

915034

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES

PHASE I INVESTIGATION

MacNaughton Brooks
City of Buffalo

Site No. 915034
Erie County

Date: January 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:
ENGINEERING-SCIENCE
In Association With
DAMES & MOORE

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

MACNAUGHTON-BROOKS
717 ELK STREET
NYS SITE NUMBER 915034
CITY OF BUFFALO
ERIE COUNTY
NEW YORK STATE

Prepared For

DIVISION OF SOLID AND HAZARDOUS WASTE
NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
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DATE OF SUBMITTAL: JANUARY, 1986

MACNAUGHTON-BROOKS

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SECTION I

EXECUTIVE SUMMARY MACNAUGHTON-BROOKS

This report, prepared for the New York State Department of Environmental Conservation (NYSDEC), presents the results of the Phase I investigation at the MacNaughton-Brooks site (NYS Site Number 915034, EPA Site Number D980507016), located in the City of Buffalo, Erie County, New York (see Figure I-1).

SITE BACKGROUND

The MacNaughton-Brooks site is owned by the Dold Feed Company and leased by the Gro-Green Fertilizer Company which is engaged in the blending and making of fertilizer products for sale. The inactive disposal site is approximately 400 square feet in size. The owners and operators of the plant site are Messrs. Olson and Walker. The MacNaughton-Brooks Company, a manufacturer of paint products, leased space from 1960 to 1974 from the Dold Feed Company. From approximately 1960 until 1966, MacNaughton-Brooks employees disposed waste solvents (xylene, toluene and mineral spirits) laden with paint on a pile of demolition material (i.e., cinders, bricks, concrete rubble) located behind an on-site building (Olson, 1985). An estimated 100 gallons per year of waste fluids were disposed in this manner. After the MacNaughton-Brooks Company moved from the property in 1974, the demolition pile was removed off-site. The site is presently plagued by scavenger dumping of non-combustible materials (tires, wood, construction debris). Concerns center on the possible contamination of soil and shallow groundwater aquifer. The disposal site is located in an industrial area between Mobil Oil property and Conrail property. There are

no known health or environmental problems. Figure I-2 presents a plan of the site.

ASSESSMENT

In an attempt to quantify the risk associated with this site, the Hazard Ranking Scoring system (HRS) was applied as currently being used by the NYSDEC to evaluate abandoned hazardous waste sites in New York State. This system takes into account the types of wastes at the site, receptors, and transport routes to apply a numerical ranking of the site. As stated in 40 CFR Subpart H Section 300.81, the HRS scoring system was developed to be used in evaluating the relative potential of uncontrolled hazardous substance facilities to cause health or safety problems or ecological or environmental damage. It is assumed by the EPA that a uniform application of the ranking system in each state will permit EPA to identify those releases of hazardous substances that pose the greatest hazard to humans or the environment.

Under the HRS, three numerical scores are computed for each site, to express the relative risk or danger from the site, taking into account the population at risk, the potential for contamination of drinking water supplies, for direct human contact, and for destruction of sensitive ecological systems and other appropriate factors. The three scores are:

- o S_M reflects the potential for harm to humans or the environment from migration of a hazardous substance away from the facility by routes involving groundwater, surface water or air. It is a composite of separate scores for each of the three routes (S_{GW} = groundwater route score, S_{SW} = surface water route score, and S_A = air route score).
- o S_{FE} reflects the potential for harm from substances that can explode or cause fires.

- o S_{DC} reflects the potential for harm from direct contact with hazardous substances at the facility (i.e., no migration need be involved).

The preliminary HRS score was:

S _M	=	4.36	S _A	=	0
S _{GW}	=	6.96	S _{FE}	=	0
S _{SW}	=	2.92	S _{DC}	=	62.5

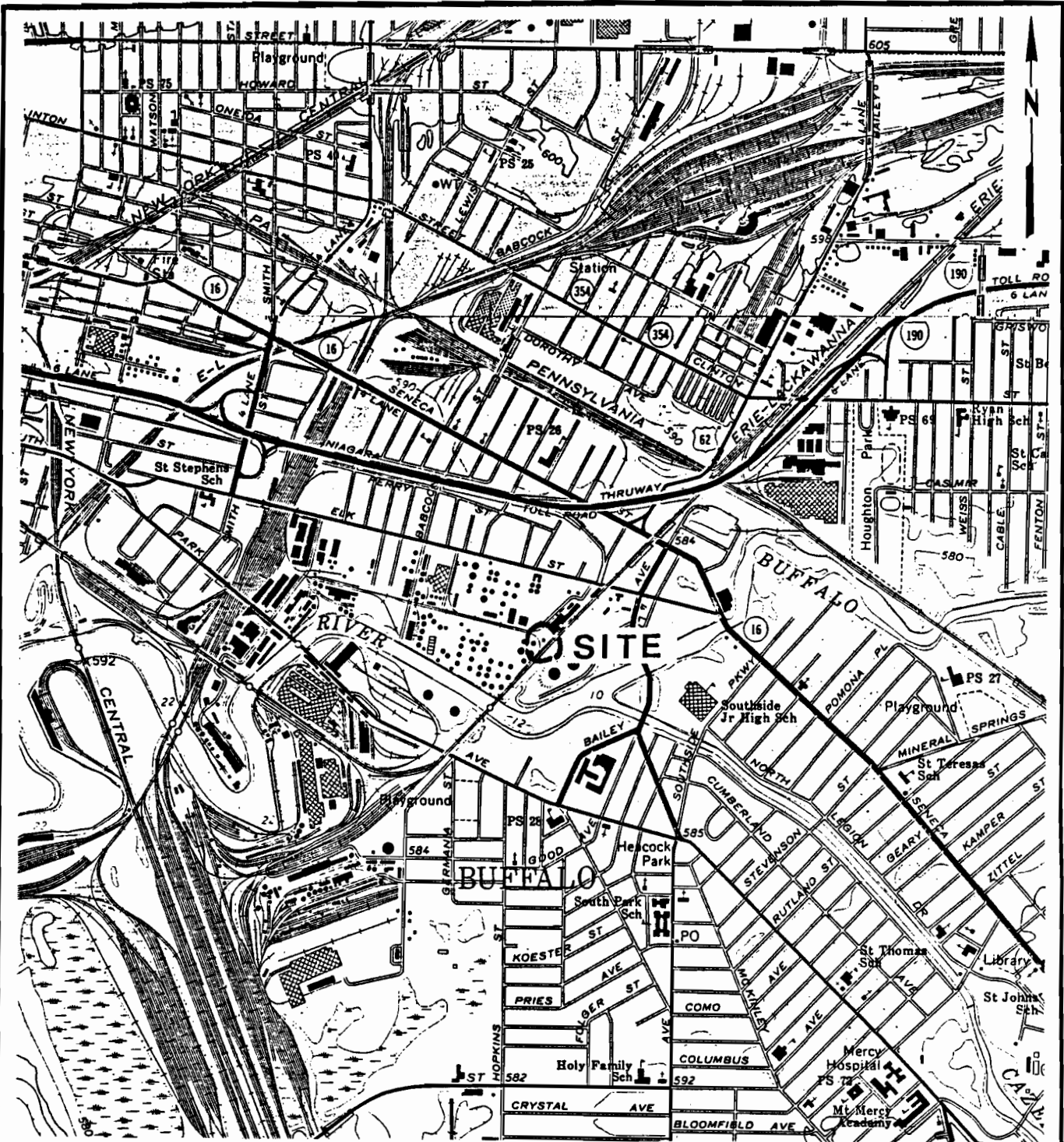
These scores reflect the high toxicity and persistence of the solvents disposed of on the site.

RECOMMENDATIONS

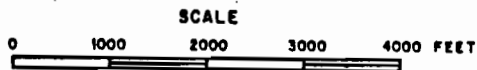
The following recommendations are made for the completion of Phase II:

- o Groundwater monitoring system consisting of one upgradient and two downgradient wells.
- o Analyses to include priority pollutants.

The estimated manhour requirements to complete Phase II are 457, while the estimated cost is \$31,064.



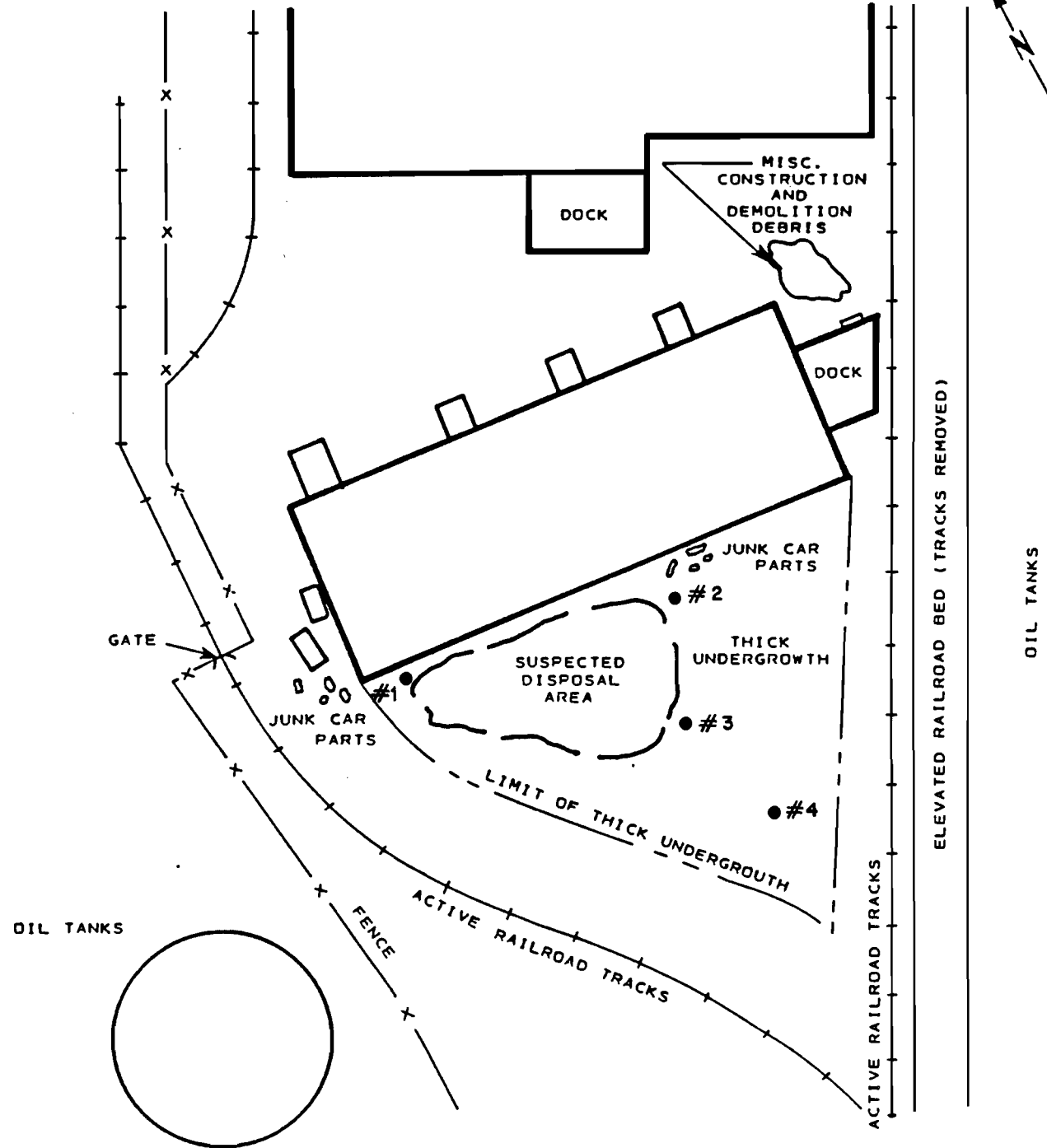
LATITUDE: 42°51'49"
 LONGITUDE: 78°49'49"



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SITE LOCATION MAP
 McNAUGHTON BROOKS

REFERENCE: U.S.G.S. 7.5' Topographic Map
 Buffalo SE, NY (1965) and Buffalo NE, NY
 (1965) Quadrangles



NOT TO SCALE

EXPLANATION:
 ● U.S.G.S. Sampling Point

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PHASE I REPORT
PLOT PLAN MacNAUGHTON - BROOKS
FIGURE I-2

SECTION II

PURPOSE

The purpose of the Phase I investigation at the MacNaughton-Brooks site was to assess the hazard to the environment caused by the present condition of the site. This assessment is based on the Hazard Ranking System, which involves the compilation and rating of numerous geological, toxicological, environmental, chemical, and demographic factors and the calculation of an HRS score. Details of HRS implementation are included in Section V. During the initial portion of the investigation, available data and records, combined with information collected from a site inspection, were reviewed and evaluated. The investigation at this site focused on the disposal of paint residues and solvents (i.e., xylene, toluene, mineral spirits) on a demolition pile. Based on this initial evaluation of the MacNaughton-Brooks site, a Phase II Work Plan has been prepared for collecting any additional data needed to complete the HRS score. In addition, a cost estimate for the recommended Phase II work is provided.

SECTION III

SCOPE OF WORK

The scope of work for the New York State Inactive Site Investigation Program (Phase I) was to collect and review all available information necessary for the documentation and preparation of a Hazard Ranking System score and a Phase II work plan and cost estimate if required. The work activities performed included data collection and review, a site inspection, and interviews with knowledgeable individuals of past and present disposal activities at the site.

The sources contacted during this Phase I investigation included government agencies (federal, state and local), present site owners and operators, and any other individuals that may have knowledge of the site, as identified during the performance of the investigation. These sources are listed in Appendix A. The intent of the list is to identify all persons, departments, and/or agencies contacted during the third round of the Phase I investigations even though useful information may not have been collected from each source contacted.

SECTION IV

SITE ASSESSMENT

SITE HISTORY

The MacNaughton-Brooks Company, a manufacturer of paint products, leased property from Dold Feed Company at 717 Elk Street, Buffalo from 1960 to 1974. Waste residues generated by MacNaughton-Brooks manufacturing operations included paint sludges and waste solvents (xylene, toluene and mineral spirits). These waste materials were disposed on a demolition pile (cinders, bricks, etc.) located on-site from approximately 1960 to 1966 (ECDEP, 1982). An estimated 100 gallons per year of waste residues were disposed in this manner. According to the owners of Gro-Green Fertilizer Company, the waste disposal area was located behind the plant buildings on land that was not leased by MacNaughton-Brooks. The disposal area is approximately 20 feet in diameter. In approximately 1974, the MacNaughton-Brooks Company moved to a new site located at 11 Bolton Street, in the City of Buffalo (MacNaughton, 1985).

Subsequent to the MacNaughton-Brooks Company moving from the Dold Feed Company property, the demolition pile previously used for disposal of waste residues was cleared and removed off-site for disposal (Olson, 1985). Mr. Olson does not recall what firm transported the wastes or where the material was disposed since the site has been cleaned of scavenger dumping refuse (such as tires, wood, construction, debris, etc.) on several occasions in the past.

The property previously occupied by the MacNaughton-Brooks Company is owned by Dold Feed Company which, in turn, leased it to the Gro-Green Fertilizer Company. The principal owners of the Dold Feed and Gro-Green

Fertilizer Companies are Messrs. Olson and Walker who purchased the site in approximately 1960 (Olson, 1985). The Gro-Green Fertilizer Company is engaged in the blending and sale of fertilizer mixes, which generates no hazardous wastes. Several other companies also engaged in business activities on this property during the time period of MacNaughton-Brooks' occupancy. A roof products company leased space and was engaged in the packaging of asphalt materials for resale. Prior to Dold Feed Company's purchase of the site in 1960, the Thompson Paper Company owned the site and leased the land to Victory Chemical Company who allegedly manufactured smoke bombs under contract to the Navy (ECDEP, 1982). When MacNaughton-Brooks took occupancy, a number of chemical storage tanks were left by the Victory Chemical Company in the building that they were to occupy. According to the property owners, these storage tanks were subsequently removed off-site. No information is available concerning the type, quantity and ultimate disposal of these waste chemicals.

SITE TOPOGRAPHY

The MacNaughton-Brooks site is located in an industrial area in the southern part of the City of Buffalo, Erie County, New York State. The site property is level and has several old factory buildings on it. The disposal area is a pile of debris located on the southern-most end of the southern-most factory building. This building is unused. Visible on the ground surface are a few pieces of scrap metal, some scrap concrete blocks, discarded tires, miscellaneous pieces of wood, and piles of dirt. This type of waste material has been periodically taken away from the site by the site owners.

The roughly circular disposal area is approximately 20 feet in diameter. Surface water occurs around the disposal area as puddles; there is no predominant surface water drainage direction. Adjacent to the site to the west are storage tanks owned by Mobil oil. These tanks are located to the south, between the disposal site and the Buffalo River. To the north of the site is Elk Street and to the east of the

site is a railroad embankment; more oil storage tanks are located beyond the embankment.

Local Sensitive Environments

A NYS-recognized wetland occurs approximately 0.5 mile south of the site on the opposite side of the Buffalo River.

SITE HYDROLOGY

This summary is based on information from USGS Topographic Maps, NYS Museum & Science Service Bedrock Geology Map and Quaternary Geology Map, LaSala, (1968), and borings on another nearby Phase I site (Allied Chemical, Industrial Division).

Regional Geology and Hydrology

The site is located in the Erie-Ontario lowlands physiographic province. The bedrock of this region is predominantly limestone, dolostone, and shale. Most of the rocks are deep aquifers with regional flow to the south.

In the recent past, most of New York State, including the site, has been repeatedly covered by a series of continental ice sheets. The activity of the glacier widened preexisting valleys and deposited widespread accumulations of till. The melting of ice, ending approximately 12,000 years ago, produced large volumes of meltwater; this water subsequently shaped channels and deposited thick accumulations of stratified, granular sediments.

As glacial ice retreated from the region, meltwater formed lakes in front of the ice margin. The Erie County region is covered by lake sediments, the most recent being from Lake Warren (a larger predecessor to Lake Ontario and Lake Erie). The sediments consist of blanket sands and beach ridges which are occasionally underlain by lacustrine silts and clays (indicating quiet, deeper water deposition).

Granular deposits in this region frequently act as shallow aquifers, whereas lacustrine clays, as well as tills, often inhibit groundwater movement. However, fine-grained, water-lain sediments, such as silts and clays, frequently contain horizontal laminations and sand seams. These internal features facilitate lateral groundwater movement through otherwise low permeability materials.

Site Hydrogeology

Bedrock occurs at approximately 50 feet beneath the ground surface on the site. It is Onondaga Limestone. Several industrial wells, while in operation, withdrew groundwater from this unit, typically at a rate of 35,000 gpd. The water from these wells was high in H₂S and other chemicals as follows (LaSala, 1968):

<u>Parameter</u>	<u>Quantity</u>
Sulfate	104 ppm
Chloride	334 ppm
Ca/Mg Hardness	338 ppm
Specific Conductance	1,750 umhos
pH	7.2

Soil stratigraphy, as extrapolated from off-site USGS boring logs, is:

<u>Unit</u>	<u>Depth (ft)</u>
Hard fill	0 - 12
Soft sandy silt	2 - 25
Very soft red and grey silty clay	25 - 45
Silt, sand, and gravel	45 - 50
Top of bedrock	50

This stratigraphy suggests the possibility of a "perched" aquifer within the sandy silt zone above a depth of approximately 25 feet. The permeability of this soil has been estimated as 10⁻⁵ cm/sec for HRS scoring.

