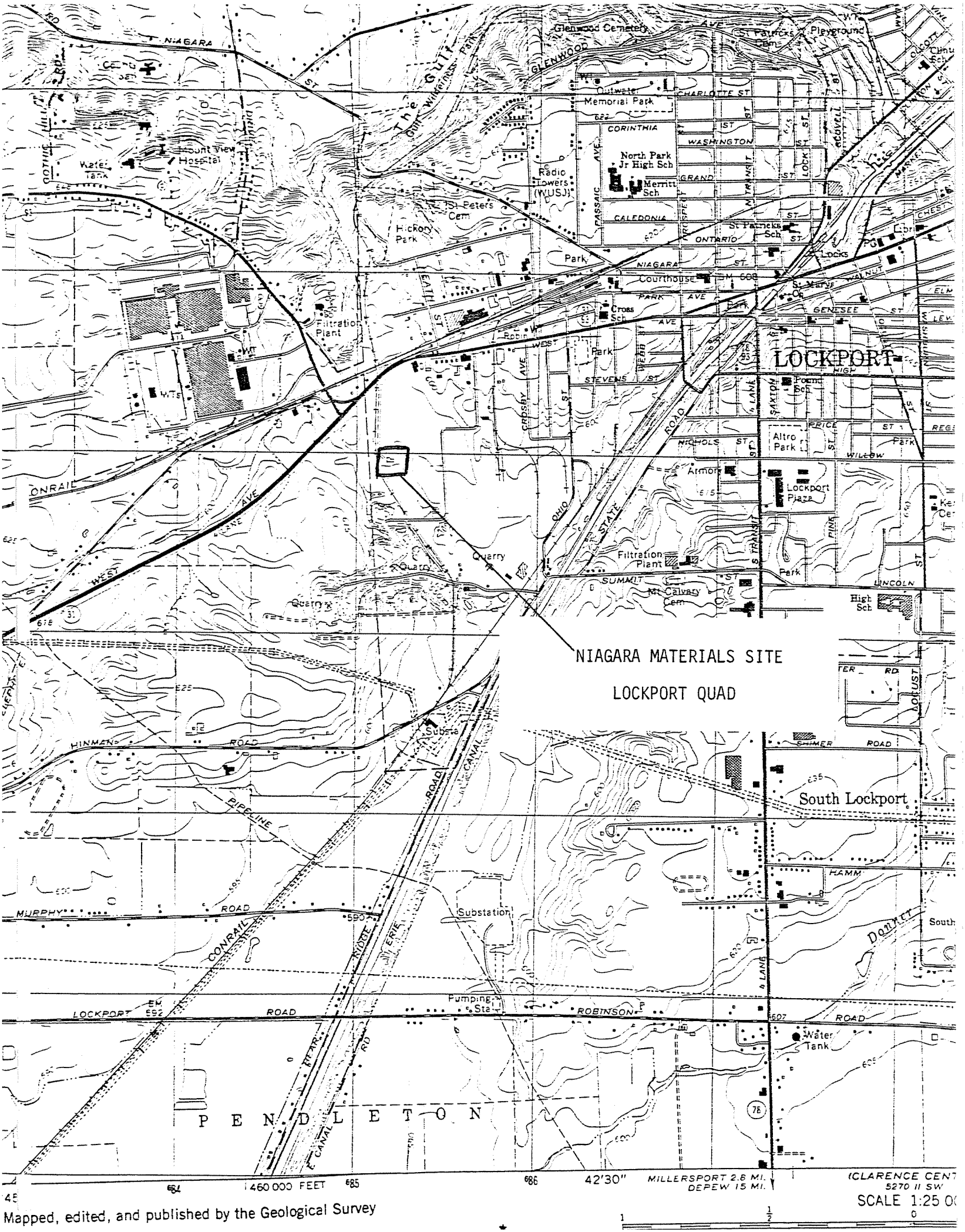
The preliminary HRS scores for the site are as follows: Migration Score (S_M) = 3.45; Direct Contact Score (S_{DC}) = 37.5. The low Migration Score reflects the lack of any known drinking water wells or surface water intakes in the area, as well as the lack of data concerning quantities of disposed waste. Given a detected release of contaminants to ground water and no further information of waste quantities or ground water use, the maximum S_M would be 7.53. On the basis of this low anticipated score, it is recommended that further work on this site be postponed until higher priority sites are studied.

SECTION 1

NIAGARA MATERIALS COMPANY

The Niagara Materials Site (New York ID No. 932073, EPA ID No. NYD980654438) is an inactive lagoon area just south of Route 31 in Lockport, Niagara County, New York. The site is believed to have been used for the disposal of industrial wastes. Metals and phenol were detected in the lagoons behind an old, abandoned building. The building is believed to have been used in the 1950's by a chemical manufacturer, Niagara Materials. Exact types and quantities of waste disposed of on site are unknown.

SECTION 2



Mapped, edited, and published by the Geological Survey

federal register

Friday
July 16, 1982

NIAGARA MATERIALS

Part V

Environmental Protection Agency

National Oil and Hazardous Substances Contingency Plan

Facility name: NIAGARA MATERIALS

Location: LOCKPORT, NIAGARA CTY, NY

EPA Region: II

Person(s) in charge of the facility: GENSTAR CO.
LOCKPORT, NY

Name of Reviewer: Ecological Analysts, Inc. Date: 9/2/83

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.)

Site is an inactive lagoon/landfill. Analysis of samples collected have shown hazardous waste contamination onsite. Building was used in 1950's by chemical company which is believed disposed of hazardous waste.

