

# **ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES**

## **PHASE I INVESTIGATION**

**Haight Farm  
Town of Clarendon**

**Site No. 837006  
Orleans County**



**Prepared for:  
New York State  
Department of  
Environmental Conservation  
50 Wolf Road, Albany, New York 12233  
Thomas C. Jorling, Commissioner**

**Division of Hazardous Waste Remediation  
Michael J. O'Toole, P.E., Director**

**By:  
ENGINEERING-SCIENCE**

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

HAIGHT FARM SITE  
NYS SITE NUMBER 837006  
TOWN OF CLARENDON  
ORLEANS COUNTY  
NEW YORK STATE

Prepared For

DIVISION OF HAZARDOUS WASTE REMEDIATION  
NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
50 WOLF ROAD  
ALBANY, NEW YORK 12233-0001

Prepared By

ENGINEERING-SCIENCE  
290 ELWOOD DAVIS ROAD  
LIVERPOOL, NEW YORK 13088

In Association With

DAMES & MOORE  
2996 BELGIUM ROAD  
BALDWINSVILLE, NEW YORK 13027

DATE OF SUBMITTAL: JANUARY, 1989

RECEIVED

MAR 09 1989  
SOLID WASTE  
D.E.C. REC. #

HAIGHT FARM SITE

TABLE OF CONTENTS

		<u>Page</u>
SECTION I	EXECUTIVE SUMMARY	I-1
	Site Location Map	I-4
	Site Plan	I-5
SECTION II	PURPOSE	II-1
SECTION III	SCOPE OF WORK	III-1
SECTION IV	SITE ASSESSMENT	IV-1
	Site History	IV-1
	Site Topography	IV-1
	Site Hydrology	IV-3
	Site Contamination	IV-4
	Sampling Locations	IV-6
SECTION V	PRELIMINARY APPLICATION OF HAZARD RANKING SYSTEM	V-1
	Narrative Summary	
	Site Location Map	
	HRS Worksheets	
	HRS Documentation Records and References	
	Potential Hazardous Waste Site -	
	Preliminary Assessment	
	Potential Hazardous Waste Site -	
	Site Inspection Report	
SECTION VI	ASSESSMENT OF DATA ADEQUACY AND RECOMMENDATIONS	VI-1
	Assessment of Data Adequacy	VI-1
	Phase II Work Plan	VI-1
	Phase II Cost Estimate	VI-3
APPENDIX A	REFERENCES	
	Sources Contacted	
	Documentation	
APPENDIX B	PROPOSED UPDATED NYS REGISTRY	

SECTION I  
EXECUTIVE SUMMARY

This report, prepared for the New York State Department of Environmental Conservation (NYSDEC), presents the results of the Phase I investigation for the Haight Farm site (New York Site Number 837006), located in the Town of Clarendon, Orleans County, New York (see Figure I-1).

SITE BACKGROUND

The present owner of the site is Mr. Earl Haight. In 1970 Mr. Haight accepted barrels containing waste "cutting oils", allegedly from the Erdle Perforating Corporation of Rochester, New York (Bailey, 1985). The oil contained trichloroethylene (TCE) at concentrations ranging from 0.7 to 65% (Tramontano, 1985; Maxfield, 1985).

In December 1984, approximately 200 gallons of the waste oils were spilled at the site (Banks, 1984). Subsequently, a NYSDEC contractor removed the liquid contents of 30 filled or partially filled drums (approximately 1,000 gallons) and empty drums stored on-site. Some of the barrels were corroded and showed signs of leakage (Leary and Farrar, 1984).

Water samples collected by the Orleans County Department of Health (OCDOH) in 1984-85, of nearby private groundwater wells contained TCE and several other organic compounds at trace levels. A sample collected from one of the downgradient wells had a TCE concentration of 960 ppb, which is above the quality standard for Class GA water in New York State (NYSDEC, 1985). Soil samples taken after the spill indicated the presence of PCB's at a concentration of 19 ppm (Maxfield, 1985). There has

been no surface water monitoring conducted at the site. During a recent site investigation, up- and downgradient HNU meter readings did not detect volatile organics above background concentrations (ES Site Investigation, 1985). However, HNu meter readings of 5 ppm were recorded during a NYSDEC site visit in 1984 (Leary and Farrar, 1984).