The thick clay unit overlying the bedrock probably acts as an aquitard, inhibiting downward vertical migration of groundwater.

SITE CONTAMINATION

From 1960 to 1966, an estimated 100 gallons per year of waste liquids including paint sludges and waste solvents (xylene, toluene, and mineral spirits) were disposed on a demolition pile (cinders, bricks, etc.) located on-site. From 1966 until the MacNaughton-Brooks Company moved in 1974, all wastes were handled by Newco Chemical Waste Systems (ECDEP, 1982). Therefore, for purposes of rating the site, the total quantity of hazardous wastes disposed on-site is 600 gallons.

Soil samples were collected from the MacNaughton-Brooks site where the disposal of waste paint residues and solvents occurred. On two separate sampling dates (5 August 1982 and 17 May 1983) the USGS collected soil samples at four locations at the site. These sampling locations are depicted on the site plot plan in Figure IV-1. The soil samples collected in August, 1982 were only analyzed for heavy metals, whereas the samples collected in May, 1983 were analyzed for organic compounds including both priority and non-priority pollutants. Several heavy metals including cadmium, chromium and lead were detected.

The organic constituents detected in the soil samples included priority and non-priority pollutants. Table IV-1 summarizes the results of selected heavy metals and organic constituents detected during this monitoring effort. The USGS data are provided in their entirety in the Appendix.

TABLE IV-1
SUMMARY OF SOIL ANALYSIS FOR MACNAUGHTON-BROOKS SITE

Parameter (ug/Kg)(ppb)	Sample Collection Sites			
	1	2	3	4
<u>Inorganic Constituents</u> ^a				
Cadmium	1,000	1,000	1,000	c
Chromium	6,000	7,000	4,000	5,000
Lead	520,000	40,000	70,000	70,000
<u>Organic Compounds</u> ^b				
<u>Priority Pollutants</u>				
Benzene	6.8 ^d	30.1	33.5	15.6
Ethylbenzene	70.2 ^d	119.0	84.5	4.3
Toluene	18.0 ^d	91.5	c	c
Fluoranthene	34,200 ^e	LT ^f	13,300 ^d	LT ^f
<u>Non-Priority Pollutants</u>				
Acetone	257	540	c	c
Xylene	609	265	614	13.1

SOURCE: USGS Draft Niagara River Study Report, 1983

^a Sample collected 5 August 1982.

^b Sample collected 17 May 1983.

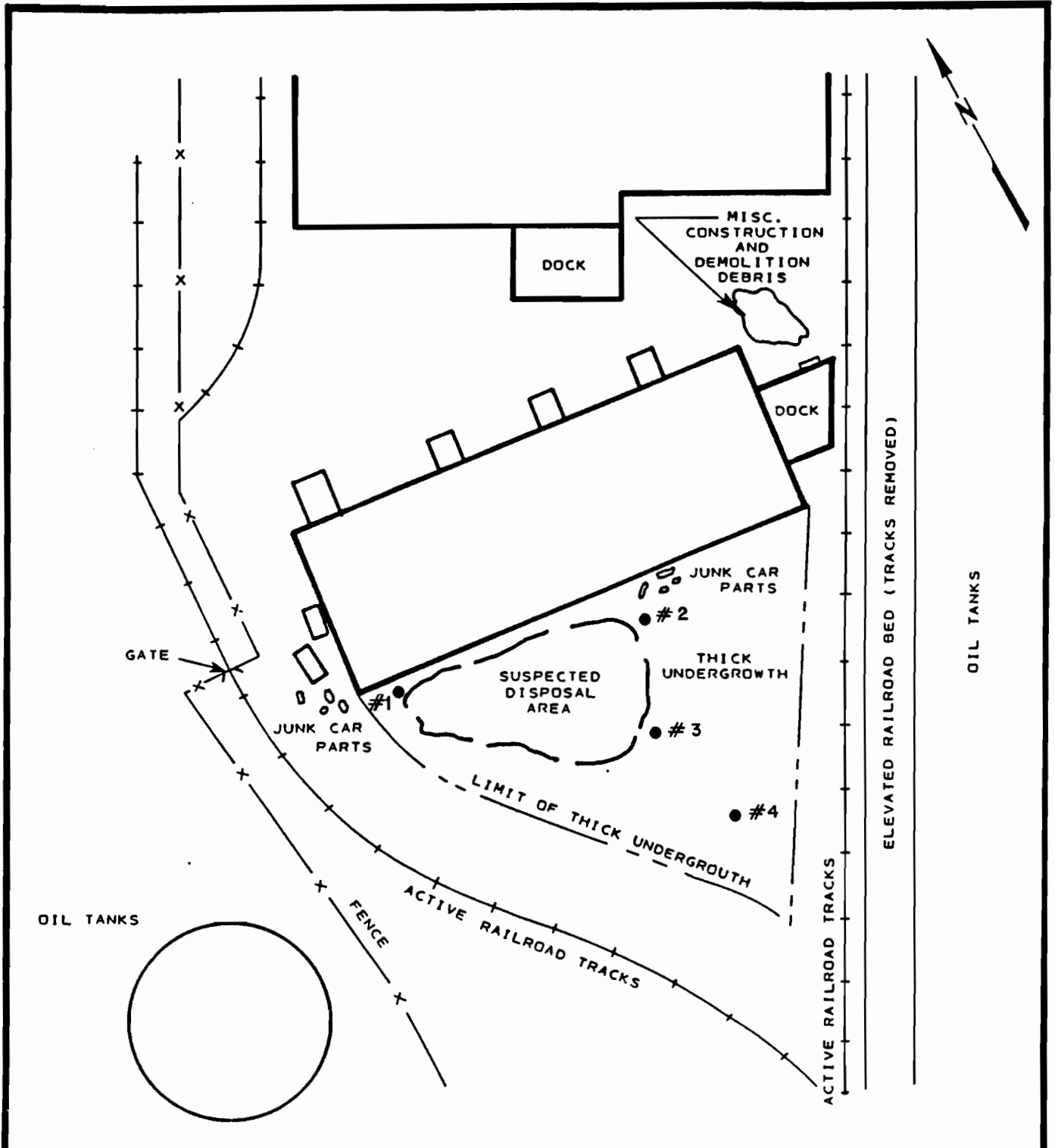
^c Indicates that constituent was not found.

^d Surrogate recoveries were below the acceptable limits.

^e Holding time exceeded before GC/MS acid and base neutral extractable compounds were extracted.

^f LT indicates that constituent was found but below the quantifiable detection limit.

Note: The USGS analytical data is provided in its entirety in the Appendix.



EXPLANATION:

- U.S.G.S. Sampling Point

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PLOT PLAN
 MacNAUGHTON - BROOKS

FIGURE IV-1

PRELIMINARY APPLICATION OF HAZARD RANKING SYSTEM

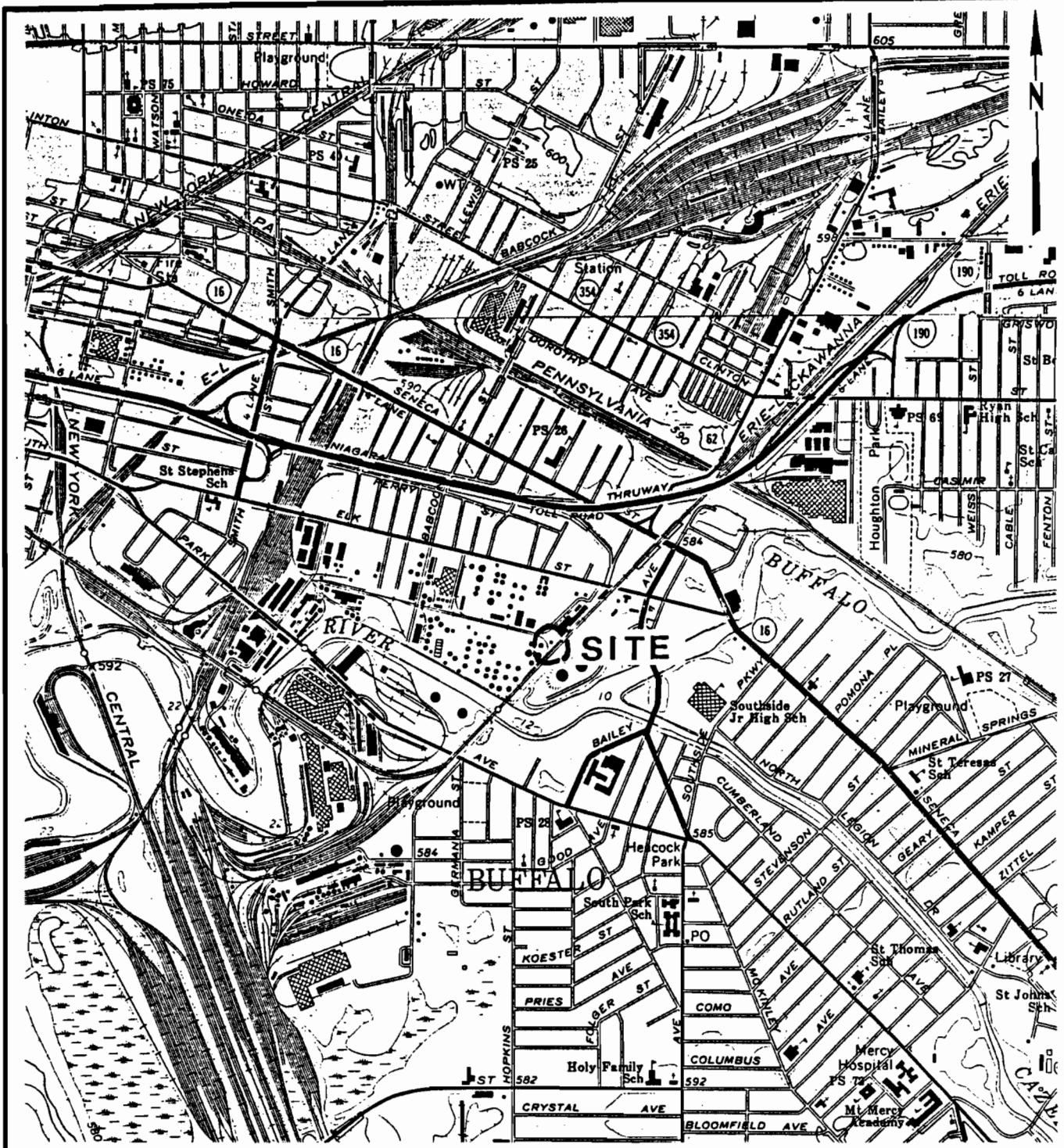
NARRATIVE SUMMARY

The MacNaughton-Brooks site, approximately 400 square feet in size, is located in the City of Buffalo, Erie County, New York. The site was used by the MacNaughton-Brooks Company, a manufacturer of paint products, to dispose of waste solvents (xylene, toluene and mineral spirits) laden with paint residues. An estimated 600 gallons were disposed from 1960 to 1966 by pouring the fluid on a pile of demolition material located in an area not leased by MacNaughton-Brooks (Erie County, 1982). The MacNaughton-Brooks Company leased work space from the Dold Feed Company from approximately 1960-1974. The Dold Feed Company has owned the site since approximately 1960. The demolition pile was cleared and disposed off-site subsequent to 1974 (Olson, 1985).

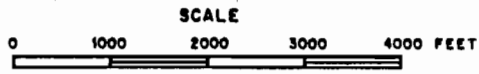
The USGS collected soil samples from the former disposal site on two separate sampling dates (8/5/82 and 5/17/83). The 1982 soil samples were analyzed for heavy metals; cadmium, chromium and lead were detected. The 1983 samples were analyzed for organic and inorganic constituents; several priority pollutants and non-priority pollutants were detected. Priority pollutants detected include benzene, ethylbenzene, toluene and fluoranthene. The non-priority pollutants were acetone and xylene (USGS, 1983).

Approximately 13,000 people reside within a one-mile radius of the site. HNu meter readings taken during the site inspection did not detect volatile organics in concentrations in excess of 1 ppm.

The demolition pile previously used for disposal of waste residues was cleared and removed off-site for disposal during the 1970's. Since the site was cleared, scavenger dumping of refuse has occurred on-site.



LATITUDE: 42°51'49"
 LONGITUDE: 78°49'49"



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<p>NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PHASE I REPORT</p>
<p>SITE LOCATION MAP McNAUGHTON BROOKS</p>
<p>FIGURE ii-1</p>

REFERENCE: U.S.G.S. 7.5' Topographic Map
 Buffalo SE, NY (1965) and Buffalo NE, NY
 (1965) Quadrangles

HRS COVER SHEET

Facility Name: MacNaughton-Brooks

Location: 717 Elk Street, Buffalo, New York

EPA Region: II

Person(s) in charge of the facility: Mr. Olson, Gro-Green Fertilizer

717 Elk Street, Buffalo, New York 14210

Name of Reviewer: S. Robert Steele, II Date: 4/2/85

General Description of the facility:

Waste solvents including xylene, toluene and mineral spirits were disposed on a pile of demolition material (i.e., bricks and concrete) on-site. Approximately 100 gallons/year from 1960-1966 were disposed in this manner. Since 1966, all wastes have been handled by Newco Chemical Waste Systems. The demolition pile has been removed and the disposal site is currently plagued by scavenger dumping of refuse (e.g., wood tires, etc.). No other chemical wastes have been disposed on-site since the waste solvents were originally disposed at this location.

Scores: $S_M = 4.36$ ($S_{gw} = 6.96$ $S_{sw} = 2.92$ $S_a = 0$)

$S_{FE} = 0$

$S_{DC} = 62.5$

Facility Name: MAC NAUGHTON-BROOKS

Date: 4-8-85

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	4	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			10	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	1	8		
Total Waste Characteristics Score			19	26		
5 Targets					3.5	
Ground Water Use	0 1 2 3	3	3	9		
Distance to Nearest Well/Population Served	0 4 6 8 10 12 16 18 20 24 30 32 35 40	1	4	40		
Total Targets Score			7	49		
6 If line 1 is 45, multiply 1 x 4 x 5			3990			
If line 1 is 0, multiply 2 x 3 x 4 x 5				57,330		
7 Divide line 6 by 57,330 and multiply by 100			$S_{gw} = 6.96$			

GROUND WATER ROUTE WORK SHEET

Surface Water Route Work Sheet						
Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)	
1 Observed Release	(0) 45	1	0	45	4.1	
If observed release is given a value of 45, proceed to line 4 . If observed release is given a value of 0, proceed to line 2 .						
2 Route Characteristics					4.2	
Facility Slope and Intervening Terrain	(0) 1 2 3	1	0	3		
1-yr. 24-hr. Rainfall	0 1 (2) 3	1	2	3		
Distance to Nearest Surface Water	0 1 2 (3)	2	6	6		
Physical State	0 1 2 (3)	1	3	3		
Total Route Characteristics Score			11	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	3	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			3	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			1,881	64,350		
7 Divide line 6 by 64,350 and multiply by 100			$S_{sw} = 2.92$			

SURFACE WATER ROUTE WORK SHEET

Facility Name: MACNAUGHTON Brooks

Date: 4/8/85

Air Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1	0	45	5.1
Date and Location: <u>3/18/85 up and down wind at site</u>					
Sampling Protocol: <u>HNU meter</u>					
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	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					$S_a = 0$

AIR ROUTE WORK SHEET

Facility Name: MAC NAUGHTON BOOKS

Date: 4/8/85

Worksheet for Computing S_M

	s	s ²
Groundwater Route Score (S_{gw})	6.96	48.44
Surface Water Route Score (S_{sw})	2.92	8.53
Air Route Score (S_a)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		56.97
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		7.55
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		4.36

WORK SHEET FOR COMPUTING S_M

Facility Name: MCNAUGHTON-BROOKS

Date: 4-8-85

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				0	1,440	
5 Divide line 4 by 1,440 and multiply by 100				$S_{FE} = 0$		

FIRE AND EXPLOSION WORK SHEET

Facility Name: MCNAUGHTON - BROOKS

Date: 4-8-85

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		8.3	
4 Waste Characteristics Toxicity	0 1 2 3	5	15	15	8.4	
5 Targets					8.5	
Population Within 1-Mile Radius	0 1 2 3 4 5	4	20	20		
Distance to a Critical Habitat	0 1 2 3	4	0	12		
Total Targets Score			20	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			13,500	21,600		
7 Divide line 6 by 21,600 and multiply by 100			$S_{DC} = 62.5$			

DIRECT CONTACT WORK SHEET

DOCUMENTATION RECORDS
FOR
HAZARD RANKING SYSTEM

FACILITY NAME: MACNAUGHTON-BROOKS

LOCATION: 717 Elk Street, City of Buffalo, Erie County, New York 14210

GROUNDWATER ROUTE

1. OBSERVED RELEASE

Contaminants detected (5 maximum):

No groundwater samples analyzed for contamination (NYSDEC Registry Sheet, 12/83).

Rationale for attributing the contaminants to the facility:

None.

* * *

2. ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifer(s) of concern:

Bedrock aquifer in underlying limestone (Erie County Department of Environment and Planning Profile Report, 3/82).

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

Estimate 20-40' (Erie County Department of Environment and Planning Site Profile Report, 3/82).

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

Approximately 3' (Erie County Department of Environment and Planning Site Profile Report, 3/82).

Net Precipitation

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

Mean annual precipitation is 36" (U.S. Department of Commerce, Climatic Atlas of the United States, 1979).

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

Mean annual lake evaporation is 27" (U.S. Department of Commerce, Climatic Atlas of the United States, 1979).

Net precipitation (subtract the above figures):

$$9" (36" - 27" = 9")$$

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

One portion of the property consists of disturbed cut and fill areas now covered by structures. The undisturbed portion consists of Niagara soils that were formed in silty lake sediments. (ECDEP Site Profile Report, 3/82)

Permeability associated with soil type:

More than 10^{-5} cm/sec (Freeze, R.A. and J.A. Cherry, Groundwater, 1979.)

Physical State

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

Liquid (NYSDEC Registry Sheet, 12/83).

3. CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

An estimated 100 gallons/year (from 1960-1966) were disposed on a pile of demolition material (bricks, concrete) on-site. (MacNaughton-Brooks Site Profile Report prepared by the Erie County Department of Environment and Planning, March 1982. Interview with Mr. MacNaughton, owner of MacNaughton-Brooks, 2/22/85.)

Method with highest score:

Open dump, unlined landfill - 3. (MacNaughton-Brooks Site Profile Report prepared by the Erie County Department of Environment and Planning, March 1982. Interview with Mr. MacNaughton, owner of MacNaughton-Brooks, 2/22/85.)

4. WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

Benzene (toxicity = 3, persistence = 1)
Lead (toxicity = 3, persistence = 3)
Xylene (toxicity = 2, persistence = 1)
Toluene (toxicity = 2, persistence = 1)

Compound with highest score:

Lead - 18

Hazardous Waste Quantity

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

600 gallons = 12 drums = 1

Basis of estimating and/or computing waste quantity:

Waste residues including solvents and solvent-sludge were disposed on-site according to the site operator MacNaughton-Brooks. (Interview with Mr. MacNaughton, owner of MacNaughton-Brooks, 3/8/85; MacNaughton-Brooks Site Profile Report prepared by Erie County, Department of Environment and Planning, March 1982.)

5. TARGETS

Groundwater Use

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

Industrial water supplies (Violanti, 1985; and Sorrento Cheese Corp., 1985).

Distance to Nearest Well

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

Sorrento Cheese Company.

Distance to above well or building:

Within 3 miles of site.

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

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

No municipal wells within three miles (New York State Atlas of Community Water System Sources, 1982, LaSala, 1968).