Scores: $S_M = 3.45$ ($S_{gw} = 4.18$ $S_{sw} = 4.25$ $S_a = 0$)

S_{FE} = N/A

S_{DC} = 37.5

Max S_M = 7.53

FIGURE 1
HRS COVER SHEET

BILLING CODE 6560-50-C

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 Unknown		2	0	6	
Net Precipitation	0 1 (2) 3		1	2	3	
Permeability of the Unsaturated Zone	0 1 (2) 3		1	2	3	
Physical State	0 1 2 (3)		1	3	3	
Total Route Characteristics Score				7	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	18	18	
Hazardous Waste Quantity	0 (1) 2 3 4 5 6 7 8		1		8	
Total Waste Characteristics Score				19	26	
5 Targets						3.5
Ground Water Use	0 1 (2) 3		3	6	9	
Distance to Nearest Well/Population Served	(0) 4 6 8 10 12 16 18 20 24 30 32 35 40		1	0	40	
Total Targets Score				6	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				2394	57,330	
7 Divide line 6 by 57,330 and multiply by 100			S_{gw} =	4.18		

FIGURE 2
GROUND WATER ROUTE WORK SHEET

Max = 8.95
S_{gw}

Surface Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	0	45	4.1
If observed release is given a value of 45, proceed to line 4. If observed release is given a value of 0, proceed to line 2.					
2 Route Characteristics					4.2
Facility Slope and Intervening Terrain	(0) 1 2 3	1	0	3	
1-yr. 24-hr. Rainfall	0 (1) 2 3	1	1	3	
Distance to Nearest Surface Water	0 1 (2) 3	2	4	6	
Physical State	0 1 2 (3)	1	3	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	18	18	
Hazardous Waste Quantity	0 (1) 2 3 4 5 6 7 8	1	1	8	
Total Waste Characteristics Score			19	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	0	6	
Population Served/Distance to Water Intake Downstream	(0) 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40	
Total Targets Score			6	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			2736	64,350	
7 Divide line 6 by 64,350 and multiply by 100			S_{sw} = 4.25		

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

FIGURE 9
AIR ROUTE WORK SHEET

BILLING CODE 6560-50-C

four-mile radius as well as transients such as workers in factories, offices, restaurants, motels, or students. It excludes travelers passing through the area. If aerial photography is used in making the count, assume 3.5 individuals per dwelling unit. Select the highest value for this rating factor as follows:

DISTANCE TO POPULATION FROM HAZARDOUS SUBSTANCE

Population	0–4 miles	0–1 mile	0–½ mile	0–¼ mile
0	0	0	0	0
1 to 100	9	12	15	18
101 to 1,000	12	15	18	21
1,001 to 3,000	15	18	21	24
3,001 to 10,000	18	21	24	27
More than 10,000	21	24	27	30

Distance to sensitive environment is an indicator of the likelihood that a region that contains important biological resources or that is a fragile natural setting would suffer serious damage if hazardous substances were to be released from the facility. Assign a value from Table 10.

Land use indicates the nature and level of human activity in the vicinity of a facility. Assign highest applicable value from Table 13.

6.0 Computing the Migration Hazard Mode Score, S_M

To compute S_M, complete the work sheet (Figure 10) using the values of S_{gw}, S_{sw} and S_a obtained from the previous sections.

7.0 Fire and Explosion

Compute a score for the fire and explosion hazard mode, S_{FE}, when either a state or local fire marshall has certified that the facility presents a significant fire or explosion threat to the public or to sensitive environments or there is a demonstrated fire and explosion threat based on field observations (e.g., combustible gas indicator readings). Document the threat.

7.1 Containment. Containment is an indicator of the measures that have been taken to minimize or prevent hazardous substances at the facility from catching fire or exploding. Normally it will be given a value of 3 on the work sheet (Figure 11). If no hazardous substances that are individually ignitable or explosive are present and those that may be hazardous in combination are segregated and isolated so that they cannot come together to form incompatible mixtures, assign this factor a value of 1.

7.2 Waste Characteristics. Direct evidence of ignitability or explosion potential may exist in the form of measurements with appropriate instruments. If so, assign this factor a value of 3; if not, assign a value of 0.

TABLE 13.—VALUES FOR LAND USE (AIR ROUTE)

Assigned value =	0	1	2	3
Distance to Commercial-Industrial	>1 mile	½ to 1 mile	¼ to ½ mile	<¼ mile.
Distance to National/State Parks, Forests, Wildlife Reserves, and Residential Areas.	>2 miles	1 to 2 miles	¼ to 1 mile	<¼ mile.
Distance to Agricultural Lands (in Production within 5 years):				
Ag land	>1 mile	½ to 1 mile	¼ to ½ mile	<¼ mile.
Prime Ag Land [1]	>2 miles	1 to 2 miles	¼ to 1 mile	<¼ mile.
Distance to Historic/Landmark Sites (National Register of Historic Places and National Natural Landmarks).				Within view of site or if site is subject to significant impacts.

[1] Defined in the Code of Federal Regulations, 7 CFR 657.5, 1981.

	S	S^2
Groundwater Route Score (S_{gw})	4.18	17.47
Surface Water Route Score (S_{sw})	4.25	18.06
Air Route Score (S_a)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		35.53
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		5.96
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		3.45

FIGURE 10
WORKSHEET FOR COMPUTING S_M

Max S_M = 7.53 with release to groundwater

Direct Contact Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multiplier	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	15	15	8.4
5 Targets					8.5
Population Within a 1-Mile Radius	0 1 2 (3) 4 5	4	12	20	
Distance to a Critical Habitat	(0) 1 2 3	4	0	12	
Total Targets Score			12	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			8,100	21,600	
7 Divide line 6 by 21,600 and multiply by 100	S_{DC} = 37.5				

FIGURE 12
DIRECT CONTACT WORK SHEET

BILLING CODE 6560-50-C

SECTION 4

June 28, 1982

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: Niagara Materials Company

LOCATION: Lockport, New York

GROUND WATER ROUTE

1 OBSERVED RELEASE None observed

Contaminants detected (5 maximum):

No data

Rationale for attributing the contaminants to the facility:

* * *

2 ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifers(s) of concern:

UnKnown

There may be no wells within 3 mile radius

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

UnKnown

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

UnKnown

UNKNOWN

Net Precipitation

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

35 inches

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

26 inches

Net precipitation (subtract the above figures):

9 inches

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Silty loam (described as medium textured)
Reference: DEC (reg. 9) report

Permeability associated with soil type:

$< 10^{-3} \geq 10^{-5}$

Physical State

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

Liquids and/or sludges ***

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

LINER EVALUATED

Method with highest score:

RESULT: NO LINER

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

LEAD
FLOURANTHENE
BENZO (a) ANTHRACENE
BENZO (a) PYRENE
CHRYSENE

Compound with highest score:

BENZO (a) PYRENE [3,3]

(See Section 7.3)

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):

unknown

Score = 1

Basis of estimating and/or computing waste quantity:

No data

* * *

5 TARGETS

Ground Water Use

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

Possibly commercial
possible drinking water in isolated locations

Distance to Nearest Well

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

< 1 MILE POSSIBLY NORTH AND/OR SOUTH

Actual location not verified, but inferred from topo. map.