#### ASSESSMENT

In an attempt to quantify the risk associated with this site, the Hazard Ranking 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 disposal substances 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 hazardous potential of the substances at a facility, 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:

- $S_M$  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:

$$S_M = 26.82$$

$$S_{GW} = 45.52$$

$$S_{FE} = 0$$

$$S_{SW} = 8.95$$

$$S_{DC} = 25.00$$

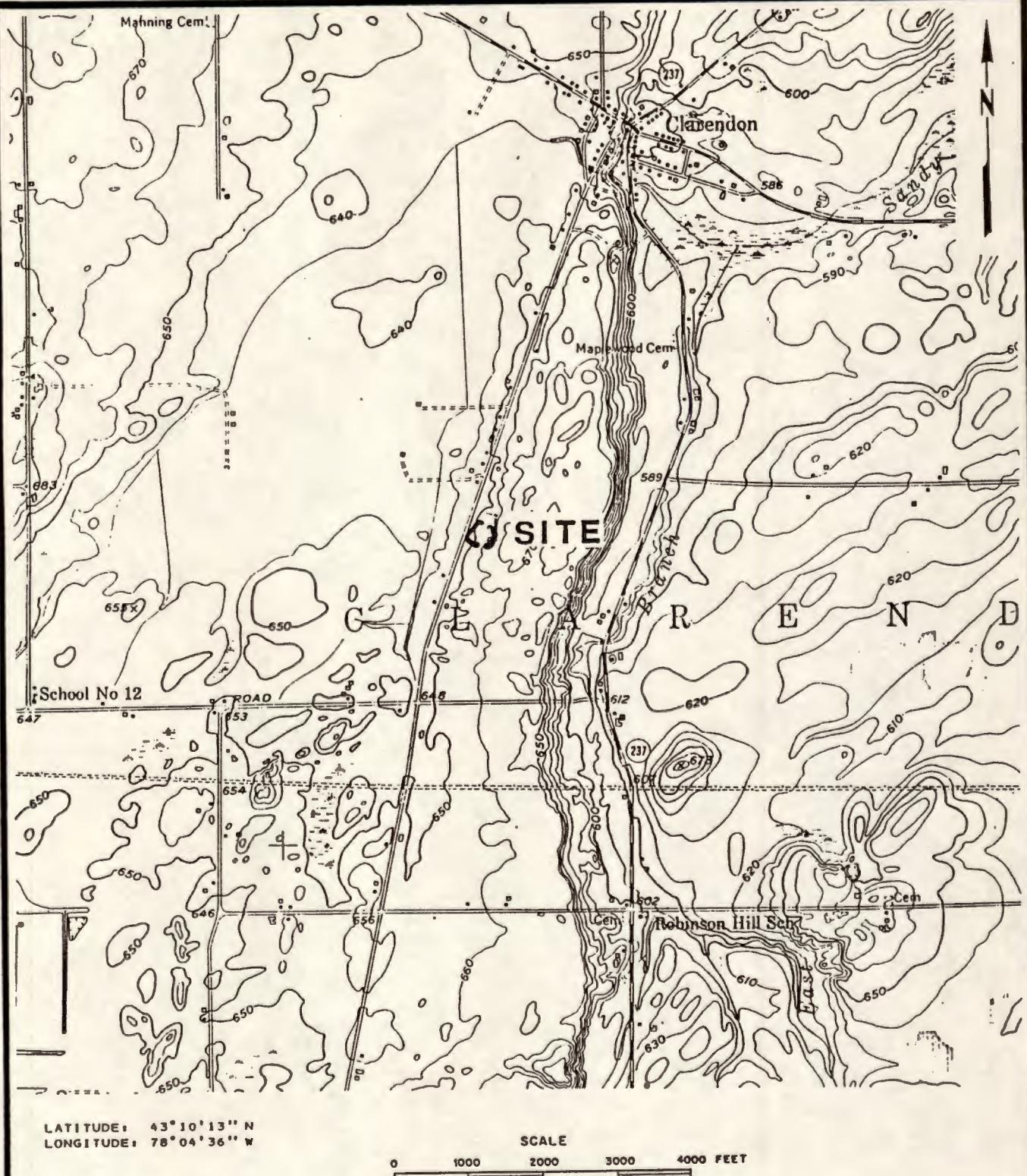
$$S_A = 0$$

#### RECOMMENDATIONS

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

- o Geophysical study consisting of an electrical resistivity survey.
- o Groundwater monitoring system consisting of one upgradient well and three downgradient wells.
- o Surface water and sediment monitoring system consisting of two monitoring stations in the surface water drainage ditch.
- o Surface soil sampling from two monitoring stations in the vicinity of the former drum storage area.
- o Analyses to include Hazard Substance List (HSL) organics and metals.

The estimated man-hour requirements to complete Phase II are 1,130, while the estimated cost is \$91,543.