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 groundwater within a 3-mile radius:

Less than 10 factory workers (Sorrento Cheese Corp., 1985).

SURFACE WATER ROUTE

1. OBSERVED RELEASE

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

No surface water samples analyzed for contamination (NYSDEC Registry Sheet, 12/83).

Rationale for attributing the contaminants to the facility:

Not tested.

* * *

2. ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

0.0% (USGS Topographic Maps: Buffalo N.W., NY - 1965; Buffalo N.E., NY - 1965).

Name/description of nearest downslope surface water:

Buffalo River (USGS Topographic Maps: Buffalo N.W., NY - 1965; Buffalo N.E., NY - 1965).

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

1.4% (USGS Topographic Maps: Buffalo N.W., NY - 1965; Buffalo N.E., NY - 1965).

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

2.1" (U.S.D.O.C. Technical Paper No. 40).

Distance to Nearest Downslope Surface Water

0.13 mile (USGS Topographic Maps: Buffalo N.W., NY - 1965; Buffalo N.E., NY - 1965).

Physical State of Waste

Liquid (NYSDEC Registry Sheet, 12/83).

* * *

3. CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

No diversion, containment system provided at site. Waste was disposed on demolition material in a rubble pile directly on ground. (MacNaughton-Brooks Site Profile Report prepared by the Erie County, Department of Environment and Planning, March 1982; Interview with Mr. MacNaughton, owner of MacNaughton-Brooks, 3/8/85.)

Method with highest score:

Landfill not covered and no diversion system = 3. (MacNaughton-Brooks Site Profile Report prepared by the Erie County, Department of Environment and Planning, March 1982; Interview with Mr. MacNaughton, owner of MacNaughton-Brooks, 3/8/85.)

4. WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

Benzene (toxicity = 3, persistence = 1)
Lead (toxicity = 3, persistence = 3)
Xylene (toxicity = 2, persistence = 1)
Toluene (toxicity = 2, persistence = 1)
(NYSDEC Registry, 12/83)

Compound with highest score:

Lead - 18

Hazardous Waste Quantity

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

600 gallons = 12 drums = 1

Basis of estimating and/or computing waste quantity:

Waste residues including solvents and solvent-sludge were disposed on-site according to the site operator MacNaughton-Brooks. (Interview with Mr. MacNaughton, owner of MacNaughton-Brooks, 3/8/85; MacNaughton-Brooks Site Profile Report prepared by Erie County, Department of Environment and Planning, March 1982.)

* * *

5. TARGETS

(USGS Topographic Maps; Buffalo N.W., New York - 1965 and Buffalo N.E., New York - 1965)

Surface Water Use

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

Industrial and commercial shipping (Site Inspection Conducted by ES and D&M, 3/18/78).

Is there tidal influence?

No.

Distance to a Sensitive Environment

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

None within two miles (Western NYS is not a coastal area).

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

0.45 mile to a wetland (NYS Wetlands Maps). However, the site of the wetland has not been verified and, therefore, can not be scored, according to HRS rating protocol.

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

None within one mile (NYSDEC Reg. 9 Department of Fish and Wildlife Files).

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:

No water supply intakes within one mile (NYS Atlas of Community Water System Sources, 1982, and Sciascia, 1985).

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

No water supply intakes within one mile.

Total population served:

Not applicable.

Name/description of nearest of above water bodies:

Not applicable.

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

Not applicable.

AIR ROUTE

1. OBSERVED RELEASE

Contaminants detected:

HNu meter readings <1 ppm (Site Inspection Conducted by ES and D&M, 3/18/85).

Date and location of detection of contaminants:

No contaminants detected by HNu (less than 1 ppm) during ES and D&M site inspection.

Methods used to detect the contaminants:

HNu meter.

Rationale for attributing the contaminants to the site:

Not applicable, no contaminants detected on-site.

* * *

2. WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

No reactive compounds known to exist on-site.

Most incompatible pair of compounds:

No incompatible compounds known to exist on-site.

Toxicity

Most toxic compound:

Benzene = toxicity of 3.

Hazardous Waste Quantity

Total quantity of hazardous waste:

600 gallons = 12 drums = 1 (McNaughton-Brooks, 3/8/85).

Basis of estimating and/or computing waste quantity:

600 gallons of waste residues including solvents were disposed on-site (McNaughton-Brooks, 3/8/85).

* * *

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

262,399 people (Compiled from 1980 US Census Data).

Distance to a Sensitive Environment

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

None within two miles (Western NYS is not a coastal area).

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

0.45 mile to a wetland (NYS Wetland Maps). However, the size of the wetland has not been verified and, therefore, can not be scored, according to HRS rating protocol.

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

None within one mile (NYSDEC Reg. 9 Division of Fish and Wildlife Files).

Land Use

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

0.0 mile. Site is located in an industrial area (ES and D&M Site Inspection, 3/8/85).

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

Tifft Farms located 1.5 miles to southwest (USGS Topographic Maps: Buffalo N.W., NY - 1965; Buffalo N.E., NY - 1965).

Distance to residential area, if 2 miles or less:

0.15 mile (ES and D&M Site Inspection, 3/8/85).

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

None within one mile (Map: "Agricultural Districts," prepared by ECDEP, Division of Planning 11/84).

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

None within two miles (Map: "Agricultural Districts," prepared by ECDEP, Division of Planning 11/84).

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

No.

FIRE AND EXPLOSION

1. CONTAINMENT

Hazardous substances present:

No records were found during the Phase I investigation which indicate that a past or present fire and explosion hazard exists at the site. However, waste residues including solvents were disposed on-site between 1960 and 1966.

Type of containment, if applicable:

* * *

2. WASTE CHARACTERISTICS

Direct Evidence

Type of instrument and measurements:

No measurements were taken on-site to determine it's fire and explosion potential.

Ignitability

Compound used:

Waste paint residues (benzene, xylene, and toluene).

Reactivity

Most reactive compound:

No reactive compounds are known to exist on-site.

Incompatibility

Most incompatible pair of compounds:

No incompatible compounds are known to exist on-site.

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility:

600 gallons of solvents.

Basis of estimating and/or computing waste quantity:

600 gallons = 12 drums (HRS score 1) were disposed on-site from 1960 to 1966 (ECDEP Site Profile Report, March, 1982).

* * *

3. TARGETS

Distance to Nearest Population

0.15 mile to a residential area (ES and D&M Site Inspection, 3/18/85).

Distance to Nearest Building

Less than 50 feet, disposal area is located directly behind an on-site warehouse (ES and D&M Site Inspection, 3/18/85).

Distance to Sensitive Environment

Distance to wetlands:

0.45 mile to a wetland (NYS Wetlands Maps). However, the size of the wetland has not been verified and, therefore, can not be scored, according to HRS rating protocol.

Distance to critical habitat:

None within 1 mile of site (NYSDEC, Region 9, Division of Fish and Wildlife Files).

Land Use

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

0.0 mile. Site is located in an industrial area (ES and D&M Site Inspection, 3/8/85).

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

Tiff Farms located 1.5 miles to southwest (USGS Topographic Maps: Buffalo NW, NY - 1965 and Buffalo NE, NY, 1965).

Distance to residential area, if 2 miles or less:

0.15 mile (ES and D&M Site Inspection, 3/8/85).

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

None within 1 mile (Map: "Agricultural Districts", Prepared by ECDEP, Division of Planning, 11/84).

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

None within 2 miles (Map: "Agricultural Districts", Prepared by ECDEP, Division of Planning, 11/84).

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

No.

Population with 2-Mile Radius

69,083 people (US Census Data, 1980).

Buildings Within 2-Mile Radius

18,180 buildings (USGS Topographic Maps: Buffalo NW, NY - 1965 and Buffalo NE, NY, 1965).

DIRECT CONTACT

1. OBSERVED INCIDENT

Date, location, and pertinent details of incident:

No information was found during the Phase I study which indicates that a direct contact incident has occurred at this site.

* * *

2. ACCESSIBILITY

Describe type of barrier(s):

Barriers do not surround facility to prevent unauthorized entry = 3 (ES/D&M Site Visit).

* * *

3. CONTAINMENT

Type of containment, if applicable:

Open dump, unlined landfill (MacNaughton-Brooks Site Profile Report, March, 1982; Interview with MacNaughton, 2/22/85).

* * *

4. WASTE CHARACTERISTICS

Toxicity

Compounds evaluated:

Benzene, lead, xylene, and toluene.

Compound with highest score:

Lead - 18.

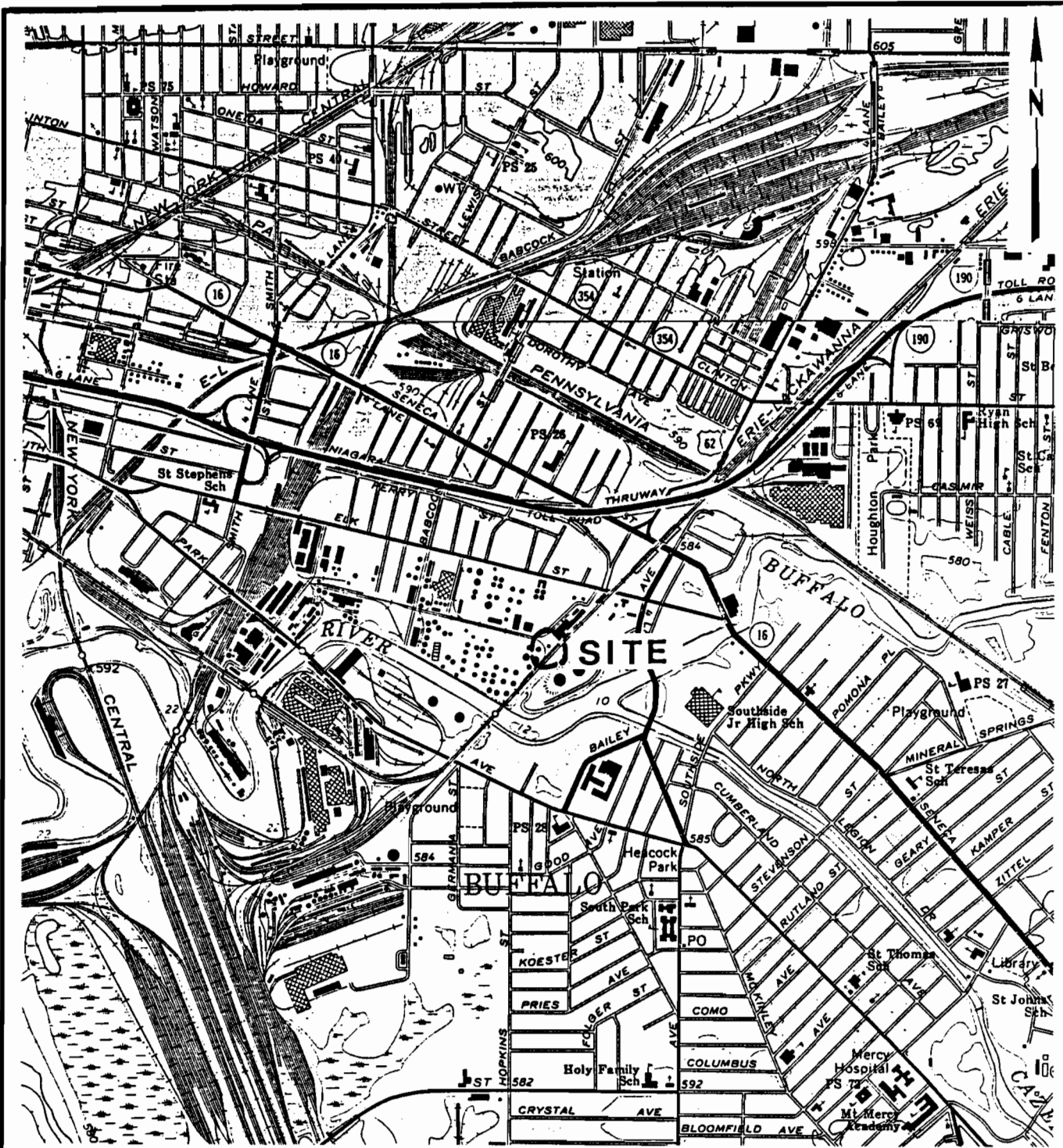
5. TARGETS

Population within one-mile radius

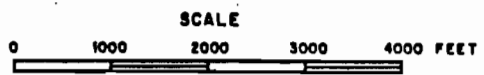
12,868 (US Census Data, 1980).

Distance to critical habitat (of endangered species)

None within one mile (NYSDEC, Region 9).

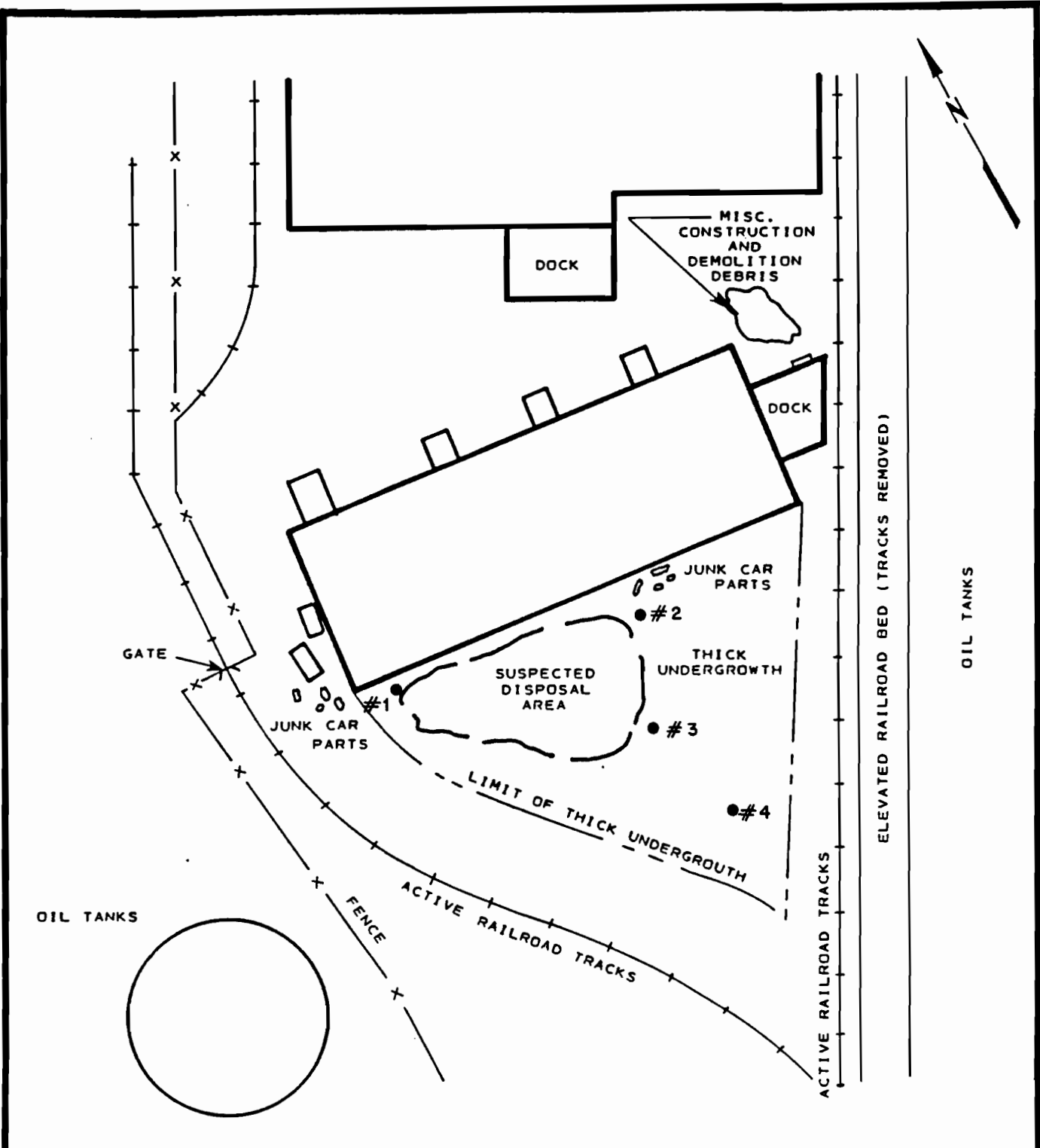


LATITUDE: 42°51'49"
 LONGITUDE: 78°49'49"



ENGINEERING-SCIENCE, INC. IN ASSOCIATION WITH DAMES & MOORE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PHASE I REPORT
SITE LOCATION MAP McNAUGHTON BROOKS

REFERENCE: U.S.G.S. 7.5' Topographic Map
 Buffalo SE, NY (1965) and Buffalo NE, NY
 (1965) Quadrangles



NOT TO SCALE

EXPLANATION:

- U.S.G.S. Sampling Point

ENGINEERING - SCIENCE IN ASSOCIATION WITH DAMES & MOORE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PHASE I REPORT
PLOT PLAN MacNAUGHTON - BROOKS
FIGURE IV-2



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

I. IDENTIFICATION

01 STATE **NY** 02 SITE NUMBER **D980507016**

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) MacNaughton - Brooks		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 717 ELK Street			
03 CITY Buffalo	04 STATE NY	05 ZIP CODE 14210	06 COUNTY ERIE	07 COUNTY CODE 029	08 CONG DIST 37
09 COORDINATES LATITUDE 42 5149.		LONGITUDE 078 49 49.			

10 DIRECTIONS TO SITE (Starting from nearest public road)

III. RESPONSIBLE PARTIES

01 OWNER (if known) Mr OLSON		02 STREET (Business, mailing, residential) 717 ELK Street			
03 CITY Buffalo	04 STATE NY	05 ZIP CODE 14210	06 TELEPHONE NUMBER (716) 826-3300		
07 OPERATOR (if known and different from owner) Dodd Feed Company		08 STREET (Business, mailing, residential) 717 ELK Street			
09 CITY Buffalo	10 STATE NY	11 ZIP CODE 14210	12 TELEPHONE NUMBER (716) 826-3300		

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

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

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
 YES DATE **9 127 84** MONTH DAY YEAR
 NO

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

CONTRACTOR NAME(S): _____

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

03 YEARS OF OPERATION
 BEGINNING YEAR **1960** ENDING YEAR **1966** UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
An estimated 100 gallons per year or gallons per year of waste paint sludges and solvents were disposed on-site from 1960-1966.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
WASTE residues containing paint sludges (ie, cadmium, lead) and solvents (ie xylene, toluene) were disposed on waste pile on-site. Elevated levels of cadmium and lead were detected in soil samples collected by the USGS in 1982.

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 S. Robert STEELE II		02 OF (Agency/Organization) Engineering - Science, Inc		03 TELEPHONE NUMBER (703) 591-7575
04 PERSON RESPONSIBLE FOR ASSESSMENT S. Robert STEELE II		05 AGENCY —	06 ORGANIZATION ES	07 TELEPHONE NUMBER (703) 591-7575
08 DATE 2 125 85 MONTH DAY YEAR				



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

I. IDENTIFICATION
01 STATE: NY 02 SITE NUMBER: 915034

II. HAZARDOUS CONDITIONS AND INCIDENTS

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

unknown

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

Not likely

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

No

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

No

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

No

01 F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: 1.0 (Acres) 02 OBSERVED (DATE: _____) POTENTIAL ALLEGED
04 NARRATIVE DESCRIPTION

Potential contamination of soil ~~exists~~ exists due to
past spill-on-ground solvent disposal practices.