Distance to above well or building:

< 1 MILE

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:

Possible wells located w/in surrounding 3 mile radius. However, area served by public water supply (Niagara County)

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):

N/A

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

1 – 100 PEOPLE Assumed. However, without verification, Score = 0.

SURFACE WATER ROUTE

1

1 OBSERVED RELEASE None observed

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

No data

Rationale for attributing the contaminants to the facility:

* * *

2 ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

0% Facility is closed basin.

Name/description of nearest downslope surface water:

Lake and stream feeding to Eighteen mile Creek

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

<3%

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

No

Is the facility completely surrounded by areas of higher elevation?

No

1-Year 24-Hour Rainfall in Inches

2.0 inches

Distance to Nearest Downslope Surface Water

~ ½ mile

Physical State of Waste

unknown, but assumed to be liquid and/or sludge

* * *

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Diking and diversion structures

Method with highest score:

Unsound diking and diversion

Score = 3

(Site Inspection)

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated

LEAD
FLOURANTHENE
CHRYSENE
BENZO (a) PYRENE
BENZO (a) ANTHRACENE

Compound with highest score:

BENZO (a) PYRENE (3,3) (See Section 7.3)

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):

UNKNOWN

Score = 1

Basis of estimating and/or computing waste quantity:

N/A

* * *

5 TARGETS

Surface Water Use

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

Recreation

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:

NONE

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

NONE

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:

0

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

N/A

Total population served:

0

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 None observed

Contaminants detected:

Date and location of detection of contaminants

Methods used to detect the contaminants:

Rationale for attributing the contaminants to the site:

* * *

2 WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

Most incompatible pair of compounds:

Toxicity

Most toxic compound:

Hazardous Waste Quantity

Total quantity of hazardous waste:

Basis of estimating and/or computing waste quantity:

* * *

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

Distance to a Sensitive Environment

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

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

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

Land Use

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

< 1 MILE

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

NONE

Distance to residential area, if 2 miles or less:

1/2 MILE

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

1 MILE

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

NONE

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

NO

SECTION 5

United States
Environmental Protection
Agency

Office of Emergency and
Remedial Response
Washington, DC 20460

EPA Form 2070-12
July, 1981

5.1

EPA

Potential Hazardous Waste Site

Preliminary Assessment

Preliminary Assessment

EPA

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

I. IDENTIFICATION

01 STATE: NY | 02 SITE NUMBER: NYD980654438

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Niagara Materials Company	West Ave.

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Lockport	NY		Niagara		

09 COORDINATES LATITUDE: __ __ __ __.__ | LONGITUDE: __ __ __ __ __.__

10 DIRECTIONS TO SITE (Starting from nearest public road)

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)
GENSTAR	400 HENMAN ST.

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
LOCKPORT	NY	14094	(716) 434-8817

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

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

13 TYPE OF OWNERSHIP (Check one)
☒ A. PRIVATE ☐ B. FEDERAL: GENSTAR (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 7 20 83 (MONTH DAY YEAR)

BY (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR ☐ C. STATE ☒ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)
CONTRACTOR NAME(S): Ecological Analysts

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

03 YEARS OF OPERATION
BEGINNING YEAR | ENDING YEAR ☒ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
Unknown

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
CONTAMINANTS DETECTED IN SOIL & WATER SAMPLES

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
Raymond Kapp	Ecological Analysts	(914) 692-6706

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
William Going		11	( ) 11	8 18 83 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

NYD980654438

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	932093

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

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

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

- TONS
- CUBIC YARDS UNKNOWN
- 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

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			unknown
OOC	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

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.)

EPA FORM 2070-12 (7-81)

NYD980654438

EPA

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

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER
~~NY~~ ~~932073~~

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 0-100
02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION
[X] POTENTIAL ☐ ALLEGED

No data.

01 [X] B. SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: None
02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION
[X] POTENTIAL ☐ ALLEGED

No data.

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

None reported

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

None reported

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

None reported

01 [X] F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: UNKNOWN (Acres)
02 [X] OBSERVED (DATE: 12/81)
04 NARRATIVE DESCRIPTION
☐ POTENTIAL ☐ ALLEGED

Lead, zinc, PNA's detected

01 [X] G. DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 0-100
02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION
[X] POTENTIAL ☐ ALLEGED

No data. Possibly one or more rural residences with wells.

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

None reported

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

None reported

NKD980654435

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
~~NY~~	~~952073~~

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

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

None reported

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

None reported

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

NA

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

None reported

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

None reported

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

None reported

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

UNKNOWN ORIGIN OF CONTAMINANTS

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

III. TOTAL POPULATION POTENTIALLY AFFECTED: None Known; possibly 1-100

IV. COMMENTS

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

NYSDEC files
Site Inspection
NYS DoH Atlas of Community Water System Sources, 1982

United States
Environmental Protection
Agency

Office of Emergency and
Remedial Response
Washington, DC 20460

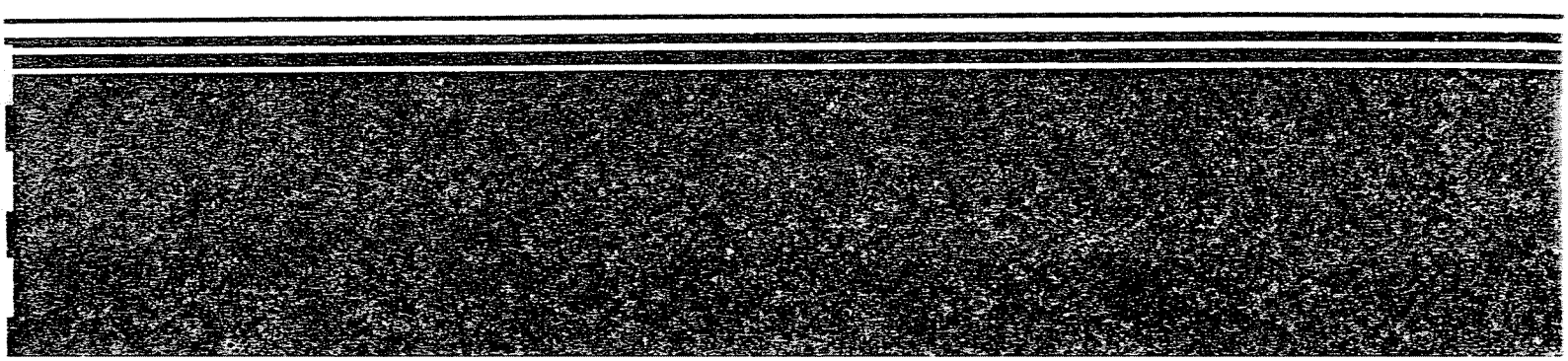
EPA Form 2070-13
July, 1981

5.2

EPA

Potential Hazardous Waste Site

Site Inspection Report



Site Inspection Report

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

EPA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	980654438

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER					
Niagara Materials Company	West Ave.					
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 COUNTY**		**07 COUNTY CODE**	**08 CONG DIST**
Lockport	NY	14094	Niagara			