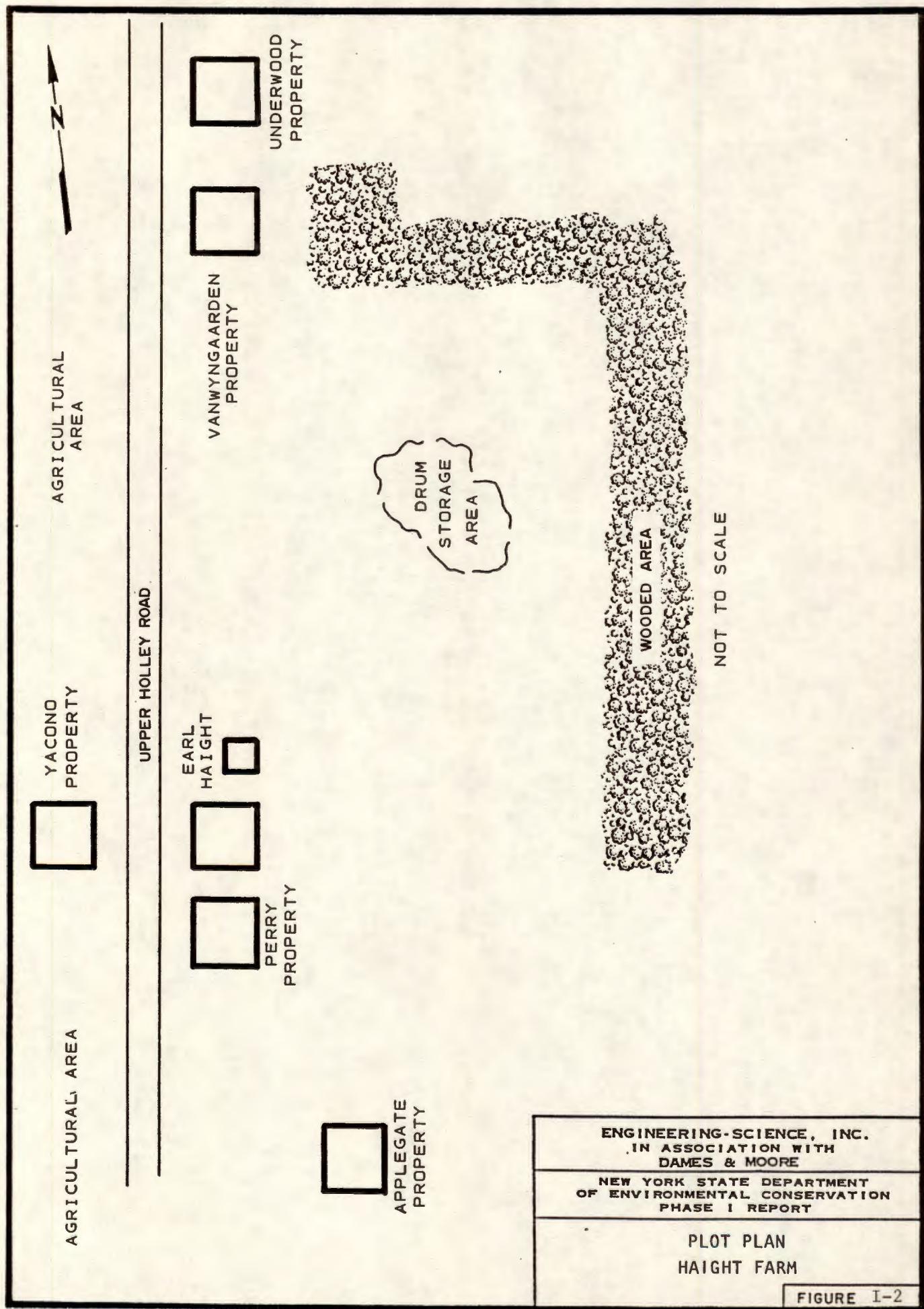
ENGINEERING-SCIENCE, INC.  
IN ASSOCIATION WITH  
DAMES & MOORE

NEW YORK STATE DEPARTMENT  
OF ENVIRONMENTAL CONSERVATION  
PHASE I REPORT

SITE LOCATION MAP  
HAIGHT FARM

REFERENCE: U.S.G.S. 7.5' Topographic Map  
Holley, NY (1950) Quadrangle

FIGURE I-1



## **SECTION II**

### **PURPOSE**

The purpose of the Phase I investigation at the Haight Farm 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 drum disposal storage area. Based on this initial evaluation of the Haight Farm 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 fourth 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 present owner of the Haight Farm site is Mr. Earl Haight of 4879 Upper Holley Road, Orleans County, New York. Mr. Haight has been the owner of the site since it was initially associated with receiving hazardous waste (i.e., cutting oils).

In approximately 1970 Mr. Haight accepted 43 drums of oil containing chlorinated solvents from a Rochester industry, allegedly the Erdle Perforating Company (Bailey, 1985; Banks, 1984). The drums were stored in a field adjacent to Mr. Haight's house until an attempt was made to move them from the site on December 15, 1984 (Banks, 1984). During the handling of the drums, approximately 200 gallons of the oily liquid was spilled onto the ground (Banks, 1984). Many of the corroded barrels showed evidence of prior leakage onto the soil (Leary and Farrar, 1984). On December 19, 1984, Frontier Chemical Waste Process of Niagara