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

No

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

No

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

No



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

I. IDENTIFICATION
 01 STATE 02 SITE NUMBER
 NY 915034

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)

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

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

No longer

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

No

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

No

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

Yes - due to unrestricted access, some illegal dumping & refuse occurs

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

None

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

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

Site visit 1/85



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

I. IDENTIFICATION	
01 STATE NY	02 SITE NUMBER 0980507016

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) Mac Naughton - Brooks		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 717 Elk Street			
03 CITY Buffalo	04 STATE NY	05 ZIP CODE 14210	06 COUNTY ERIE	07 COUNTY CODE 029	08 CONG DIST 37
09 COORDINATES LATITUDE 42 37 49.		LONGITUDE 078 49 49.		10 TYPE OF OWNERSHIP (Check one) <input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER <input type="checkbox"/> G. UNKNOWN	

III. INSPECTION INFORMATION

01 DATE OF INSPECTION 3 / 18 / 85 MONTH DAY YEAR	02 SITE STATUS <input type="checkbox"/> ACTIVE <input checked="" type="checkbox"/> INACTIVE	03 YEARS OF OPERATION 1960 1966 BEGINNING YEAR ENDING YEAR	UNKNOWN
04 AGENCY PERFORMING INSPECTION (Check all that apply) <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR Engineering - Science <input type="checkbox"/> C. MUNICIPAL <input type="checkbox"/> D. MUNICIPAL CONTRACTOR <input type="checkbox"/> E. STATE <input checked="" type="checkbox"/> F. STATE CONTRACTOR Dams and Moore <input type="checkbox"/> G. OTHER			

05 CHIEF INSPECTOR S. Robert STEELE II	06 TITLE ENVIRONMENTAL SCIENTIST	07 ORGANIZATION ES	08 TELEPHONE NO. (703) 591-7575
09 OTHER INSPECTORS Eileen Gilligan	10 TITLE Geologist	11 ORGANIZATION DE M	12 TELEPHONE NO. (315) 638-1510
			()
			()
			()
			()

13 SITE REPRESENTATIVES INTERVIEWED Mr Olson	14 TITLE OWNER	15 ADDRESS 717 Elk Street, Buffalo NY 14210	16 TELEPHONE NO (716) 826-3300
Mr Walker	OWNER	717 Elk Street, Buffalo NY 14210	(716) 826-3300
Mr. A. J Mac Donald	previous plant manager	11 Bolton Ave Buffalo NY 14210	(716) 826-3300
			()
			()
			()

17 ACCESS GAINED BY (Check one) <input checked="" type="checkbox"/> PERMISSION <input type="checkbox"/> WARRANT	18 TIME OF INSPECTION 2³⁰ PM	19 WEATHER CONDITIONS Cold (23°F) SUNNY clear skies
---	---	---

IV. INFORMATION AVAILABLE FROM

01 CONTACT S Robert STEELE II	02 OF (Agency/Organization) Engineering - Science, Inc	03 TELEPHONE NO. (703) 591-7575
04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM S. Robert STEELE II	05 AGENCY ES	06 ORGANIZATION ES
07 TELEPHONE NO. 703 (591-7575)	08 DATE 3 / 18 / 85 MONTH DAY YEAR	



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

I. IDENTIFICATION

01 STATE NY 02 SITE NUMBER 0980507016

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

Not likely

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

NO

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

No

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

No

01 F. CONTAMINATION OF SOIL 02 OBSERVED (DATE: _____) POTENTIAL ALLEGED
03 AREA POTENTIALLY AFFECTED: 1.0 (Acres) 04 NARRATIVE DESCRIPTION

Potential contamination of soil may exist due to past spill-on-ground solvent disposal practices.

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

No

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

No

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

No



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

I. IDENTIFICATION

01 STATE NY 02 SITE NUMBER 0980507016

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)

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

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

No Leaker

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

No

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

No

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

Yes - due to unrestricted access, some minor amount dumping of refuse occurs

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

None

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

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

Site visit 1985



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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
17	980507016

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED <small>(Check all that apply)</small>	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
<input type="checkbox"/> A. NPDES				The formerly used disposal site is not a permitted disposal facility.
<input type="checkbox"/> B. UIC				
<input type="checkbox"/> C. AIR				
<input type="checkbox"/> D. RCRA				
<input type="checkbox"/> E. RCRA INTERIM STATUS				
<input type="checkbox"/> F. SPCG PLAN				
<input type="checkbox"/> G. STATE <small>(Specify)</small>				
<input type="checkbox"/> H. LOCAL <small>(Specify)</small>				
<input type="checkbox"/> I. OTHER <small>(Specify)</small>				
<input type="checkbox"/> J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL <small>(Check all that apply)</small>	02 AMOUNT	03 UNIT OF MEASURE	04 TREATMENT <small>(Check all that apply)</small>	05 OTHER
<input type="checkbox"/> A. SURFACE IMPOUNDMENT <input type="checkbox"/> B. PILES <input type="checkbox"/> C. DRUMS, ABOVE GROUND <input type="checkbox"/> D. TANK, ABOVE GROUND <input type="checkbox"/> E. TANK, BELOW GROUND <input type="checkbox"/> F. LANDFILL <input type="checkbox"/> G. LANDFARM <input checked="" type="checkbox"/> H. OPEN DUMP <input type="checkbox"/> I. OTHER <small>(Specify)</small>			<input type="checkbox"/> A. INCENERATION <input type="checkbox"/> B. UNDERGROUND INJECTION <input type="checkbox"/> C. CHEMICAL/PHYSICAL <input type="checkbox"/> D. BIOLOGICAL <input type="checkbox"/> E. WASTE OIL PROCESSING <input type="checkbox"/> F. SOLVENT RECOVERY <input type="checkbox"/> G. OTHER RECYCLING/RECOVERY <input type="checkbox"/> H. OTHER <small>(Specify)</small>	<input checked="" type="checkbox"/> A. BUILDINGS ON SITE 06 AREA OF SITE 440 SF <small>(ACRES)</small>
	600	gallons	N/A	

07 COMMENTS

Approximately 100 gallons/year (from 1960-1966) of waste solvents (i.e., xylene, toluene, mineral spirits) were disposed on a pile of demolition material consisting of brick, concrete ect. The demolition material has been removed and presently scavenger dumping occurs at the site.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

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

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

The disposal site was used in the past for the disposal of construction debris. Solvents and paint residues were later disposed on the debris pile. The debris was later removed and currently the site has debris (i.e., tires, wood ect) from scavenger dumping.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: YES NO

02 COMMENTS The site is not enclosed by a fence to prevent unauthorized entry

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

County of Erie, Department of Environment and Planning, memorandum from Ronald D. Koczaja to Donald Campbell, 10/2/84
 ERIE County, Department of Environment and Planning, Hazardous waste Site PROFILE REPORT MARCH 1982.



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

I. IDENTIFICATION
01 STATE NY 02 SITE NUMBER 0980507016

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 20'-40' (ft) 04 DEPTH OF CONTAMINATED SOIL ZONE unknown (ft) 05 SOIL pH unknown

06 NET PRECIPITATION 9 (in) 07 ONE YEAR 24 HOUR RAINFALL 2.1 (in) 08 SLOPE SITE SLOPE 0.0% DIRECTION OF SITE SLOPE N/A TERRAIN AVERAGE SLOPE 1.4%

09 FLOOD POTENTIAL SITE IS IN >100 YEAR FLOODPLAIN 10 SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum) ESTUARINE A. >2 (mi) OTHER B. 0.45* (mi) 12 DISTANCE TO CRITICAL HABITAT (of endangered species) Migratory Birds >1 (mi) ENDANGERED SPECIES: Aquila chrysaetos, Haliaeetus leucocephalus, Falco Peregrinus

13 LAND USE IN VICINITY DISTANCE TO: COMMERCIAL/INDUSTRIAL A. 0.0 (mi) RESIDENTIAL AREAS, NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES B. 1.5 (mi) AGRICULTURAL LANDS PRIME AG LAND C. >2 (mi) AG LAND D. >1 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY
 The ground surface is flat, no permanent surface water features occur on site. Surface runoff would probably drain more south into the Buffalo River.

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

ECDEP Site Profile Report, 3/82
 URS Engineers Report, 1/80
 NYS Wetlands Maps
 USDOC Technical Paper No 40
 USDOC Climatic Atlas of the United States, 1979
 NYSDEC Reg 9 Dept of Fish & Wildlife Files
 U.S.G.S. Topographic Maps Freeze & Cherry, Groundwater, 1979
 NYS Atlas of Community water system sources, 1982.

* 0.45 mi. to a wetland &



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

I. IDENTIFICATION
01 STATE NY 02 SITE NUMBER 0980507016

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
<u>H21U</u>	<u>meter readings were taken during site inspection. All readings were non-detectable.</u>

IV. PHOTOGRAPHS AND MAPS

01 TYPE <input checked="" type="checkbox"/> GROUND <input type="checkbox"/> AERIAL	02 IN CUSTODY OF <u>Engineering - Science</u> <small>(Name of organization or individual)</small>
03 MAPS <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	04 LOCATION OF MAPS <u>DAMES & MOORE</u>

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

Geo-Green fertilizer will provide a site map of the plant area which includes the waste disposal site.

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

Interview with Mr Olson of Geo-Green Fertilizer Company during ES and O&M site inspection, 3/18/85



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

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY D980507016

II. CURRENT OWNER(S)				PARENT COMPANY (if applicable)			
01 NAME DOLD FEED COMPANY		02 D+B NUMBER		08 NAME		09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 717 ELK STREET			04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE
05 CITY BUFFALO,	06 STATE NY	07 ZIP CODE 14210		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
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) (Last most recent first)				IV. REALTY OWNER(S) (if applicable; list most recent first)			
01 NAME THOMPSON PAPER CO.		02 D+B NUMBER		01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 717 ELK STREET			04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE
05 CITY BUFFALO	06 STATE NY	07 ZIP CODE 14210		05 CITY		06 STATE	07 ZIP CODE
01 NAME VICTORY CHEMICAL		02 D+B NUMBER		01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 717 ELK STREET			04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE
05 CITY BUFFALO	06 STATE NY	07 ZIP CODE 14210		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)

County of Erie, Department of Environment and Planning, Division of Environmental Control, memorandum from Ronald Koczaja to Donald Campbell (10/84).
Interview with owners of Gro-Green Fertilizer Co. during site inspection.



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

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY D980507016

II. CURRENT OPERATOR <small>(Provide if different from owner)</small>				OPERATOR'S PARENT COMPANY <small>(if applicable)</small>			
01 NAME Gro-Green Fertilizer Co.		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS <small>(P.O. Box, RFD #, etc.)</small> 717 Elk Street			04 SIC CODE	12 STREET ADDRESS <small>(P.O. Box, RFD #, etc.)</small>			13 SIC CODE
05 CITY Buffalo		06 STATE NY	07 ZIP CODE 14210	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION 1960-1985		09 NAME OF OWNER Mr. Walter Olson					
III. PREVIOUS OPERATOR(S) <small>(List most recent first; provide only if different from owner)</small>				PREVIOUS OPERATORS' PARENT COMPANIES <small>(if applicable)</small>			
01 NAME MacNaughton-Brooks Inc		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS <small>(P.O. Box, RFD #, etc.)</small> 11 Bolton			04 SIC CODE	12 STREET ADDRESS <small>(P.O. Box, RFD #, etc.)</small>			13 SIC CODE
05 CITY Buffalo		06 STATE NY	07 ZIP CODE 14210	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION 1960-1982		09 NAME OF OWNER DURING THIS PERIOD Mr. MacNaughton					
01 NAME Thompson Paper Co.		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS <small>(P.O. Box, RFD #, etc.)</small>			04 SIC CODE	12 STREET ADDRESS <small>(P.O. Box, RFD #, etc.)</small>			13 SIC CODE
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION 1945-1960		09 NAME OF OWNER DURING THIS PERIOD					
01 NAME Victory Chemical Co.		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS <small>(P.O. Box, RFD #, etc.)</small>			04 SIC CODE	12 STREET ADDRESS <small>(P.O. Box, RFD #, etc.)</small>			13 SIC CODE
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION -1945		09 NAME OF OWNER DURING THIS PERIOD					

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

County of Erie, Department of Environment and Planning, Division of Environmental Control, Memorandum from Ronald D Koczaja to Donald Campbell, dated 10/84

Interview with Mr. Olson of Gro-Green Fertilizer during ES and DM's site inspection, 3/18/85



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

I. IDENTIFICATION	
01 STATE <i>NY</i>	02 SITE NUMBER <i>0980507010</i>

II. ON-SITE GENERATOR

01 NAME <i>NONE</i>		02 D+B NUMBER		<i>NO hazardous wastes are generated on-site.</i>
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 <i>NONE</i>		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 <i>NONE</i>		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)

Interview with Mr Olson of Green Fertilizer Co during site inspection conducted by ES and DEM, 3/18/85



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

I. IDENTIFICATION
01. STATE | 02. SITE NUMBER

II. PAST RESPONSE ACTIVITIES

01 <input type="checkbox"/> A. WATER SUPPLY CLOSED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
<i>NO</i>		
01 <input type="checkbox"/> B. TEMPORARY WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
<i>NO</i>		
01 <input type="checkbox"/> C. PERMANENT WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
<i>NO</i>		
01 <input type="checkbox"/> D. SPILLED MATERIAL REMOVED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
<i>NO</i>		
01 <input type="checkbox"/> E. CONTAMINATED SOIL REMOVED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
<i>Demolition material removed from site</i>		
01 <input type="checkbox"/> F. WASTE REPACKAGED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
<i>NO</i>		
01 <input type="checkbox"/> G. WASTE DISPOSED ELSEWHERE 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
<i>NO</i>		
01 <input type="checkbox"/> H. ON SITE BURIAL 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
<i>NO</i>		
01 <input type="checkbox"/> I. IN SITU CHEMICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
<i>NO</i>		
01 <input type="checkbox"/> J. IN SITU BIOLOGICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
<i>NO</i>		
01 <input type="checkbox"/> K. IN SITU PHYSICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
<i>NO</i>		
01 <input type="checkbox"/> L. ENCAPSULATION 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
<i>NO</i>		
01 <input type="checkbox"/> M. EMERGENCY WASTE TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
<i>NO</i>		
01 <input type="checkbox"/> N. CUTOFF WALLS 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
<i>NO</i>		
01 <input type="checkbox"/> O. EMERGENCY DIKING/SURFACE WATER DIVERSION 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
<i>NO</i>		
01 <input type="checkbox"/> P. CUTOFF TRENCHES/SUMP 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
<i>NO</i>		
01 <input type="checkbox"/> Q. SUBSURFACE CUTOFF WALL 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
<i>NO</i>		



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

L IDENTIFICATION

01 STATE NY 02 SITE NUMBER 0980507016

II PAST RESPONSE ACTIVITIES (Continued)

01 R. BARRIER WALLS CONSTRUCTED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

No

01 S. CAPPING/COVERING
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

No

01 T. BULK TANKAGE REPAIRED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

No

01 U. GROUT CURTAIN CONSTRUCTED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

No

01 V. BOTTOM SEALED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

No

01 W. GAS CONTROL
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

No

01 X. FIRE CONTROL
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

No

01 Y. LEACHATE TREATMENT
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

No

01 Z. AREA EVACUATED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

No

01 1. ACCESS TO SITE RESTRICTED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

No

01 2. POPULATION RELOCATED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

No

01 3. OTHER REMEDIAL ACTIVITIES
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

The demolition debris pile previously used to dispose solvents and waste paint residues has been removed. The area where disposal activities are suspected is used to dispose of misc. wastes by the general public. GPR work removed all accumulated debris (ties, tires & trash) on a as needed basis. It is not known where the demolition pile was disposed.

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

Interview with owners of Gila-Green Fertilizer Company during ES and O&M site inspection, 3/12/85



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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	0980507016

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION YES NO *NO Enforcement Actions have been taken*

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

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

NYSDEC, Environmental Enforcement Division
NYS, Attorney General's Office

SECTION VI

ASSESSMENT OF DATA ADEQUACY AND RECOMMENDATIONS

ASSESSMENT OF DATA ADEQUACY

A summary assessment of the adequacy of existing data for completion of the HRS score is presented in Table VI-1. Based on this assessment, the following Phase II work plan and cost estimate has been prepared.

PHASE II WORK PLAN

Objectives

The objectives of the Phase II activities are:

- o To collect additional field data necessary to identify the occurrence and extent of contamination and to determine if any imminent health hazard exists.
- o To perform a conceptual evaluation of remedial alternatives and estimate budgetary costs for the most likely alternative.
- o To prepare a site investigation report including final HRS score.

The additional field data required to complete this investigation are described as follows:

Groundwater - A groundwater monitoring system consisting of 3 wells is recommended. Borings will be drilled to an approximate depth of 25 to 40 feet (final depths to be determined by field personnel); soil samples will be taken continuously in the upper ten feet and every 5 feet or more frequently thereafter if a change in soil lithology is encountered. The wells will be placed in the aquifer of concern and constructed of 2" PVC pipe. The groundwater samples will be analyzed for priority pollutants. In addition, sieve and hydrometer analyses will be performed on representative samples of the subsurface soils. Finally, an in-situ permeability test will be performed on each well.

Air - An air monitoring survey with an HNU meter is recommended to test the air quality during site activities.

TASK DESCRIPTION

The proposed Phase II tasks are described in Table VI-2 as required under the site specific health and safety plan and quality assurance plan which must be submitted prior to initiation of field activities. The proposed monitoring well and sampling location are presented in Figure VI-1.

COST ESTIMATE

The estimated man-hours required for the Phase II project are presented in Table VI-3 and the estimated project costs by tasks are presented in Table VI-4. The estimate total cost for this project is \$31,064.

TABLE VI-1

ASSESSMENT OF DATA ADEQUACY

HRS Data Requirement	Comments on Data
Observed Release	
Groundwater	Insufficient data to score release
Surface Water	Insufficient data to score release
Air	HNu meter readings taken, no observed release
Route Characteristics	
Groundwater	Insufficient to score, soil types and depth to aquifer of concern were estimated
Surface Water	Adequate data for HRS score
Air	HNu meter readings taken, no observed release
Containment	Adequate data for HRS score
Waste Characteristics	Adequate data for HRS score
Targets	Adequate data for HRS score
Observed Incident	Adequate data for HRS score
Accessibility	Adequate data for HRS score

TABLE VI-2
 PHASE II WORK PLAN - TASK DESCRIPTION

Tasks	Description of Task
II-A Update Work Plan	Review the information in the Phase I report, conduct a site visit, and revise the Phase II work plan.
II-B Conduct Geophysical Studies	No further studies necessary.
II-C Conduct Boring/Install Monitoring Wells	Install 1 upgradient and 2 down-gradient wells. The borings will be drilled to a depth between approximately 25 to 40 feet. Wells will be constructed of 2" PVC pipe.
II-D Construct Test Pits/Auger Holes	No further construction of test pits/auger holes necessary.
II-E Perform Sampling & Analysis	
Soil samples from borings	Soil samples collected continuously in the upper 10 feet and thereafter at 5 feet intervals during drilling and at changes in subsurface lithologies. Perform one grain size analysis and permeability test per subsurface lithology change.
Soil samples from surface soils	No further studies necessary.
Soil samples from auger holes/test pits	No further studies necessary.
Sediment samples from surface water	No further studies necessary.
Groundwater samples	3 groundwater samples are to be collected and analyzed for priority pollutants.
Surface water samples	No further studies necessary.