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

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
7 29 83 (MONTH DAY YEAR)	☐ ACTIVE ☒ INACTIVE	_____ BEGINNING YEAR _____ ENDING YEAR ☒ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)

☐ A. EPA ☐ B. EPA CONTRACTOR _____ (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
☐ E. STATE ☒ F. STATE CONTRACTOR Ecological Analysts (Name of firm) ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
William Going	Scientist	Ecological Analysts	1914 692-6706
09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Ian Jones	Scientist	"	( ) "
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
			( )
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	afternoon	Sunny, hot, dry

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Raymond Kapp	Ecological Analysts	1914 692-6706

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
William Going		"	"	8 18 83 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

NYD980654438

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
~~NY~~	~~932 073~~

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

Unknown

01 PHYSICAL STATES (Check all that apply)

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

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

TONS _____
CUBIC YARDS Unknown
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

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			Unknown
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

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)

NYS DEC files

EPA FORM 2070-13 (7-81)

NJD980654438

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NJ	932073

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 0-100
02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION
☒ POTENTIAL ☐ ALLEGED

No data.

01 ☐ B. SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 0
02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION
☒ POTENTIAL ☐ ALLEGED

Surface water not used for public water supply

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

None reported

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

None reported

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

None reported

01 ☒ F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: _____ (Acres)
02 ☒ OBSERVED (DATE: 12/81)
04 NARRATIVE DESCRIPTION
☐ POTENTIAL ☐ ALLEGED

Soil samples contained metals and PNA's

01 ☒ G. DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 0-100
02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION
☒ POTENTIAL ☐ ALLEGED

May possibly be some nearby rural residences with wells.

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

None reported

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

None reported

NYD980654438

EPA

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

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER
NY 932073

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None reported

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)
None reported

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

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
None reported

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None reported

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None reported

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
UNKNOWN ORIGIN OF CONTAMINANTS

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
CONTAMINANTS DETECTED IN SOIL SAMPLE & PONDED WATER SAMPLE.

III. TOTAL POPULATION POTENTIALLY AFFECTED: None known; 1-100 possible

IV. COMMENTS
City of Lockport and surrounding areas are all on public water supply

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)
NYSDEC files
Site inspection
NYSDOH Atlas of Community Water System Sources, 1982

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NYD	980654438

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				

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

05 OTHER

☒ A. BUILDINGS ON SITE

06 AREA OF SITE

(Acres)

07 COMMENTS

UNKNOWN WHETHER LAGOON OR LANDFILL; RESEMBLES LAGOON

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.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☒ YES ☐ NO

02 COMMENTS

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

NYSDEC FILE

EA site inspection

NYD980654438

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
~~NY~~	~~932073~~

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

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

02 STATUS

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

03 DISTANCE TO SITE

A. > 15 (mi)
B. _____ (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

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

02 POPULATION SERVED BY GROUND WATER None

03 DISTANCE TO NEAREST DRINKING WATER WELL Unknown (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)	_____ (gpd)	☐ YES ☒ NO

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

Unknown. Possibly one or more rural residences on wells. Otherwise, all of the area on Niagara County PWS.

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

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

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

02 AFFECTED POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Eighteen Mile Creek	☐	~0.5 (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. _____ NO. OF PERSONS	B. _____ NO. OF PERSONS	C. _____ NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION ~0.25 (mi)

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

04 DISTANCE TO NEAREST OFF-SITE BUILDING ~0.25 (mi)

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

rural, located on outskirts of LOCKPORT.

NYD980654438

EPA

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

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER
NY 932073

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	
< 3 (ft)	Unknown (ft)		

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
9 (in)	2.0 (in)	0 %		%

09 FLOOD POTENTIAL
SITE IS IN NA YEAR FLOODPLAIN

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

11 DISTANCE TO WETLANDS (5 acre minimum)
ESTUARINE: A. _____ (mi)
OTHER: None B. _____ (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)
None _____ (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. 2 1 (mi)	B. _____ (mi)	C. _____ (mi)	D. _____ (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Rural area bordered by railroad tracks, and landfill to the south. Landfill is @ higher elevation. Area to the north is level for approximately ½ mile.

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

NYSDEC FILE (See Sections 6 & 7)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NVD	980654438

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL			
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☒ GROUND ☐ AERIAL

02 IN CUSTODY OF EA
(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)*

NYD 980654438

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
~~NY~~	~~932073~~

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
GENSTAR		400 HENMAN ST.		LOCKPORT	NY	14094

PARENT COMPANY (If applicable)

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

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

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
O'CONNOR, HOLMAN		2333 - LAKE RD.		RANSOMVILLE	NY	14131
NIAGARA MATERIALS		WEST AVE		LOCKPORT	NY	14094

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

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

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

EA communications with: David Mayhar (Genstar)
John Tygert (Reg. 9 DEC)

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NVD	980654438

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

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)*

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NYD	980654438

II. ON-SITE GENERATOR

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

III. OFF-SITE GENERATOR(S)

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

IV. TRANSPORTER(S)

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

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

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	980654438

II. PAST RESPONSE ACTIVITIES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NYD	980654432

II PAST RESPONSE ACTIVITIES *(Continued)*

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

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

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

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

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

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

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

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

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

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

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

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

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

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NJ	NJA 980654038

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)*

EPA FORM 2070-13 (7-81)

5.3 SITE INSPECTION SUMMARY

On 20 July 1983, Mr. William Going and Mr. Ian Jones, representatives of Ecological Analysts, Inc., visited the Niagara Materials Company site. An old building and several lagoons are located just south of Route 31 in Lockport, New York. The area is rural. The property is situated in the middle of a large tract of open land surrounded by tree and shrub cover. Access to the site is via a dirt road off Route 31. There are no fences or gates to limit access to the property. The block building is nearly demolished and completely overgrown with trees and vines. A large concrete tank saddle sits along side. There are three lagoons located about 50 feet in back of the building. They are small (cover less than 1/2 acre each), and they are dry at present. Two lagoons are separated by a berm. Each lagoon is being revegetated by cattail and other plants. Abrasive discs were scattered around the lagoon area. Bedrock was observed at ground surface in several places on the site, including at the bottom of one of the lagoons. A municipal landfill is located less than 1/4-mile southeast of the site and a large quarry is situated less than 1/4-mile southwest of the property. Many photographs were taken from different vantage points on the site.