TABLE VI-2 (Continued)
 PHASE II WORK PLAN - TASK DESCRIPTION

Tasks	Description of Task
Air samples	Using the HNu determine the presence of organics during site activities.
Waste samples	No further sampling necessary.
II-F Calculate Final HRS	Based on the field data collected in Tasks II-B - II-E, complete the HRS form.
II-G Conduct Site Assessment	Prepare final report containing significant Phase I information, additional field data, final HRS and HRS documentation records, and site assessments. The site assessment will consist of a conceptual evaluation of alternatives and a preliminary cost estimate of the most probable alternative.
II-H Project Management	Project coordination, administration and reporting.

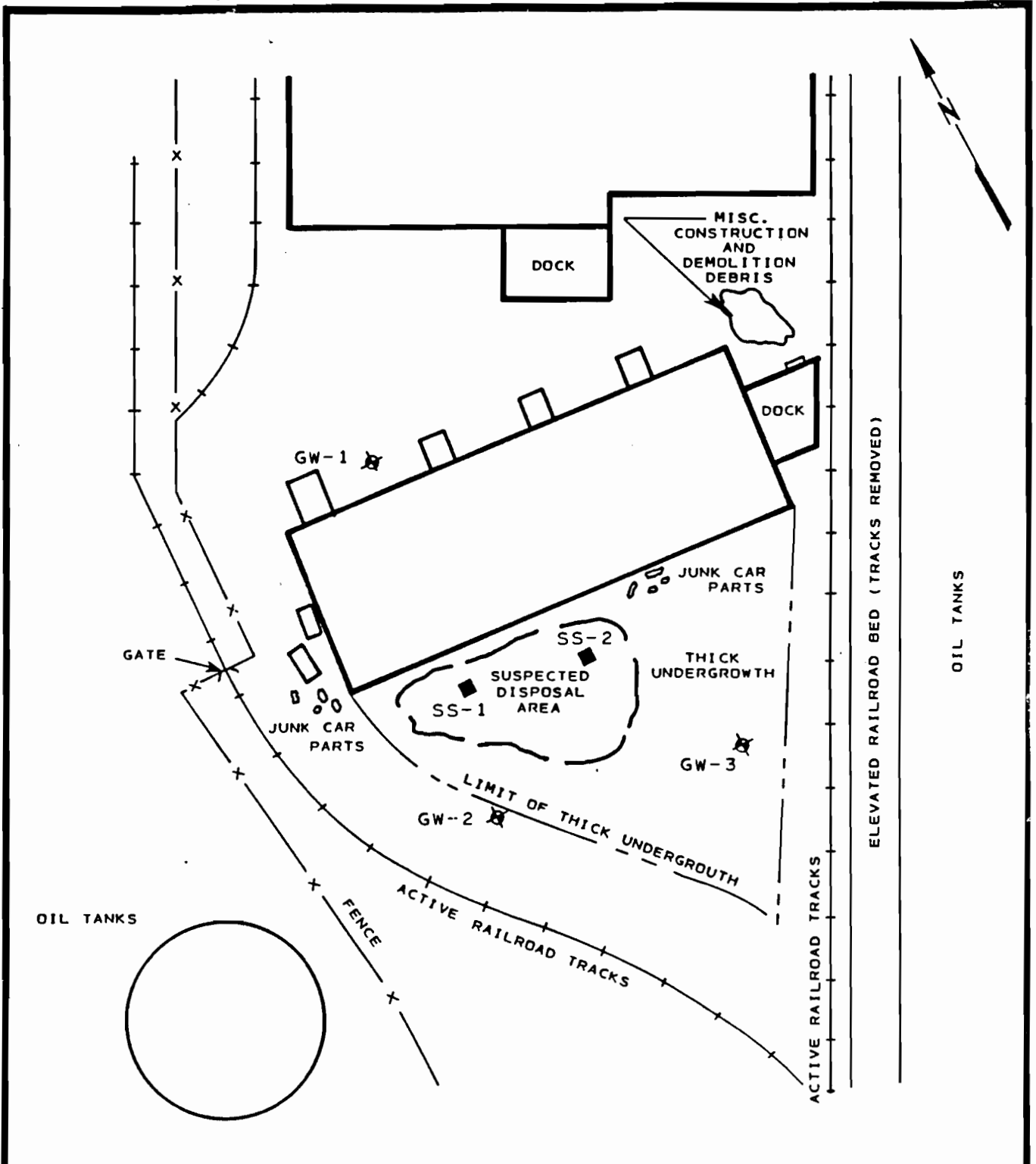
TABLE VI-3
 PERSONNEL RESOURCES BY TASK
 PHASE II HRS SITE INVESTIGATION (McHAUGHTON BROOKS)

TASK DESCRIPTION	TEAM MEMBERS, MANHOURS											TOTAL HOURS	TOTAL \$			
	PIC	TIB	PM	DM	PCD	DM	SM	FTL	FT	RAAL	MMAT			SS		
II-A UPDATE WORK PLAN	1	1	0	4	4	4	4	16	0	0	0	28	74	1144.1	0	
II-B CONDUCT GEOPHYSICAL STUDIES													0	0	0	0
II-C CONDUCT BORING/INSTALL MONITORING WELLS		4	0	4	4	4	4	16	48			16	92	1250.04		
II-D CONSTRUCT TEST PITS/AUGER HOLES													0	0	0	0
II-E PERFORM SAMPLING AND ANALYSIS																
SOIL SAMPLES FROM BORINGS			2	4		2	2	4	0			4	26	482.05		
SOIL SAMPLES FROM SURFACE SOILS													0	0		
SOIL SAMPLES FROM TEST PITS AND AUGER HOLES													0	0		
SEDIMENT SAMPLES FROM SURFACE WATER													0	0		
GROUND-WATER SAMPLES		4	4	4	2	2	2	8	16			4	48	686.74		
SURFACE WATER SAMPLES													0	0		
AIR SAMPLES		2	2		1	1	1	2	4			2	14	225.53		
WASTE SAMPLES													0	0		
II-F CALCULATE FINAL HRS			4	4			4	4	2				18	364.80		
II-G CONDUCT SITE ASSESSMENT	2	2	0	2			24	32	12		48	48	162	2142.82		
II-H PROJECT MANAGEMENT	2		6	2	3	4	4					10	31	515.04		
TOTALS	5	3	38	30	3	17	17	74	104	22	48	184	457	6632.81		

TABLE VI-4
 COST ESTIMATE BREAKDOWN BY TASK
 PHASE II HRS SITE INVESTIGATION (SITE INVESTIGATION BROOKS)

TASK DESCRIPTION	OTHER DIRECT COSTS (ODC), \$									
	DIRECT LABOR HOURS	LAB ANALYSIS	TRAVEL AND SUBSTANCE	SUPPLIES	EQUIP. CHARGES	SUBCONTRACTORS	MISC.	ODC	SUBTOTAL	TOTAL (1)
II-A UPDATE WORK PLAN	74	\$1,144.10	\$200.00	\$50.00	\$50.00		\$50.00	\$350.00	\$1,494.10	\$0.00
II-B CONDUCT GEOPHYSICAL STUDIES	0	\$0.00						\$0.00	\$0.00	\$0.00
II-C CONDUCT BORINGS/INSTALL MONITORING WELLS	92	\$1,250.04	\$450.00	\$250.00	\$600.00	\$4,500.00	\$250.00	\$6,650.00	\$7,300.04	\$0.00
II-D CONSTRUCT TEST PITS/AUGER HOLES	0	\$0.00						\$0.00	\$0.00	\$0.00
II-E PERFORM SAMPLING AND ANALYSIS	26	\$482.06		\$100.00	\$150.00		\$50.00	\$300.00	\$782.06	\$0.00
SOIL SAMPLES FROM BORINGS	0	\$0.00						\$0.00	\$0.00	\$0.00
SOIL SAMPLES FROM SURFACE SOILS	0	\$0.00						\$0.00	\$0.00	\$0.00
SOIL SAMPLES FROM TEST PITS AND AUGER HOLES	0	\$0.00						\$0.00	\$0.00	\$0.00
SEDIMENT SAMPLES FROM SURFACE WATER	0	\$0.00						\$0.00	\$0.00	\$0.00
GROUND-WATER SAMPLES	40	\$666.74	\$3,600.00	\$250.00	\$440.00	\$150.00	\$50.00	\$4,696.74	\$4,696.74	\$0.00
SURFACE WATER SAMPLES	0	\$0.00						\$0.00	\$0.00	\$0.00
AIR SAMPLES	14	\$225.33			\$60.00		\$10.00	\$70.00	\$295.33	\$0.00
WASTE SAMPLES	0	\$0.00						\$0.00	\$0.00	\$0.00
II-F CALCULATE FINAL HRS	10	\$364.00		\$150.00	\$150.00		\$20.00	\$320.00	\$684.00	\$0.00
II-G CONDUCT SITE ASSESSMENT	162	\$2,142.02		\$750.00	\$300.00		\$75.00	\$1,125.00	\$3,267.02	\$0.00
II-H PROJECT MANAGEMENT	31	\$515.04	\$300.00	\$300.00	\$150.00	\$50.00	\$50.00	\$650.00	\$1,165.04	\$0.00
TOTALS	457	\$6,652.01	\$3,900.00	\$1,200.00	\$1,450.00	\$1,510.00	\$4,500.00	\$355.00	\$13,155.00	\$19,007.01

OVERHEAD= \$9,300.21
 SUBTOTAL= \$29,300.02
 FEE= \$1,755.00
 TOTAL PROJECT COST= \$31,055.00



NOT TO SCALE

EXPLANATION:

- ⊕ PROPOSED WELL LOCATION
- PROPOSED SOIL SAMPLE

ENGINEERING-SCIENCE
 IN ASSOCIATION WITH
 DAMES & MOORE
 NEW YORK STATE DEPARTMENT
 OF ENVIRONMENTAL CONSERVATION
 PHASE I REPORT

PROPOSED SAMPLING LOCATIONS
 MacNAUGHTON - BROOKS

FIGURE VI-1

APPENDIX A

REFERENCES

Sources Contacted

Documentation

SOURCES CONTACTED FOR
MacNaughton-Brooks Investigation

CONTACT	DATE CONTACTED	PERSON CONTACTED	TELEPHONE NUMBER	LOCATION	INFORMATION COLLECTED
USEPA Headquarters, Superfund Office	4/2/85	Hamid Saebfed	(202) 382-4839	401 M Street, NW Washington, D.C. 20460	Reviewed list of sites to determine if additional information was available.
USEPA - Region II, OERR	3/22/85	Mel Hauptman	(212) 264-7681	Room 402 26 Federal Plaza NY, NY 10278	General information from site files.
NYSDEC - Division of Solid and Hazardous	12/19/84	Marsden Chen	(518) 457-0639	50 Wolf Road Albany, NY 12233	General information from site files.
NYSDEC - Division of Water	12/19/84	Sal Pagano	(518) 457-6675	50 Wolf Road Albany, NY 12233	Mr. Pagano set up meetings with three bureaus within Division of Water.
NYSDEC - Division of Water SPDES Files	12/20/84	Bob Hannaford	(518) 457-6716	50 Wolf Road Albany, NY 12233	Reviewed SPDES Files for permit numbers and conditions.
NYSDEC - Division of Water DMR Files	12/21/84	George Hansen	(518) 457-2010	50 Wolf Road Albany, NY 12233	Reviewed DMR files for discharge violations.
NYSDEC - Division of Air Toxics	12/21/84	Art Fossa	(518) 457-7454	50 Wolf Road Albany, NY 12233	Reviewed site list to identify sites with potential air emissions.
NYSDEC - Division of Monitoring and Assessment	12/21/84	Bill Berner Frank Estabrook Fred Van Alstyne	(518) 457-7363 (518) 457-7363 (518) 457-7363	50 Wolf Road Albany, NY 12233	Reviewed geology and monitoring information for specific sites.

SOURCES CONTACTED FOR
MacNaughton-Brooks Investigation

CONTACT	DATE CONTACTED	PERSON CONTACTED	TELEPHONE NUMBER	LOCATION	INFORMATION COLLECTED
NYSDEC - Division of Environmental Enforcement	12/20/84	Kevin Walter	(518) 457-4346	50 Wolf Road Albany, NY 12233	Reviewed list of sites to determine if legal action has occurred in the past, is in progress, and/or is scheduled in the near future.
NYS - Attorney General's Office, Dept. of Law	1/7/85	Val Washington	(518) 473-3105	Empire State Plaza Justice Building Albany, NY 12233	Reviewed list of sites to determine if legal action has occurred in the past, is in progress, and/or is scheduled in the near future.
NYS - Attorney's Office	1/3/85	Albert Bronson	(716) 847-7196	Buffalo State Office Bldg. Buffalo, NY 14202	Reviewed list of sites to determine if legal action has occurred in the past, is in progress, and/or is scheduled in the near future.
NYSDEC - Division of Solid and Hazardous Waste	1/7/85	Ahmad Tayyebi Larry Clare Peter Buechi Jack Tygert	(716) 847-4615 (716) 847-4615 (716) 847-4590 (716) 847-4585	600 Delaware Ave. Buffalo, NY 14202	Collected information from site files.
NYSDEC - Region 9 Division of Air	1/8/85	Henry Sandonato Robert Armbrust	(716) 847-4565	600 Delaware Ave. Buffalo, NY 14202	Collected information concerning previous air emissions from inactive disposal sites.

SOURCES CONTACTED FOR
MacNaughton-Brooks Investigation

CONTACT	DATE CONTACTED	PERSON CONTACTED	TELEPHONE NUMBER	LOCATION	INFORMATION COLLECTED
NYSDEC - Regional Attorney	1/10/85	Peter J. Burke	847-4551	600 Delaware Ave. Buffalo, NY 14202	Reviewed list of sites to determine if legal action has occurred in the past, is in progress, and/or is scheduled in the near future.
NYS Dept. of Health, Buffalo Region, Public Health Engineering	1/8/85	Lou Violanti	(716) 847-4500	584 Delaware Ave. Buffalo, NY 14202	Collected information from site files.
NYSDEC - Region 9 Division of Fish and Wildlife	1/10/85 & 1/11/85	Mike Wilkinson Jim Sneider	(716) 847-4600	600 Delaware Ave. Buffalo, NY 14202	Collected information from site files
Erie County, Division of Environmental Control, Dept. of Environment & Planning	1/10/85	Don Campbell Ron Koczaja	(716) 846-6271 (716) 846-6370	95 Franklin Street Buffalo, NY 14202	Collected information from Erie County site files. Obtained additional information through interview.
Erie County, Division of Economic Development and Planning	4/2/85	Mike Alspaugh	(716) 846-6013	95 Franklin Street Buffalo, NY 14202	Obtained 1980 U.S. Census Data.
MacNaughton-Brooks Co.	3/8/85	Mr. MacNaughton	(416) 741-3830	3636 Weston Road Ontario, Canada MGL-1W1	Telephone interview concerning past waste disposal practices and site ownership.
MacNaughton-Brooks Co.	3/18/85	A. J. MacDonald	(716) 822-5000	11 Bolton Ave. Buffalo, NY 14210	Discussed past waste management practices.
Gro-Green Fertilizer Co. (Dold Feed Company)	3/18/85	W. Olson Mr. Walker	(716) 826-3300	717 Elk Street Buffalo, NY 14210	Conducted site inspection and reviewed site ownership and past waste management practices.

REFERENCES

1. Allied Chemical, Industrial Division, Soil Borings, Phase I Report.
2. ECDEP, Division of Planning, "Agricultural Districts" Map, 11/84.
3. Erie County Dept. of Environment and Planning Site Profile Report, 3/82.
4. ES and D&M Site Inspection, March/April, 1985.
5. Freeze, R.A., and J.A. Cherry, Groundwater, 1979.
6. LaSala, Groundwater Resources of the Erie-Niagara Basin, new York, 1968.
7. MacNaughton, Personal Communication, 2/22/85.
8. NYS Atlas of Community Water System Sources, 1982.
9. NYS Museum and Science Service Bedrock Geology Map, Map and Chart Series, No. 15 (Compiled by Richard, L.V., and Fisher, D. W.).
10. NYS Wetlands Maps (Not Provided in Appendix).
11. NYSDEC Registry Sheet, 1983.
12. NYSDEC, Region 9, Department of Fish and Wildlife Files.
13. Olson, Grow Green Fertilizer Company, Personal Communication, 3/18/85.
14. Sciascia, J., ECDEP, Personal Communication, 11/85.
15. Sorrento Cheese Corp., Personal Communication, 11/85.
16. US Census Data, 1980.

17. US Dept. of Commerce, National Climatic Center, 1979 Climatic Atlas of the United States.
18. US Department of Commerce Technical Paper No. 40
19. USGS Draft Report of Preliminary Evaluation of Chemical Migration to Groundwater and the Niagara River from Selected Waste Disposal Sites, 1982-83.
20. USGS Topographic Maps: Buffalo NW, NY, 1965; Buffalo NE, NY, 1965 (Provided in Report).
21. Violanti, Louis, NYS Department of Health, Buffalo Region, Personal Communication, 10/8/85.

REF-1

DEPTH	ELEVATION	SAMPLES	SAMPLE NO	CHEM ANAL	RECOVERY (percent)	K	SOIL or ROCK CLASSIFICATION	UNIFIED SOIL CLASSIF.	SOIL PH	WATER CONTENT (Percent)	PERMEABILITY (cm/sec)	MONITOR/PIEZOMETER CONSTRUCTION DETAILS		WATER PROBE READINGS			NOTES	
												Temp (°C)	Cond (µmhos/cm)	Depth (m)	Depth (ft)	pH		
												11-21 12-3						
		1				82	Dry, very compact, SILT, SAND & SLAG (FILL)	6.0										Elevation Top of Protector Pipe: 11.01 Well Materials Riser Pipe-2 inch ID PVC, flush, threaded joint: Well screen-2 inch ID PVC, 0.01 inch slots Sand Pack-4 0 silica sand Bentonite Seal-slurry of bentonite powder and water Concrete seal-grout consisting of cement with some bentonite powder
5		2				7	Dry, Medium, Red-brown silty CLAY, little sand and gravel (FILL) 4.0'	6.0										
10		3				5	Moist, soft, Gray fine-medium SAND, Some Silt and Clay 8.0'	6.0										
15		4				3	Moist, soft, Gray fine SAND, Some Organic Silt, pieces of organic matter, trace clay	6.0										
20		5				2	Wet, very soft, Gray fine SAND, seams of organic matter	6.0										
25		6				6	Wet, medium, Gray fine-coarse SAND, Some Silt, alternating seams of fine sand & coarse sand 26.0	6.0										
30		7				-	Wet; very soft, Red-brown silty CLAY	6.0										
35		8				-	Occasional silt partings	7.0										
40		9				-	Varves of Gray silt, little very fine sand Grades to trace very fine sand	7.0										
		10				-	Grades to little very fine sand	6.5										

HYDROGEOLOGIC LOG

Project No. HO-84-123
 Project Title PVS Chemicals
 Location Leg Street Buffalo, NY
 Classified by MR-L Checked _____

Surface Elevation 9.15
 Date Started 11-19-84
 Date Completed 11-20-84
 Number of Installations in Holes 1
 Method of Installation Hand Hollow

MONITOR NO
B-1
Sheet 1 of 1



ECDEP Agricultural District Maps

Agricultural District Maps prepared by the Erie County, Department of Environment and Planning (November, 1984) were reviewed during the Phase I investigation. Individual maps for each site were not obtained and are, therefore, not included in the Phase I reports. Site-specific information related to the location of agricultural areas within 2 miles of each site is recorded in the documentation section of each Phase I report.

MacNaughton-Brooks, Inc.

REF-3

117 Elk Street

Buffalo, New York

The Interagency Task Force (IATF), in Volume 3 of Hazardous Waste Disposal Sites in New York State, reported that 600 gallons total of xylol, toluol and paint sludges were landspread onto bricks in the rear of the plant. The site is coded "F" indicating that no in-place toxics are present in dangerous amounts and that no further action would be required.

BACKGROUND INFORMATION

The MacNaughton-Brooks Company was incorporated in New York in 1960, and started operations in Buffalo at that time. The Company manufactures paint products.

Waste products consist of solvents and solvent sludge (water, solvent, paint powder). From 1960 to 1966 about 100 gallons per year of waste solvents were poured onto bricks and other demolition material in the back of the plant. The Company had indicated that there has not been any on-site waste disposal since 1966. ^{Since then} All wastes are ~~now~~ handled by Newco Chemical Waste Systems.

AERIAL PHOTOGRAPHY

Aerial photographs for the years 1950, 1958, 1960 and 1972 were evaluated. No evidence of landfilling was observed.

SITE INSPECTION

The disposal site is approximately 20 feet by 20 feet and is about 6 feet high. There was no evidence of leachate or ground staining or odors at the site. The disposal site is overgrown with heavy weed growth (Exhibit 2).

ENVIRONMENTAL DATA

General soil map and interpretations for Erie County by the U.S.D.A. Soil Conservation Service (1979) reports that the soils in the area are Urban Land-Niagara. This unit consists of nonsoil areas and deep somewhat poorly drained silty soils.

The Urban land (nonsoil) portion of this unit is covered by man-made structures. In these areas the ^{SURFACE} soil layers have been disturbed or removed. The undisturbed areas of this unit are dominated by Niagara soils that were formed in silty, gravel and stone-free, lake-laid sediments. The Niagara soils are somewhat poorly drained and have a seasonal high water table in the upper part of the subsoil during the spring and other excessively wet periods. The rate of water movement (permeability) through the soil layers is moderately slow. Depth to bedrock in the area ranges between 20 to 40 feet.

The disposal area is approximately 600 feet north of the Buffalo River. The site is not within the 100 year flood plain of the Buffalo River. Surface drainage from the area would run southwest to the Buffalo River. No other surface waters are within a 1 mile radius of the disposal site.

The U.R.S. Study reports a "miscellaneous" natural groundwater table.

GEOGRAPHIC DATA

Land use within a 1 mile radius of the disposal site is commercial, residential and industrial. The 1980 census reports that the population in this area is over 10,000. There are no known private drinking water wells within the City of Buffalo. All residents receive their water supply from a City of Buffalo municipal water supply system which comes from the mouth of the Niagara River.

DIRECT CONTACT

There is no access control on site. However, the area is private property and the only contact that could be expected would be by MacNaughton-Brooks employees.

FIRE OR EXPLOSION POTENTIAL

There is no evidence that this site represents a fire or explosion potential.

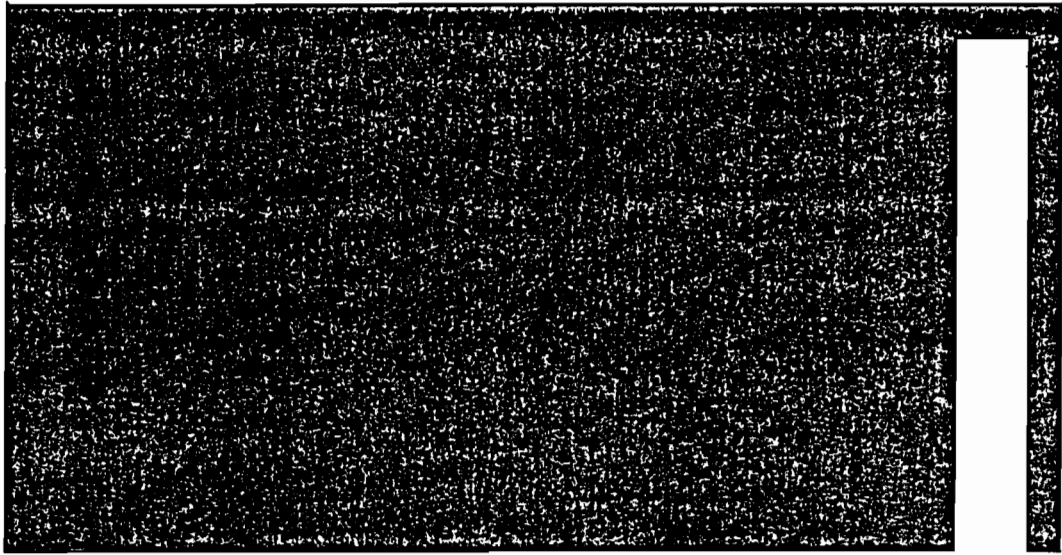
CONCLUSIONS

There is no evidence that this area was ever used as a landfill or that substantial quantities of hazardous materials were disposed of. The solvents which were disposed of on the site would have evaporated by this time leaving a minute residue along with small amounts of paint pigment.

REF - 4

ES AND D&M SITE INSPECTION

Observations made during the ES and D&M Site Inspections are provided on US EPA Forms 2070-12 and 2070-13. Field notes were used to complete these EPA Forms, and are not included herein.



R. Allan Freeze

Department of Geological Sciences
University of British Columbia
Vancouver, British Columbia

John A. Cherry

Department of Earth Sciences
University of Waterloo
Waterloo, Ontario

GROUNDWATER

Prentice-Hall, Inc.
Englewood Cliffs, New Jersey 07632

Table 2.2 Range of Values of Hydraulic Conductivity and Permeability

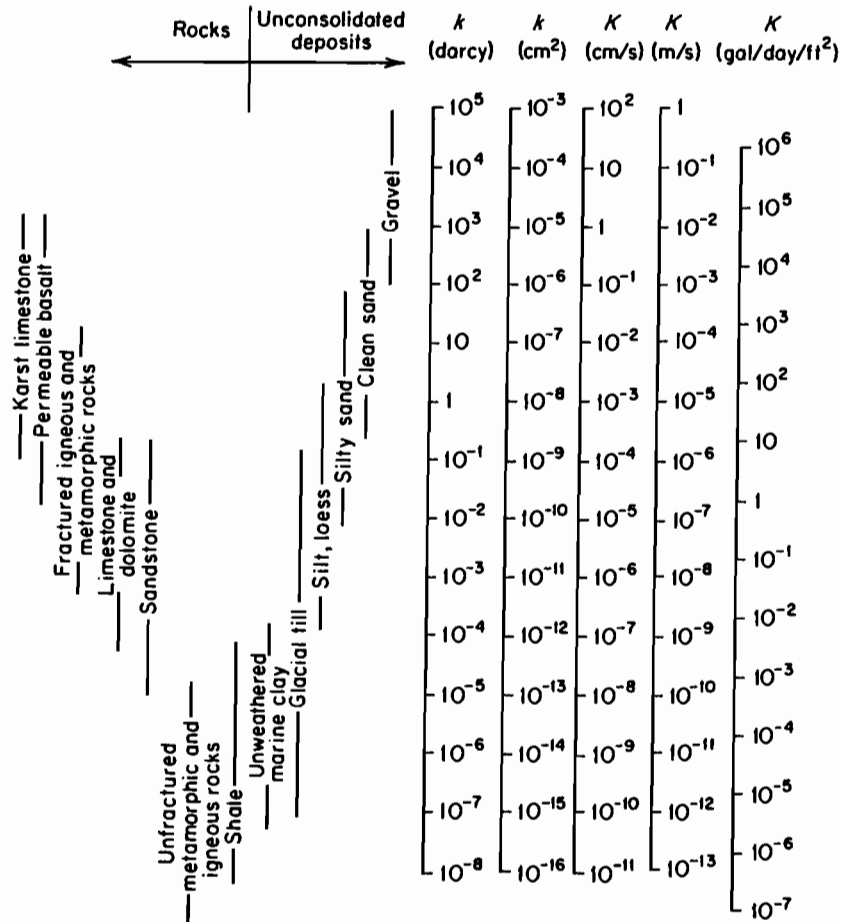


Table 2.3 Conversion Factors for Permeability and Hydraulic Conductivity Units

	Permeability, k^*			Hydraulic conductivity, K		
	cm ²	ft ²	darcy	m/s	ft/s	gal/day/ft ²
cm ²	1	1.08×10^{-3}	1.01×10^8	9.80×10^2	3.22×10^3	1.85×10^9
ft ²	9.29×10^2	1	9.42×10^{10}	9.11×10^5	2.99×10^6	1.71×10^{12}
darcy	9.87×10^{-9}	1.06×10^{-11}	1	9.66×10^{-6}	3.17×10^{-5}	1.82×10^1
m/s	1.02×10^{-3}	1.10×10^{-6}	1.04×10^5	1	3.28	2.12×10^6
ft/s	3.11×10^{-4}	3.35×10^{-7}	3.15×10^4	3.05×10^{-1}	1	5.74×10^5
gal/day/ft ²	5.42×10^{-10}	5.83×10^{-13}	5.49×10^{-2}	4.72×10^{-7}	1.74×10^{-6}	1

*To obtain k in ft², multiply k in cm² by 1.08×10^{-3} .

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

INTERVIEW FORM

INTERVIEWEE/CODE MR. Mac Naughton 1
 TITLE - POSITION OWNER OF Mac Naughton-Brooks
 ADDRESS 3636 Weston Road
 CITY Weston, Ontario, Canada STATE _____ ZIP M9L-1W1
 PHONE (416) 741 3830 RESIDENCE PERIOD 1962 TO 1974
 LOCATION Telephone Interview INTERVIEWER S. Robert STEELE II
 DATE/TIME 8 March 1985 11⁰⁰ AM
 SUBJECT: Inactive Disposal Site At Former MacNaughton-Brooks Site

REMARKS: Mac Naughton-Brooks manufactured paint products from approximately 1962 to 1974 at 717 Elk Street Buffalo, New York. This site was owned by GRO Green Fertilizer Company. From approximately 1960 to 1966 an estimated 100 gallons of waste material including toluene, xylene, mineral spirits and miscellaneous paint residues. These waste residues did not contain heavy metals. Mineral spirits which are used to dilute oil base paints were the principal chemical disposed on-site. The waste residues were collected in 55 gallon drums which were then emptied on a demolition pile (ie bricks and construction debris) From 1966 to 1974, a commercial waste hauler transported all waste chemicals off-site for disposal. The Mac Naughton-Brooks company vacated the premises in approximately 1974.

I AGREE WITH THE ABOVE SUMMARY OF THE INTERVIEW:

SIGNATURE: MR. Mac Naughton

COMMENTS:

New York State Atlas of Community Water System Sources 1982

NEW YORK STATE
DEPARTMENT OF HEALTH

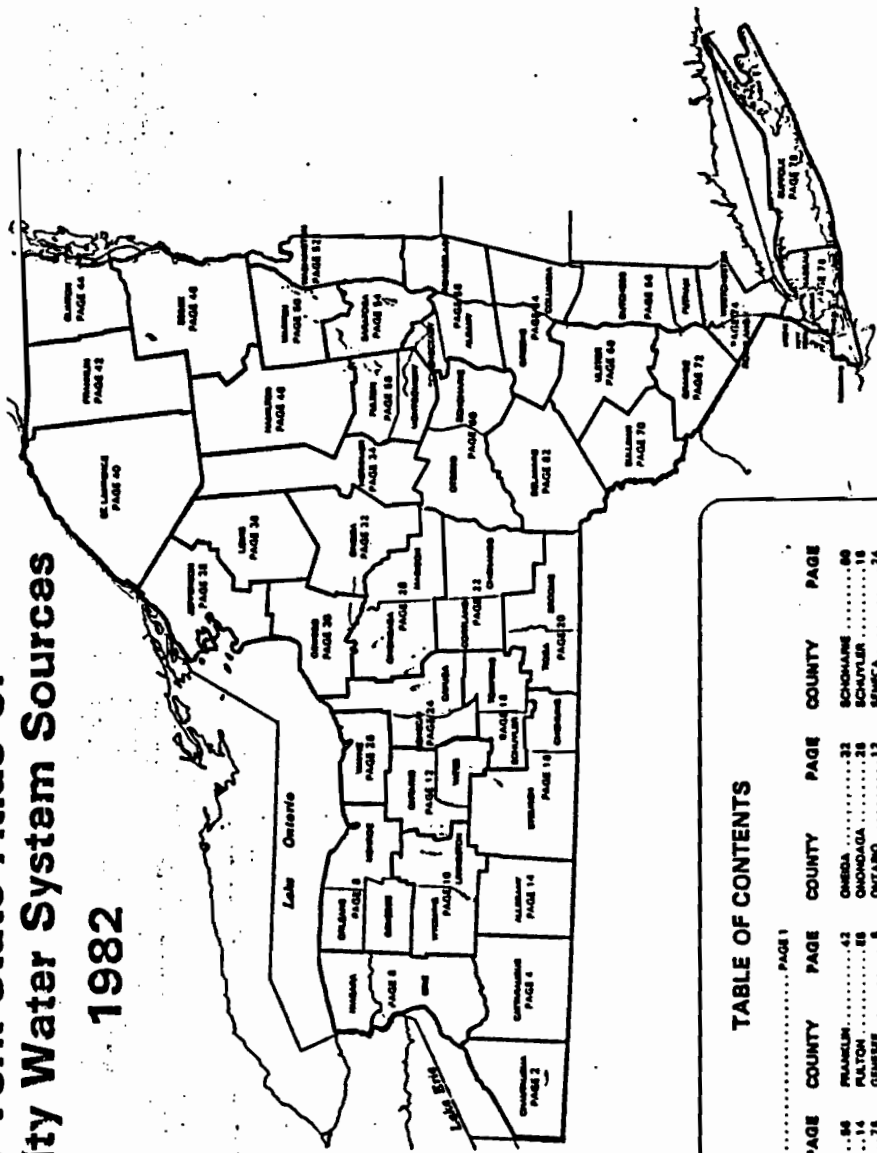


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CAYUGA	24	HEMPHIS	34
CHAUTAUQUA	2	JEFFERSON	38
CHEMUNG	16	KINGS	78
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CLINTON	44	LIVINGSTON	10
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		SCHOENHARTEN	80
		SCHUYLER	24
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		TOMPKINS	18
		ULSTER	88
		WARREN	82
		WASHINGTON	80
		WAYNE	28
		WESTCHESTER	74
		WYOMING	10
		YATES	12

LEGEND

- BOUNDARIES AND PLACES**
- International
 - State
 - County
 - Town
 - Indian Reservation
 - City
 - Unincorporated Place
 - Village
 - Postal Reservation
 - Swiftpage Area (Over 25,000 population including any surrounding city or village)

- CLASSIFICATION OF POPULATED PLACES**
- 100,000 or more
 - 50,000 to 100,000
 - 12,500 to 50,000
 - 2,500 to 12,500
 - 250 to 2,500
 - 250 or less
- YONKERS** Levittown
POUGHKEEPSIE
HARRISON BAYS

TRANSPORTATION

- Highways**
- Divided Highway
 - Full Control of Access
 - Partial or No Control of Access
 - Unimproved Highway
 - Interchange
 - Touring Route (Illm. U.S., Interstate or State Parkway)
 - Touring Route Marker
 - State U.S. Interstates
- Railroads**
- Operating Line
 - Service Discontinued
 - Operator
 - Owner of Other than Operator
 - Company Having Trackage Rights
 - Airports (Open to the Public, Military)
 - Runway under 4000'
 - Runway over 4000'

- Floor Areas**
- Fed. Gov. Floor Areas
 - Gov. Floor Areas
 - State or National Recreation Area
 - State Campground
 - State Boat Launching Site
 - State Canal Port
 - State Fish Hatchery
 - Other State Recreation Site

RECREATION FACILITIES

- State or National Recreation Area
- State Campground
- State Boat Launching Site
- State Canal Port
- State Fish Hatchery
- Other State Recreation Site



SCALE 1:250,000

NORTH

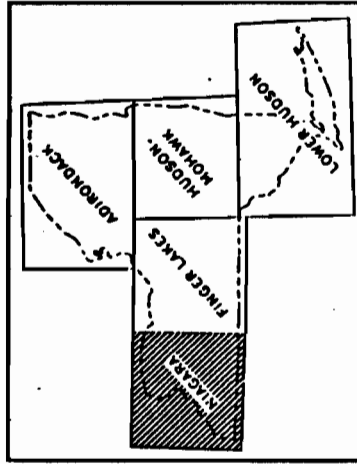
GEOLOGIC MAP OF NEW YORK

1970

Niagara Sheet



CONTOUR INTERVAL 100 FEET



REF-9

COMPILED AND EDITED BY
Lawrence V. Rickard
Donald W. Fisher
March, 1970

Topographic Base from AMS Quadrangles 1:250,000 scale.
NEW YORK STATE MUSEUM AND SCIENCE SERVICE
MAP AND CHART SERIES NO. 15

NYS WETLANDS MAPS

NYS Wetlands Maps were reviewed during the Phase I investigation. Individual maps for each site were not obtained and are, therefore, not included in the Phase I reports. Site specific information collected concerning the location of a wetland within 1 mile of a given site is recorded in the documentation section of each report.

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

PRIORITY CODE: 2a SITE CODE: 915034
NAME OF SITE: MacNaughton-Brooks REGION: 9
STREET ADDRESS: 717 Elk Street
TOWN/CITY: Buffalo COUNTY: Erie
NAME OF CURRENT OWNER OF SITE: MacNaughton-Brooks
ADDRESS OF CURRENT OWNER OF SITE: 11 Balton Place, Buffalo, NY 14210

TYPE OF SITE: OPEN DUMP STRUCTURE LAGOON
LANDFILL TREATMENT POND

ESTIMATED SIZE: <1 ACRES

SITE DESCRIPTION:

During the period of 1960-1966, approximately 100 gallons per year of waste solvents were poured onto demolition material and a rubble pile located in the back of the plant. The company has indicated that there has not been any on-site waste disposal since 1966. Aerial photographs do not show any evidence of landfilling operations for the period indicated.

The site was sampled by the U.S.G.S. in 1982.

HAZARDOUS WASTE DISPOSED: CONFIRMED SUSPECTED

TYPE AND QUANTITY OF HAZARDOUS WASTES DISPOSED:

<u>TYPE</u>	<u>QUANTITY</u> (POUNDS, DRUMS, TONS, GALLONS)
<u>Paint sludges, solvents, xylol, toluol</u>	<u>600 gallons total</u>
_____	_____
_____	_____
_____	_____
_____	_____

TIME PERIOD SITE WAS USED FOR HAZARDOUS WASTE DISPOSAL:

_____, 1960 TO _____, 19 86

OWNER(S) DURING PERIOD OF USE: MacNaughton-Brooks

SITE OPERATOR DURING PERIOD OF USE: MacNaughton-Brooks

ADDRESS OF SITE OPERATOR: 11 Balton Place, Buffalo, NY 14210

ANALYTICAL DATA AVAILABLE: AIR SURFACE WATER GROUNDWATER
SOIL SEDIMENT NONE

CONTRAVENTION OF STANDARDS: GROUNDWATER DRINKING WATER
SURFACE WATER AIR

SOIL TYPE: Urban/poorly drained silty soil

DEPTH TO GROUNDWATER TABLE: Unknown

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:

The site does not pose an immediate environmental problem. However, the soil samples collected by the U.S.G.S. revealed the presence of numerous organic parameters, some at elevated concentrations. Further investigation warranted to determine extent of the problems.