6. SITE HISTORY

The inactive Niagara Materials site consists of three lagoons believed to have been used for the disposal of industrial waste. Little is known about the generators of the waste, types and quantities of waste disposed and the method of waste disposal. Soil and water samples collected in December, 1981 indicate the presence of metals, phenolics, halogenated organics, and polynuclear aromatic hydrocarbons.

On 18 August 1983, Mr. John Tygert, from the Region 9 NYSDEC office, informed Ecological Analysts (EA) that the building on site was used by the Niagara Materials Company for the manufacturing of abrasive wheels. According to Mr. Tygert, the process used polynuclear aromatic hydrocarbons, which have been detected through sampling on site.

Mr. Allen Van de Mark, of Van de Mark Chemical Company, Locksport, N.Y., told EA in a telephone conversation on 19 August 1983 that Niagara Materials operated for two years in the late 1950's. The company was formed by an ex-Van de Mark Chemical Company employee. According to Mr. Van de Mark, Niagara Materials manufactured silicon tetrachloride and generated a waste product called hexachloro di-siloxane. Mr. Van de Mark said the waste breaks down neatly into hydrochloric acid and silicon dioxide and therefore could not explain why PNA's had been detected on site.

SECTION 7

7. SITE DATA

7.1 SITE AREA SURFACE FEATURES

The Niagara Materials Company site is located south of Route 31 in Lockport, New York. It is situated at the end of a long dirt driveway, out in the middle of a large expanse of old, fallow fields and abandoned orchards (Attachment 7.1-1). The terrain is very flat; in fact, there is no noticeable slope or grade to the land at the site. The broad, general slope to the land in that part of Lockport appeared to be a gentle south to north slope. There are no streams or rivers on or near the property. Three small, man-made lagoons were observed at the site, however, these were dry and overgrown with vegetation. Bedrock was observed at the bottom of one of the shallow lagoons where the topsoil had been pushed away. A quarry operation was observed approximately 1/4 mile south of the site.

7.2 SITE HYDROGEOLOGY

Located in central Niagara County, the site is in the Eastern Lake Section of the Central Lowland Physiographic Province. The bedrock underneath the site is the Lockport Dolomite of Silurian age. The overburden material is Farmington silt loam soil. The Farmington series consists of shallow, well-drained, medium textured soils. Runoff is slow to moderately rapid on Farmington silt loam, depending on the slope. In sloping areas, the hazard of erosion is moderate. There is no information concerning ground water movement or depth to water table available. Information presented was derived from NYSDEC Region 9 file report (Attachment 7.2-1).

7.3 SUMMARY OF PAST SAMPLING AND ANALYSIS

Ground Water

No data are available.

Surface Water

NYSDEC Region 9 officials collected a water sample on 16 December 1981 from ponded water in a lagooned area approximately 50 feet south of the old Niagara Materials building (Attachment 7.2-1). The sample was analyzed for heavy metals, phenol, halogenated organics, and polynuclear aromatic hydrocarbons (PAH) (Attachment 7.3-1).

Metals present in the sample with concentrations above the detection limits were arsenic (17 ug/l) and zinc (0.116 mg/l). Low concentrations of PAH were also detected. Some PAH detected were: acenaphthalene (0.53 ug/l), pyrene (0.29 ug/l), flouranthene (0.18 ug/l), benzo(a)anthracene (0.073 ug/l), and benzo(g,h,i)perylene (0.94 ug/l). Phenolics and halogenated organics were not detected.

Air

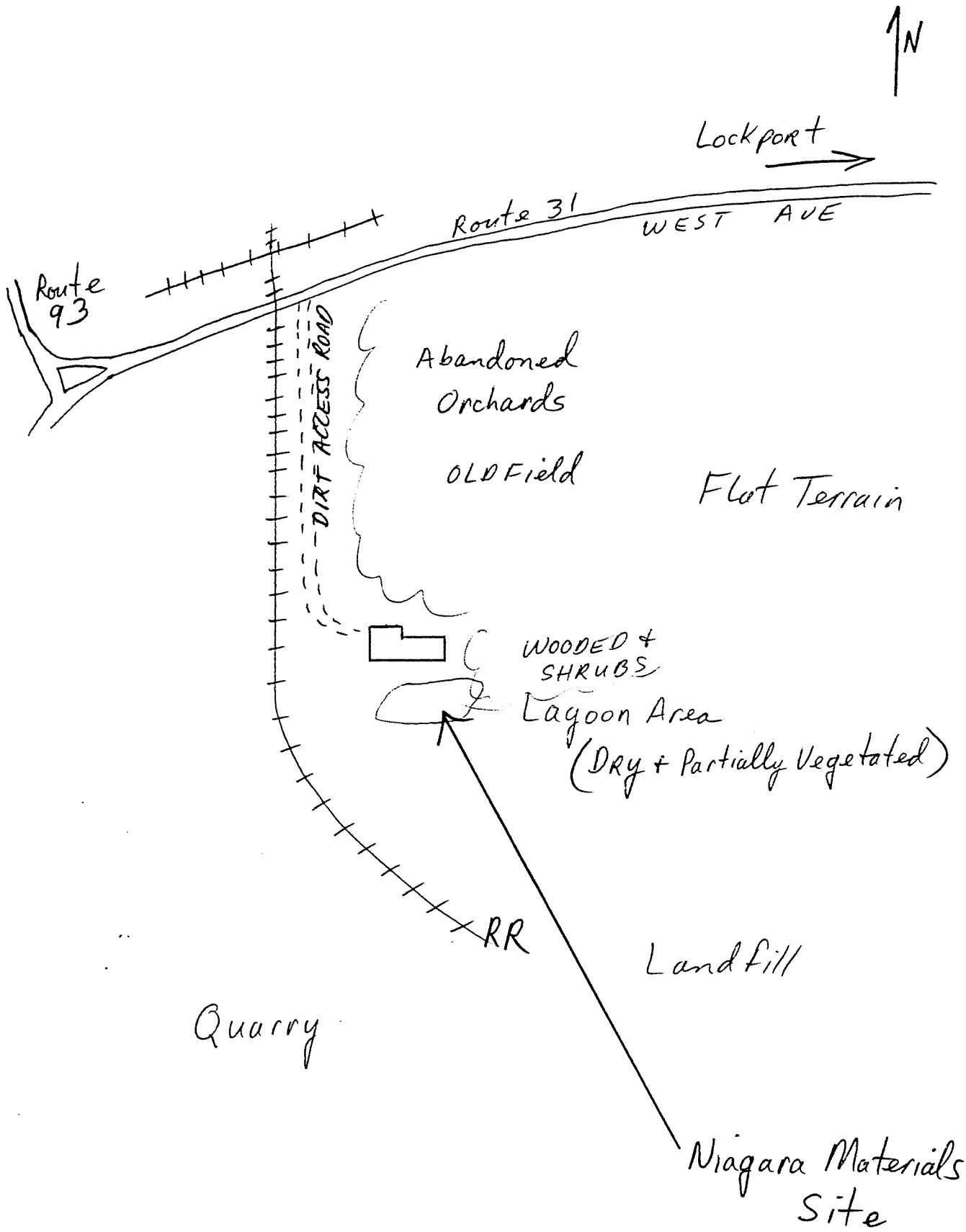
No data are available.