ASSESSMENT OF HEALTH PROBLEMS:

INSUFFICIENT INFORMATION

PERSON(S) COMPLETING THIS FORM:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

NAME Peter Buechl
TITLE Assoc. Sanitary Engr.
NAME Ahmad Tayyebi
TITLE Asst. Sanitary Engr.
DATE: 11/16/83

NEW YORK STATE DEPARTMENT OF HEALTH

NAME R. Tramontano
TITLE Bur. Tox. Subst. Assess.
NAME _____
TITLE _____
DATE: 12/83

INTERVIEW FORM

INTERVIEWEE/CODE Jim Sneider Mike Wilkenson
 TITLE - POSITION NVSEC, Div of Fish & Wildlife
 ADDRESS Delaware Ave.
 CITY Buffalo STATE NY ZIP _____
 PHONE () _____ RESIDENCE PERIOD _____ TO _____
 LOCATION: in DEC office INTERVIEWER Aileen Helligan
 DATE/TIME 1/10/85 - 1/11/85
 SUBJECT: Phase I site information

REMARKS: The above-named interviewees provided us with the following information regarding our Phase I site. (see attached list):

- 1) Wetlands in Niagara Co. & proximity to sites
- 2) Types of fish & wildlife in Erie/Niagara area
- 3) Use by fish & wildlife of Niagara River & tributaries
- 4) Sensitive environments & proposed wetlands in the Erie/Niagara area
MacNaghten Books site
- 0.45 mile to wetland, distance to ~~an~~ ~~area~~
critical habitat of an endangered species is
more than 1 mile

I AGREE WITH THE ABOVE SUMMARY OF THE INTERVIEW:

SIGNATURE:

James R. Sneider - Sr. Wildlife Biologist
Michael A. Wilkenson - Conservation Biologist (Aquatic)

COMMENTS:

No discussion of wetlands/wildlife regarding
Mine Landfill site - referred to Aileen Office

INTERVIEW FORM

INTERVIEWEE/CODE Mr. OLSON, GRO-Green Fertilizer CO 1
 TITLE - POSITION OWNER
 ADDRESS 717 EIK Street
 CITY Buffalo STATE NY ZIP 14210
 PHONE (716) 926-3300 RESIDENCE PERIOD _____ TO _____
 LOCATION During site inspection INTERVIEWER S. Robert STEELE, II
 DATE/TIME 3/18/85 2³⁰ PM 1
 SUBJECT: DISPOSAL AREA

REMARKS: The demolition debris pile, previously used to dispose of solvents and waste paint residues by MacNaughton-Bowk from 1960-1966 has been removed off-site. The area where disposal activities previously occurred is plagued by scavenger dumping including fires, scrap iron etc. The site is not currently used to dispose of chemical wastes. Further, the Gro-Green Fertilizer company is engaged in the formulation of fertilizer blends and, as hazardous wastes are generated from this business activity. The Old Feed Company is the owner of the property located at 717 EIK Street, Buffalo, NY and Gro-Green Fertilizer Co. leases the property.

I AGREE WITH THE ABOVE SUMMARY OF THE INTERVIEW:

SIGNATURE: W. Olson 4/9/85

COMMENTS:

INTERVIEW FORM

INTERVIEWEE/CODE Joseph Sciascia / 1

TITLE - POSITION Erie Co Dept. of Environmental Planning

ADDRESS 95 Franklin St.

CITY Buffalo STATE NY ZIP 14202

PHONE (716) 846-6271 RESIDENCE PERIOD _____ TO _____

LOCATION Phone Convers. D&M office INTERVIEWER JCBrod

DATE/TIME 11/6/85 9:50 AM

SUBJECT: MacNaughton - Brooks

REMARKS: Mr. Sciascia stated that there are no private drinking water wells in the 3-mile radius of the site. He could not comment on industrial wells in the area.

I AGREE WITH THE ABOVE SUMMARY OF THE INTERVIEW:

SIGNATURE

COMMENTS: _____

INTERVIEW FORM

INTERVIEWEE/CODE Sorrento Cheese Corp 1

TITLE - POSITION _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

PHONE () _____ RESIDENCE PERIOD _____ TO _____

LOCATION: _____ INTERVIEWER John Brod

DATE/TIME 11/85

SUBJECT: Mac Naughton Brooks

REMARKS: Sorrento Cheese Corp has industrial well within 3 miles from the MacNaughton Brooks site. An estimated 10 factory workers come into contact with the non press water

note: Personnel from Dames & Moore contacted Sorrento Cheese Corp and did not record name of contact person. This information will need to be verified during Phase II

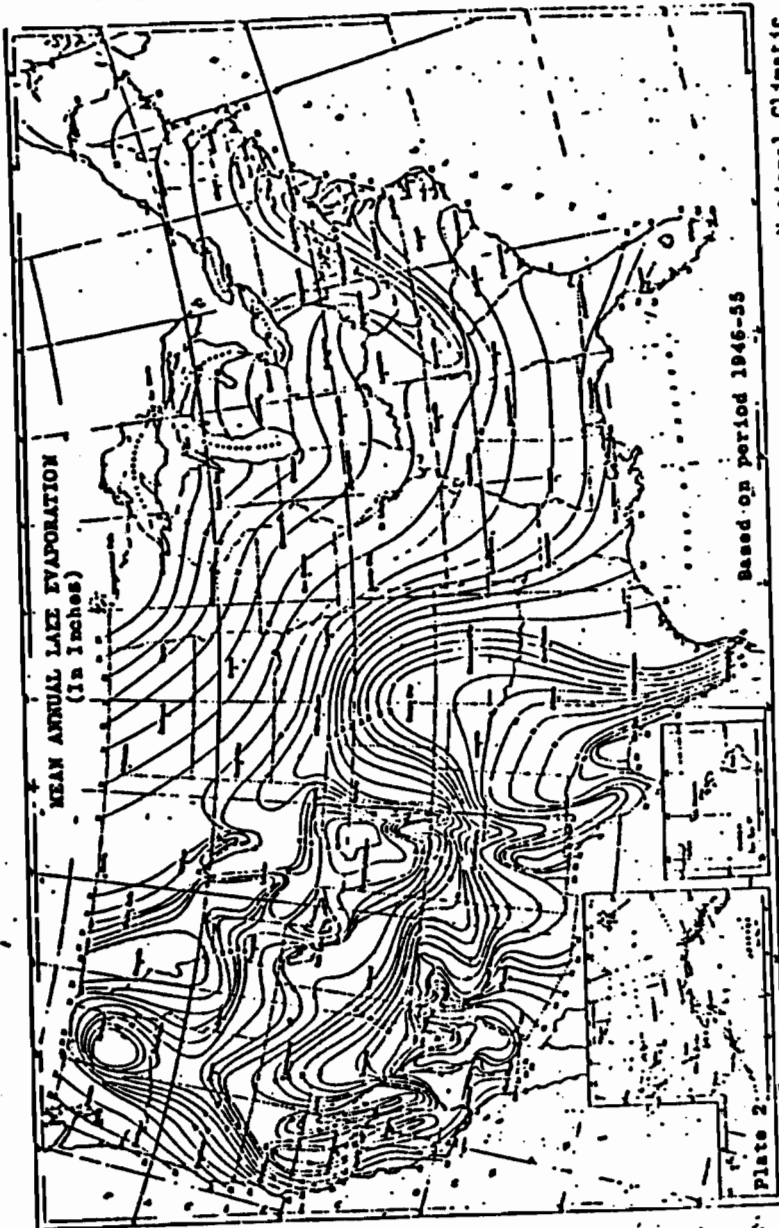
I agree with the above interview summary:

Signature/Title:

Comments:

US CENSUS DATA, 1980

US Census Data used in the HRS scoring was obtained from various County Planning Offices. This data was not obtained from a report. The raw census data combined with County Planning Maps was used to estimate the population within 1, 2, 3, and 4 miles of the Phase I site being investigated. Because of the voluminous amount of data used, the data is not provided in this Appendix.



Based on period 1946-55

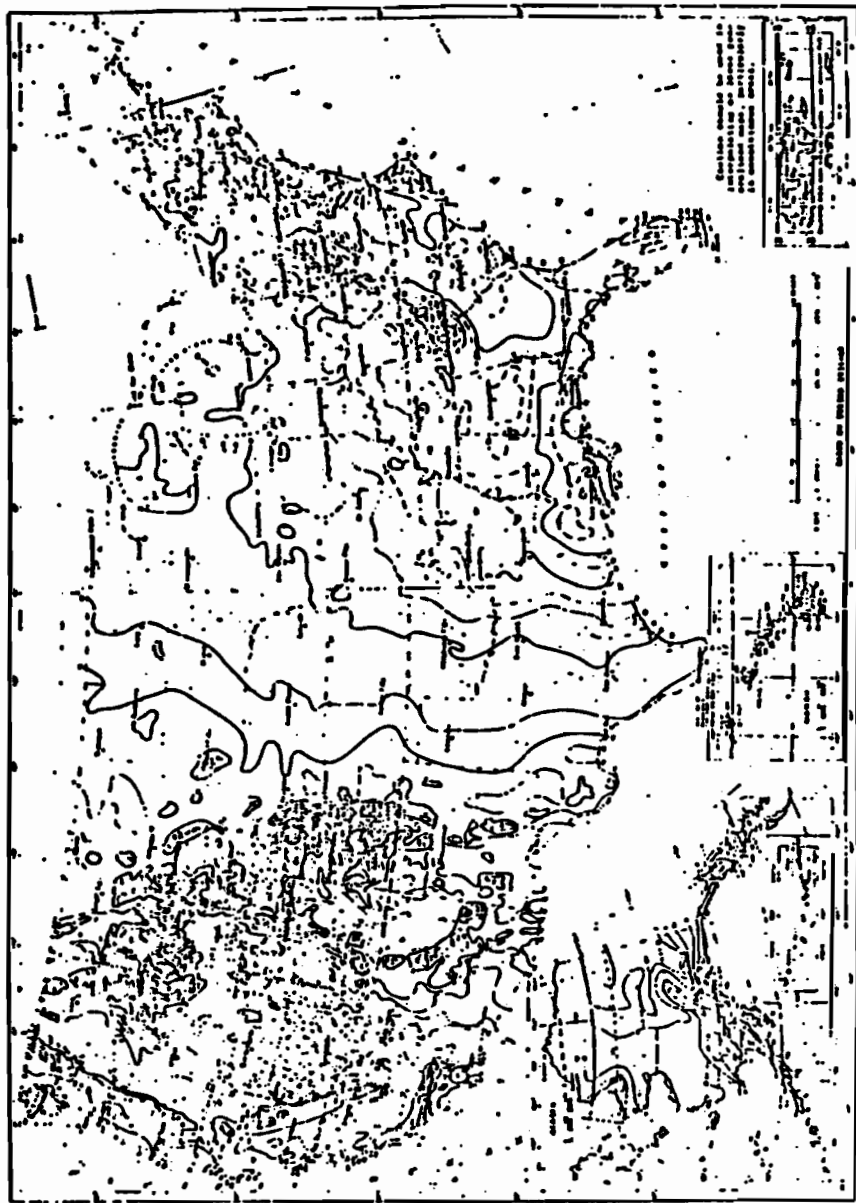
Plate 2

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

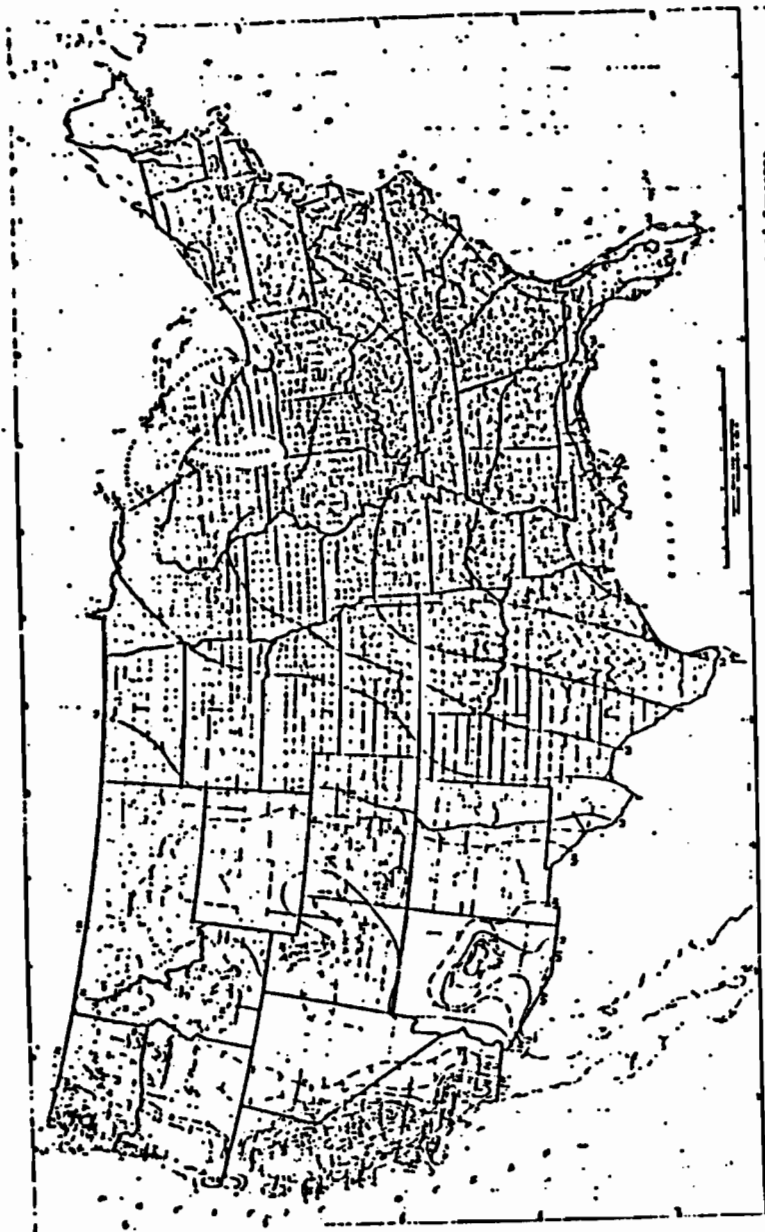
REF-17

Figure 4

Mean Annual Lake Evaporation (In Inches)



REF-1-8



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., 1955.

Figure 8

1-Year 24-Hour Rainfall (Inches)

138. MCNAUGHTON-BROOKS, INC. (USGS field reconnaissance)

NYSDEC 81-034

General information and contaminant-migration potential.--The McNaughton-Brooks, Inc. site, in the city of Buffalo, contains a rubble pile upon which approximately 600 gallons of solvents such as xylol, toluol, and paint sludges were disposed of in the 1960's. This activity ceased in 1966.

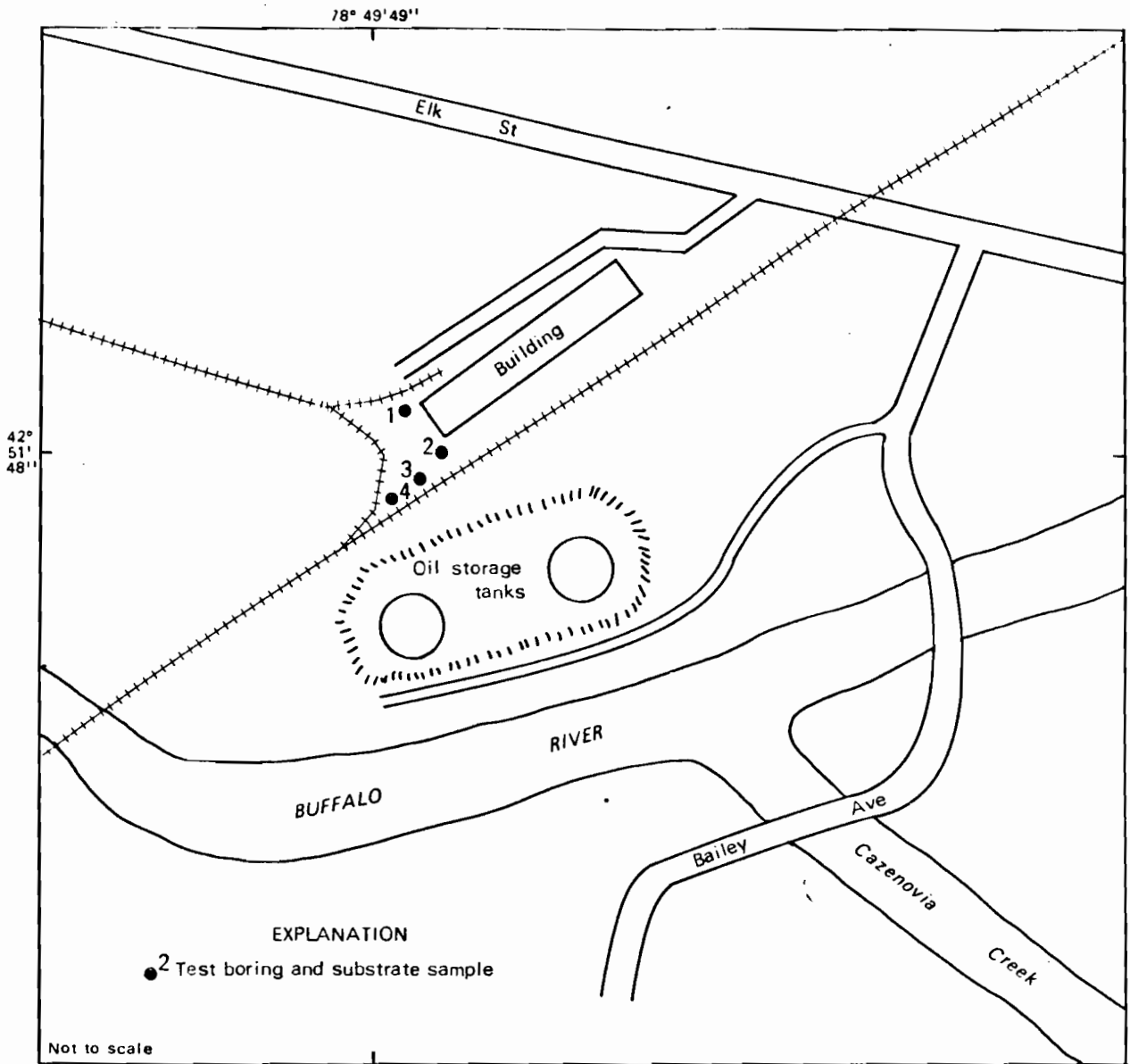
Vertical migration of contaminants by ground-water movement would be inhibited by the clay layer below land surface. Horizontal migration due to advection could occur during seasons of high precipitation. The high concentration of synthetic organic compounds in one of the soil samples indicates that horizontal migration away from the disposal site may have occurred. The presence of these compounds indicates a major potential for contaminant migration.

Geologic information.--The U.S. Geological Survey drilled four test holes at the site in 1982; the locations are shown in figure A-6. The geologic logs are as follows:

<u>Boring no.</u>	<u>Depth (ft)</u>	<u>Description</u>
1	0 - 3.5	Topsoil, debris, rubble, could not drill there, moved 5 ft.
	0 - 2.5	Topsoil, debris, rubble.
	2.5 - 3.0	Sand, black wet. SAMPLE: 2.5 ft.
2	0 - 4	Topsoil and debris.
	4 - 6	Dark gray.
	6 - 6.5	Clay, green. SAMPLE: 5 ft.
3	0 - 2	Brown topsoil and debris.
	2 - 3	Dark gray.
	3 - 5	Clay, light gray/green. SAMPLE: 2.5 ft.
4	0 - 2	Black organic topsoil.
	2 - 4	Clay, gray/green. SAMPLE: 3 ft.

Hydrologic information.--No hydrologic data were obtained because water did not collect in the wells installed in test holes, even though the material appeared to be wet below about 2.5 ft. The moist material was encountered at approximately 580 ft above NGVD.

Chemical information.--The U.S. Geological Survey collected a soil sample at each borehole for cadmium, chromium, iron, lead, and organic-compounds analyses; results are given in table A-7. The lead concentrations were higher here than in the soil samples from undisturbed areas. The samples contained 21 organic priority pollutants, 22 nonpriority pollutants, and some unknown hydrocarbons.



Base from USGS field sketch, 1982

Figure A-6. Location of sampling holes at McNoughton-Brooks, Inc., site 138, Buffalo.

Table A-7.--Analyses of substrate samples from McNaughton Brooks, site 13S, Buffalo, N.Y.

[Locations shown in fig. A-6. Concentrations are in µg/kg; dashes indicate that constituent or compound was not found, LT indicates it was found but below the quantifiable detection limit.]

	Sample number and depth below land surface (ft)			
	1 (2.5)	2 (5.0)	3 (2.5)	4 (3.0)
First sampling (08-05-82)				

Inorganic constituents

Cadmium	1,000	1,000	1,000	--
Chromium	6,000	7,000	4,000	5,000
Iron	7,500,000	7,100,000	2,900,000	5,700,000
Lead	520,000††	40,000	70,000	70,000

	Sample number and depth below land surface (ft)			
	1A (2.5)	2A (5.0)	3A (2.5)	4A (3.0)
Second sampling (05-17-83)				

Inorganic constituents

Molecular sulfur ¹	--	--	37,000	--
-------------------------------	----	----	--------	----

Organic compounds

Priority pollutants

Benzene	6.8**	30.1	33.5	15.0
Ethylbenzene	70.2**	119	84.5	4.5
Methylene chloride	284 **	--	--	--
Toluene	18.0**	91.5	--	--
Phenol	--	--	--	*
Acenaphthene	*	--	*	--
Fluoranthene	*	*	*	*
Naphthalene	*	*	*	--
Bis(2-ethylhexyl) phthalate	--	--	--	*

¹ Tentative identification based on comparison with the National Bureau of Standards (NBS) library. No external standard was available. Concentration reported is semiquantitative and is based only on an internal standard. GC/MS spectra were examined and interpreted by GC/MS analysts.

†† Exceeds concentrations in samples taken from undisturbed soils in the Buffalo area. Undisturbed soils were not analyzed for iron.

* Compounds detected but not quantified--Holding time exceeded before GC/MS acid- and base-neutral extractable compounds were extracted.

** Surrogate recoveries were outside the acceptance limits.

Table A-7.--Analyses of substrate samples from McNaughton Brooks, site 138, Buffalo, N.Y. (continued)

[Locations shown in fig. A-6. Concentrations are in $\mu\text{g}/\text{kg}$; dashes indicate that constituent or compound was not found, LT indicates it was found but below the quantifiable detection limit.]

	Sample number and depth below land surface			
	1A (2.5)	2A (5.0)	3A (2.5)	4A (3.0)
Second sampling (05-17-83)				
<u>Organic compounds (continued)</u>				
Priority pollutants (continued)				
Di-n-butyl/phthalate	*	--	--	*
Di-n-octyl/phthalate	--	--	--	*
Benzo(a)anthracene	*	*	*	--
Benzo(a)pyrene	*	*	*	*
Benzo(b)fluoranthene and benzo(k)fluoranthene	*	*	*	*
Chrysene	*	*	*	*
Acenaphthylene	*	--	--	--
Benzo(ghi)perylene	*	--	*	--
Fluorene	*	--	*	--
Dibenzo(a,h)anthracene	*	--	--	--
Indeno(1,2,3-cd)pyrene	*	--	*	*
Pyrene	*	*	*	*
Nonpriority pollutants				
Acetone	257	540	--	--
2-Butanone	--	99.5	--	--
Carbon disulfide	7.9	--	--	--
4-Methyl-2-pentanone	208	--	--	--
Styrene	--	15.5	--	--
O-xylene	609	265	614	13.1
Dibenzofuran	*	*	*	*
2-Methylnaphthalene	*	-	*	*
1,7,7-Trimethyl-tricyclo- (2.2.1.0 _{2,6})heptane ¹	*	--	--	--
1-Ethyl-2-methyl-benzene ¹	*	--	--	--
Tetrahydrofuran ¹	--	*	*	*
3-Methyl-2-butanone ¹	--	*	--	--
1-Pentanol ¹	--	*	--	--
2,6,6-Trimethyl-bicyclo- (3.1.1)hepten-2-ene ¹	--	*	--	*
1,3-and 1,4-Dimethylbenzene ¹	--	*	*	--
Benzofuran ¹	--	*	*	--
Unknown hydrocarbons ¹	*	--	*	*
Cis-1,2-Dimethylcyclo- hexane ¹	--	--	*	--
5-Methyl-1-phenyl-hexane ¹	--	--	*	--
2-Propoxybenzene ¹	--	--	--	*
1,3,5-Trimethylbenzene ¹	--	--	--	*
1,2,3-Trimethylbenzene ¹	--	--	--	*

138. McNaughton-Brooks, Inc.

General information and contaminant-migration potential

McNaughton-Brooks, Inc. site is located in the city of Buffalo, and is shown on plate 1.

The site contains a rubble pile upon which approximately 600 gallons of solvents such as xylol, toluol, and paint sludges were disposed of in the 1960's. This activity ceased in 1966.

Vertical migration of contaminants by ground-water movement would be inhibited by the clay layer below land surface. Horizontal migration due to advection could occur during seasons of high precipitation. The high concentration of synthetic organic compounds in one of the soil samples indicates that horizontal migration away from the disposal site may have occurred.

The presence of these compounds indicates a major potential for contaminant migration.

Figure (caption on next page) belongs near here.

Geologic information

The U.S. Geological Survey drilled on the site; the locations are shown in figure ___. The geologic logs are as follows:

<u>Boring no.</u>	<u>Depth (ft)</u>	<u>Description</u>
1	0 - 3.5	Topsoil, debris, rubble, could not drill there, moved 5 ft
	0 - 2.5	Topsoil, debris, rubble
	2.5 - 3.0	Sand, black wet SAMPLE: 2.5 ft
2	0 - 4	Topsoil and debris
	4 - 6	Dark gray
	6 - 6.5	Clay, green SAMPLE: 5 ft
3	0 - 2	Brown topsoil and debris
	2 - 3	Dark gray
	3 - 5	Clay, light gray/green
		SAMPLE: 2.5 ft
4	0 - 2	Black organic topsoil
	2 - 4	Clay, gray/green SAMPLE: 3 ft

Table 1.--Analyses of substrate samples from McNaughton Brooks, Buffalo, N.Y. Locations shown in fig. 1. Concentrations are in $\mu\text{g}/\text{kg}$; dashes indicate that constituent or compound was not found, LT indicates it was found but below the quantifiable detection limit.)

	Sample number and depth below land surface (ft)			
	1	2	3	4
First sampling (08-05-82)	2.5	5.0	2.5	3.0
<u>Inorganic Constituents</u>				
Cadmium	1,000	1,000	1,000	---
Chromium	6,000	7,000	4,000	5,000
Iron	7,500,000	7,100,000	2,900,000	5,700,000
Lead	520,000†	40,000	70,000	70,000
<u>Sample Number</u>				
Second sampling (05-17-83)	1A	2A	3A	4A
<u>Inorganic Constituents</u>				
Molecular sulfur ¹	---	---	37,000	---
<u>Organic Compounds</u>				
<u>Priority pollutants</u>				
Benzene	6.8**	30.1	33.5	15.6
Ethylbenzene	70.2**	119	84.5	4.3
Methylene chloride	284 **	---	---	---
Toluene	18.0**	91.5	---	---
Phenol	---	---	---	LT*
Acenaphthene	LT*	---	LT*	---
Fluoranthene	34,200*	LT*	13,300*	LT*
Naphthalene	LT*	LT*	11,200*	---
Bis(2-ethylhexyl)phthalate	---	---	---	158*

¹ Tentative identification based on comparison with the National Bureau of Standards (NBS) library. No external standard was available. Concentration reported is semiquantitative and is based only on an internal standard. GC/MS spectra were examined and interpreted by GC/MS analysts.

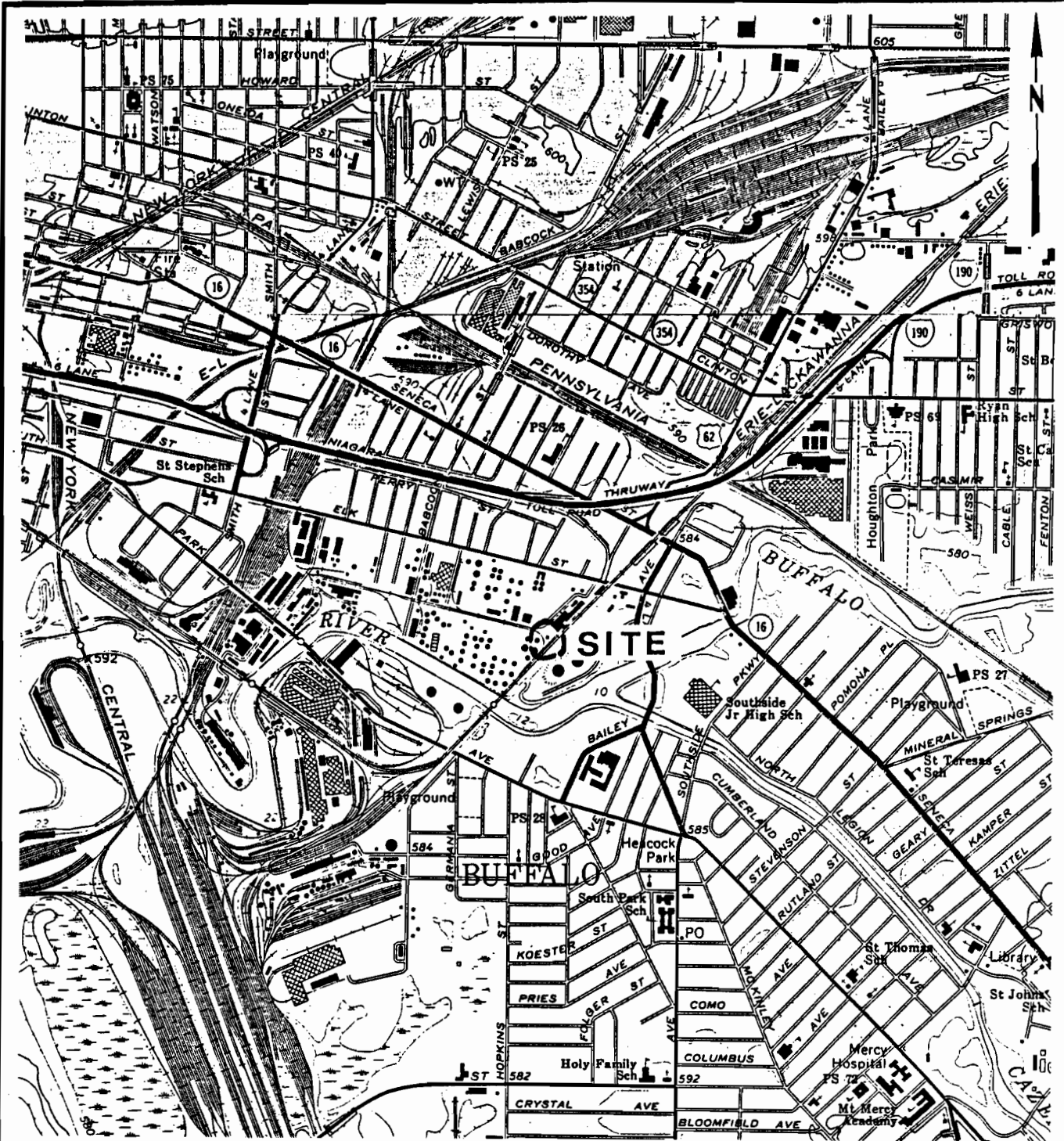
† Exceeds concentrations in samples taken from undisturbed soils in the Buffalo area.

* Holding time exceeded before GC/MC acid- and base-neutral extractable compounds were extracted.

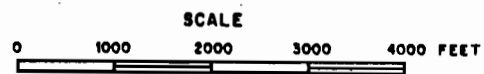
** Surrogate recoveries were above or below the acceptance limits.

Table --Analyses of substrate samples from McNaughton Brooks, Buffalo, N.Y.
Locations shown in fig. . Concentrations are in ug/Kg; dashes indicate
that constituent or compound was not found, LT indicates it was found but
below the quantifiable detection limit.)--continued.

	Sample Number			
	1A	2A	3A	4A
Second sampling (05-17-83)				
<u>Organic Compounds (continued)</u>				
Priority pollutants (continued)				
Di-n-butylphthalate	LT*	--	--	LT*
Di-n-octylphthalate	--	--	--	LT*
Benzo(a)anthracene	25,200*	LT*	LT*	--
Benzo(a)pyrene	LT*	LT*	LT*	21.8*
Benzo(b)fluoranthene and benzo(k)fluoranthene	32,400*	LT*	LT*	36.6*
Chrysene	25,700*	LT*	LT*	LT*
Acenaphthylene	LT*	--	--	--
Benzo(ghi)perylene	LT*	--	LT*	--
Fluorene	LT*	--	LT*	--
Dibenzo(a,h)anthracene	LT*	--	--	--
Indeno(1,2,3-cd)pyrene	LT*	--	LT*	LT*
Pyrene	60,500*	LT*	10,200*	10.4*
Nonpriority pollutants				
Acetone	257	540	--	--
2-Butanone	--	99.5	--	--
Carbonylsulfide	7.9	--	--	--
4-Methyl-2-pentanone	208	--	--	--
Styrene	--	15.5	--	--
O-xylene	609	265	614	13.1
Dibenzofuran	LT*	LT*	LT*	LT*
2-Methylnaphthalene	LT*	--	LT*	LT*
1,7,7-Trimethyl-tricyclo- (2.2.1.0 ^{2,6})heptane ¹	290*	--	--	--
1-Ethyl-2-methyl-benzene ¹	130*	--	--	--
Tetrahydrofuran ¹	--	13*	9.6*	9*
3-Methyl-2-butanone ¹	--	5.5*	--	--
1-Pentanol ¹	--	5.2*	--	--
2,6,6-Trimethyl-bicyclo- (3.1.1)hepten-2-ene ¹	--	14*	--	34*
1,3-and 1,4-Dimethylbenzene ¹	--	220*	400*	--
Benzofuran ¹	--	170*	54*	--
Unknown hydrocarbons ¹	45,000*	--	3.8*	74*
Cis-1,2-Dimethylcyclo- hexane ¹	--	--	2.1*	--
5-Methyl-1-phenyl-hexane ¹	--	--	17*	--
2-Propyloxybenzene ¹	--	--	--	58*
1,3,5-Trimethylbenzene ¹	--	--	--	32*
1,2,3-Trimethylbenzene ¹	--	--	--	76*



LATITUDE: 42°51'49"
 LONGITUDE: 78°49'49"



ENGINEERING-SCIENCE, INC.
 IN ASSOCIATION WITH
 DAMES & MOORE

NEW YORK STATE DEPARTMENT
 OF ENVIRONMENTAL CONSERVATION
 PHASE I REPORT

SITE LOCATION MAP
 McNAUGHTON BROOKS

REFERENCE: U.S.G.S. 7.5' Topographic Map
 Buffalo SE, NY (1965) and Buffalo NE, NY
 (1965) Quadrangles

FIGURE IV-1

INTERVIEW FORM

MAY 18 1985

INTERVIEWEE/CODE Louis Violanti /

TITLE - POSITION NYS DOH Buffalo Region, Public Health Engineering

ADDRESS 584 Delaware Ave

CITY Buffalo STATE NY ZIP 14202

PHONE (716) 847-4500 RESIDENCE PERIOD _____ TO _____

LOCATION Phone convers. (D&M office) INTERVIEWER JCBrod

DATE/TIME 11/6/85 11:10 AM

SUBJECT: Mac Naughton - Brooks Site

REMARKS: Mr. Violanti confirmed the fact that Donna-Hanna Coke Company has been out of business for many years. There are several industries in the area of the site, any one of which has a good possibility of having an industrial well. Industrial wells were not documented by the NYS DOH if they were not used for human consumption.

I AGREE WITH THE ABOVE SUMMARY OF THE INTERVIEW:

Louis M Violanti
SIGNATURE

COMMENTS: _____

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APPENDIX B
PROPOSED UPDATED NYS REGISTRY SHEET

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: 915034

NAME OF SITE : MacNaughton-Brooks
STREET ADDRESS: 717 Elk Street
TOWN/CITY: Buffalo

COUNTY: Erie ZIP: 14210

SITE TYPE: Open Dump-X Structure- Lagoon- Landfill- Treatment Pond-
ESTIMATED SIZE: 1 Acres

SITE OWNER/OPERATOR INFORMATION:

CURRENT OWNER NAME....: MacNaughton-Brooks
CURRENT OWNER ADDRESS.: 11 Balton Place, Buffalo, NY 14210
OWNER(S) DURING USE...: MacNaughton-Brooks
OPERATOR DURING USE...: MacNaughton-Brooks
OPERATOR ADDRESS.....: 11 Balton Place, Buffalo, NY 14210
PERIOD ASSOCIATED WITH HAZARDOUS WASTE: From 1960 To 1966

SITE DESCRIPTION:

During the period of 1960-1966, approximately 100 gallons per year of waste solvents were poured onto demolition material and a rubble pile located in the back of the plant. The company has indicated that there has not been any on-site waste disposal since 1966. Aerial photographs do not show any evidence of landfilling operations for the period indicated. The site was sampled by U.S.G.S. in 1982. Samples were analyzed for Cd, Cr, Fe, Pb and the organic pollutants. Concentrations of Pb exceeds the background level. Ten of the organic priority pollutants were also detected. Six of the samples showed concentrations above 10 ppm levels. Phase I State Superfund investigation was completed in Nov. of 1983. Phase II investigation to be scheduled.

A Phase I State Superfund investigation was also performed in 1985.

HAZARDOUS WASTE DISPOSED:	Confirmed-X	Suspected	-
TYPE	QUANTITY (units)		
Paint sludges, solvents, xylol, toluol			600 gallons total

SITE CODE: 915034

ANALYTICAL DATA AVAILABLE:

Air- Surface Water- Groundwater- Soil- 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: Urban/poorly drained silty soil

GROUNDWATER DEPTH: Unknown

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

The site does not pose an immediate environmental problem. However, the soil samples collected by U.S.G.S. revealed the presence of numerous organic parameters, some at elevated concentrations. Further investigation warranted to determine extent of the problems.

ASSESSMENT OF HEALTH PROBLEMS:

Insufficient information

PERSON(S) COMPLETING THIS FORM:

NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

NEW YORK STATE DEPARTMENT
OF HEALTH

NAME.: Peter Buechi
TITLE: Assoc. Sanitary Engineer

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

NAME.: Ahmad Tayyebi
TITLE: Asst. Sanitary Engineer

NAME.:
TITLE:

DATE.: 01/24/85

DATE.: 01/24/85