Soil

Silt was collected from the lagooned area 50 feet behind the old Niagara Materials building on 16 December 1981, along with the water sample. The soil sample was analyzed for heavy metals, phenolics, halogenated organics, and polynuclear aromatic hydrocarbons (PAH) (Attachment 7.3-1).

High concentrations of lead (810 ug/g) and zinc (1,600 ug/g) were detected in the soil sample. In addition, the following metals were detected: chromium (70 ug/g), arsenic (6.4 ug/g), cadmium (4.7 ug/g), nickel (220 ug/g), and copper (86 ug/g). Some of the PNA's detected were: benzo (a) pyrene (0.13 ug/g), benzo (a) anthracene (0.18 ug/g), pyrene (0.71 ug/g), flouranthene (0.88 ug/g), and chrysene (0.30 ug/g). Phenolics (1.8 ug/g) and haloginated organics (1.2 ug/g as chlorine; lindane standard) were also detected in the soil sample.

Attachment 7.1-1



attachment
7.2-1

NAME OF LANDFILL: Niagara Materials Company

LOCATION: West Avenue, Lockport, Niagara County

CURRENT OWNER: Niagara Materials Company

HISTORY

There is very little information currently available in the files concerning this site. It is suspected to have been used as an industrial waste disposal site. However, the types of materials disposed of, the quantity, and the length of activity is currently unknown.

INVESTIGATION

An inspection was performed at this site on December 16, 1981 by Messrs. Tygert, Christoffel, and Wozniak of DEC Region 9. Water and silt samples were obtained from ponded water in a lagooned area approximately 50 feet south of the old Niagara Materials building. No unusual features were observed at this site on this inspection.

SOILS AND GEOLOGICAL INFORMATION

This site is located on a Farmington silt loam soil formation. The Farmington series consists of shallow, well-drained, medium-textured soils. A representative profile of a Farmington soil that is idle has a very dark grayish brown silt loam surface layer 8 inches thick. From 8 to 16 inches the subsoil is brown to a yellowish-brown, friable silt loam. At 16 inches a 2-inch layer of the subsoil occurs and it is brown, friable, neutral loam. Gray, hard limestone occurs at a depth of 18 inches. On Farmington silt loam the runoff is slow to moderately rapid, depending on the slope. The hazard of erosion is moderate in the more sloping areas.

The bedrock under this site is Lockport dolomitic limestone.

SAMPLE ANALYSES

The silt and water samples were analyzed for heavy metals, phenol, halogenated organics and polynuclear aromatic hydrocarbons. There were fairly high amounts of lead and zinc in the soil sample, as well as detectable amounts of phenolics and halogenated organics. There were low concentrations of arsenic and zinc in the water sample. Both the water and soil samples contained concentrations of various PNA compounds; however, no particular compound had a large enough concentration to present even a remote health or environmental hazard.

DISCUSSION OF RESULTS

The high concentration of lead in the soil sample indicates the possibility that a paint sludge was disposed of at this site. The moderate concentrations of other metals, and the high concentration of zinc, indicates the possibility that some kind of metal plating wastes were deposited at this site.

The site is not near a surface or groundwater drinking water source, nor is it in the floodplain of any creeks in the area. It has been classified code N, meaning a preliminary investigation is underway, as no information is presently available.

RECOMMENDATIONS

Based on the analyses results of samples collected at the site, and a visual inspection this site does not appear to present a threat to health or the environment at this time. Therefore no remedial action is recommended for this site at the present time.

Niagara Materials

ATTACHMENT 7.3-1 1 of 8

ANALYTICAL RESULTS

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
PRIORITY POLLUTANT ANALYSES - METALS

Report Date: 1/28/82
Date Received: 12/16/81

WATER SAMPLE

COMPOUND	UNITS OF MEASURE	SAMPLE IDENTIFICATION (DATE) R-012-01 (12/16/81)
Total antimony	mg/l	<0.2
Total arsenic	µg/l	17
Total beryllium	mg/l	<0.01
Total cadmium	mg/l	<0.005
Total chromium	mg/l	<0.005
Total copper	mg/l	<0.006
Total lead	mg/l	<0.04
Total mercury	µg/l	<2
Total nickel	mg/l	<0.02
Total selenium	µg/l	<5
Total silver	mg/l	<0.01
Total thallium	mg/l	<0.1
Total zinc	mg/l	0.116

COMMENTS: Comments pertain to data on one or all pages of this report.

FOR RECRA RESEARCH, INC. R. V. Finn / W. J. S.

DATE 2/2/82

RECRA RESEARCH INC.
I.D. #81-1162

ANALYTICAL RESULTS

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
PRIORITY POLLUTANT ANALYSES - METALS

2/8

Report Date: 1/28/82
Date Received: 12/16/81

SOIL SAMPLE

COMPOUND	UNITS OF MEASURE	SAMPLE IDENTIFICATION (DATE) R-012-05 (12/16/81)
Total antimony	µg/g dry	<10
Total arsenic	µg/g dry	6.4
Total beryllium	µg/g dry	<0.5
Total cadmium	µg/g dry	4.7
Total chromium	µg/g dry	70
Total copper	µg/g dry	86
Total lead	µg/g dry	810
Total mercury	µg/g dry	<0.3
Total nickel	µg/g dry	220
Total selenium	µg/g dry	<0.4
Total silver	µg/g dry	<0.5
Total thallium	µg/g dry	<5
Total zinc	µg/g dry	1,600
Dry Weight	%	57

COMMENTS: Samples were received at Recra on 12/16/81.

FOR RECRA RESEARCH, INC. R. V. Linn / D. J. S.

DATE 2/2/82

RECRA RESEARCH, INC.
I.D. #81-1162

ANALYTICAL RESULTS

3 of 8

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Report Date: 1/28/82
Date Received: 12/16/81

WATER SAMPLE

SAMPLE IDENTIFICATION	SAMPLE DATE	PARAMETER (UNITS OF MEASURE)
		TOTAL RECOVERABLE PHENOLICS (mg/l)
R-012-03	12/16/81	<0.01

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

FOR RECRA RESEARCH, INC. R. V. Finn / D. J. P.

DATE 2/2/82

RECRA RESEARCH, INC.
I.D. #81-1162

4 of 8

ANALYTICAL RESULTS

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Report Date: 1/28/82
Date Received: 12/16/81

SOIL SAMPLE

SAMPLE IDENTIFICATION	SAMPLE DATE	PARAMETER (UNITS OF MEASURE)
		TOTAL RECOVERABLE PHENOLICS (µg/g dry)
R-012-05	12/16/81	1.8

COMMENTS: Values reported as "less than" (<) indicate the working detection limit for the particular sample or parameter. Results for soil analyses are reported on a dry weight basis.

FOR RECRA RESEARCH, INC. R. V. Finn / D. J. P.

DATE 2/2/82

RECRA RESEARCH, INC.
I.D. #81-1162

ANALYTICAL RESULTS

548

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GAS CHROMATOGRAPHY

Report Date: 1/28/82
Date Received: 12/16/81

WATER SAMPLE

SAMPLE IDENTIFICATION	SAMPLE DATE	PARAMETER (UNITS OF MEASURE) HALOGENATED ORGANIC SCAN (ECD) (µg/l AS CHLORINE; LINDANE STANDARD)
R-012-02	12/16/81	<0.1

COMMENTS: Halogenated Organic Scan (ECD) results are used for screening purposes only and are not designed for qualification or quantification of any specific organic compound. Results are calculated based upon the chlorine content and response factor of Lindane but do not imply either the presence or absence of Lindane itself.

FOR RECRA RESEARCH, INC. Deborah J Praus

DATE 1/28/82

RECRA RESEARCH INC
I.D. #S1-1162

ANALYTICAL RESULTS

6 of 8

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GAS CHROMATOGRAPHY

Report Date: 1/28/82
Date Received: 12/16/81

SOIL SAMPLE

SAMPLE IDENTIFICATION	SAMPLE DATE	PARAMETER (UNITS OF MEASURE) HALOGENATED ORGANIC SCAN (ECD) (µg/g DRY AS CHLORINE; LINDANE STANDARD)
R-012-05	12/16/81	1.2

COMMENTS: Halogenated Organic Scan results do not include volatile organic constituents.

FOR RECRA RESEARCH, INC. Deborah J. Praeus

DATE 1/28/82

I.D. #81-1162

ANALYTICAL RESULTS

7 of 8

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
HIGH PRESSURE LIQUID CHROMATOGRAPHY
POLYNUCLEAR AROMATIC HYDROCARBON ANALYSIS

Report Date: 1/28/82
Date Received: 12/16/81

WATER SAMPLE

COMPOUND	UNITS OF MEASURE	SAMPLE IDENTIFICATION (DATE) R-012-04 (12/16/81)
acenaphthene	µg/l	0.53
acenaphthylene	µg/l	<2
anthracene	µg/l	0.039
benzo(a)anthracene	µg/l	0.073
benzo(a)pyrene	µg/l	<0.1
benzo(b)fluoranthene	µg/l	0.020
benzo(g,h,i)perylene	µg/l	0.94
benzo(k)fluoranthene	µg/l	0.18
chrysene	µg/l	<0.1
dibenzo(a,h)anthracene	µg/l	0.93
fluoranthene	µg/l	0.18
fluorene	µg/l	0.025
indeno(1,2,3-cd)pyrene	µg/l	0.058
naphthalene	µg/l	<1
phenanthrene	µg/l	0.047
pyrene	µg/l	0.29

COMMENTS: Polynuclear Aromatic Hydrocarbon (PAH's) analyses of water were performed using Waters C_{18} Sep Pak cartridge.

FOR RECRA RESEARCH, INC. Stephen Frost

DATE 2/2/82

I.D. #81-1162

ANALYTICAL RESULTS

8 of 8

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
HIGH PRESSURE LIQUID CHROMATOGRAPHY
POLYNUCLEAR AROMATIC HYDROCARBON ANALYSIS

Report Date: 1/28/82
Date Received: 12/16/81

SOIL SAMPLE

COMPOUND	UNITS OF MEASURE	SAMPLE IDENTIFICATION (DATE) R-012-05 (12/16/81)
acenaphthene	µg/g dry	<1
acenaphthylene	µg/g dry	<2
anthracene	µg/g dry	0.030
benzo(a)anthracene	µg/g dry	0.18
benzo(a)pyrene	µg/g dry	0.13
benzo(b)fluoranthene	µg/g dry	0.27
benzo(g,h,i)perylene	µg/g dry	0.52
benzo(k)fluoranthene	µg/g dry	<0.1
chrysene	µg/g dry	0.30
dibenzo(a,h)anthracene	µg/g dry	<0.2
fluoranthene	µg/g dry	0.88
fluorene	µg/g dry	0.15
indeno(1,2,3-cd)pyrene	µg/g dry	0.084
naphthalene	µg/g dry	1.2
phenanthrene	µg/g dry	0.65
pyrene	µg/g dry	0.71
Dry Weight	%	55.1

COMMENTS: Polynuclear Aromatic Hydrocarbon (PAH's) analysis of soils was performed by mixing equal portions of sample (by weight) with anhydrous sodium sulfate prior to sixteen-hour extraction with 1:1 hexane:acetone in a Soxlet apparatus. All extracts were subjected to Silica Gel column cleanup according to EPA Method 610 prior to High Pressure Liquid Chromatographic (HPLC) analyses using ultra-violet detection at 254 nm.

FOR RECRA RESEARCH, INC. Stephen J. Trost

DATE 2/2/82

RECRA RESEARCH, INC.
I.D. #81-1162

SECTION 8

8. ADEQUACY OF AVAILABLE DATA TO PREPARE FINAL HRS

The available data are inadequate for the purposes of preparing a final HRS. The data indicate the presence of polynuclear aromatic hydrocarbons, metals, phenolics, and halogenated organics. No information, however, concerning the migratory routes of these contaminants is available. Release to ground water must be either confirmed or ruled out in order to finalize the HRS. In the event that contaminants are being released to ground water, the maximum Migration Score (Sm) would be 7.53. The preliminary HRS is 3.45. The lack of an estimation of waste quantities and the low population (if any) at risk from ground water contamination account for the low scores. No surface waters in the area are endangered, given the flat intervening terrain between the site and the nearest waterbodies.

9. PHASE II WORK PLAN

The available data are sufficient only to indicate the need for further investigation. The entire property should be surveyed via geophysical techniques. For purposes of cost estimating, it is assumed, on the basis of existing information, that four hot spots will be identified. It is anticipated that plumes emanating from the nearby municipal landfill may be encountered.

9.1 DETAILED WORK PLAN

9.1.1 Remote Sensing

OVA and EM teams will perform perimeter surveys, followed by onsite grid traverses. OVA traverse will be performed in survey mode, followed by hot spot evaluation in chromatographic mode. Draeger tubes may be used in documented disposal areas (Section 5.3). EM surveying will be multi-depth. The number and value of depth settings will be determined on the basis of field conditions.

During these traverses, areas of stressed vegetation and active seeps will be noted, described, and plotted on the base map.

9.1.2 Test Borings and Observation Wells

The locations and depths of test borings and observation wells will be selected on the basis of the results of the remote sensing surveys.

For purposes of estimating cost, it is assumed that three borings will be advanced to a depth of 25 feet and converted to 4-inch PVC observation wells screened from 15 to 25 feet. These assumptions result in the assumption that three samples of ground water will be obtained for priority pollutant analysis.

9.2 HEALTH AND SAFETY PLAN

Activities

Phase II activities include OVA and geophysical surveys, test boring and well development, and ground water sampling.

General Corporate Occupational Health and Safety (COSH) Plan

The four levels of personnel protection which have been identified for use in the current project are summarized below.

Level 1: Self-Contained Positive Resource Demand -- Breathing apparatus with fully encapsulated suit.

Level 2: Self-Contained Positive Resource Demand -- Breathing apparatus (4-hour portable or line) with TYVEK-SARAN encapsulated disposable suit (with chemical splash suits as necesary), boots, and gloves (double NEOPRENE over VITON).

Level 3: Air purifying respirator with chemical cartridge (standard organics/acid gases/radionuclides/fumes/mists/dusts/particles), TYVEK-SARAN or polylaminated-coveralls (with hood and booties), safety boots, gloves (NEOPRENE over VITON), hard hats with integral face shield and goggles, and personal first-aid kit.

Level 4: Ibidem Level 3 except respirator use is optional. Respirators must be available in beltpack at all times.

Additionally, specific standard operating procedure manuals will be developed for each phase of work. These manuals include instructions for use of respirators, Draeger tubes, and portable Organic Vapor Analyzers (OVA). Emergency medical information will also be included. Basic field procedures, such as site entry and exit, will be presented.

Level 4 is recommended for remote sensing activities. Level 3 may be required for borings and ground water sampling if dictated by OVA monitoring.

9.3 COST ESTIMATE

Work Element	Estimated Cost
OVA/Draeger survey	$ 2,000
Geophysical survey	5,000
Test borings observation wells and sampling	10,000
Laboratory analysis	3,500
Remedial cost estimate	2,500
Report preparation	2,500
Project management and administration	2,500
Total Estimated Cost	$ 28,000

APPENDIX

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

47-15-11(2/80)

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

Code: _____

Site Code: 932073

Name of Site: NIAGARA MATERIALS Region: 9

County: NIAGARA Town/City LOCKPORT

Street Address WEST AVE.

Status of Site Narrative:

The site consists of what appears to have been lagoons (3) located behind an old, delapidated building. The building is believed to have been used by Niagara Materials Co. for the production of Silicone Tetrachloride. Quantities and types of wastes generated are unknown. Soil and ponded water samples collected in December of 1981 indicate presence of metals, phenolics, halogenated organics and polynuclear aromatics.

Type of Site: Open Dump ☐ Treatment Pond(s) ☐ Number of Ponds _____
Landfill ☐ Lagoon(s) ☒ Number of Lagoons 3
Structure ☐

Estimated Size <1.0 Acres

Hazardous Wastes Disposed? Confirmed ☐ Suspected ☒

*Type and Quantity of Hazardous Wastes:

TYPE	QUANTITY (Pounds, drums, tons, gallons)
metals	
phenolics	unknown
halogenated organics	
PAH's	

* Use additional sheets if more space is needed.

Name of Current Owner of Site: GENSTAR

Address of Current Owner of Site: 400 HENMAN STREET, LOCKPORT, NY

Time Period Site Was Used for Hazardous Waste Disposal:

UNKNOWN, 19 To , 19

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

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

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

Status of Legal Action: _____ State ☐ Federal ☐

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

X Assessment of Environmental Problems:

POLYNUCLEAR AROMATIC HYDROCARBONS, HALOGENATED ORGANICS, PHENOLICS, AND HEAVY METALS WERE DETECTED IN SAMPLES COLLECTED 12/81. Possible groundwater contamination.

Assessment of Health Problems:

X Persons Completing this Form:

Ecological Analysts, Inc.

for:

New York State Department of Environmental Conservation

New York State Department of Health

Date 8-23-83

6/3/81
RPM:cl