Falls, NY removed 30 drums of liquid waste (approximately 1,000 gallons) along with an additional 13 empty drums found at the site (Banks, 1984). Presently, there are no barrels at the site, but oil-stained soil was observed during a recent inspection (ES Site Visit, 1985).

SITE TOPOGRAPHY

The Haight Farm site is located on Upper Holley Road, Town of Clarendon, Orleans County, New York (see Figure IV-1). The land surface is relatively flat, brush covered, and sloping gently to the west and southwest.

The site, approximately 1-acre in size, is situated within a residential and agricultural area bordered on the northwest by a house and wooded lot. To the south and southeast of the site is another wooded area, to the southwest by a vacant lot, and west of the site by several residences. To the northwest is Upper Holley Road and an agricultural area.

#### Regional Geology and Hydrology

The Haight Farm site is located within the Erie-Ontario Lowlands Physiographic Province. This is an undulating plain 240 feet in elevation along the southern shore of Lake Ontario in the northern part of Orleans County rising to approximately 600 feet in the southern part of the county (USDA, Soil Survey, 1977). The bedrock of the region consists of nearly horizontal layers of limestone, shale, sandstone, and dolostone deposited in ancient seas during the Silurian, Devonian and Ordovician Period.

In the recent past, most of New York State, including the site, has been repeatedly covered by a series of continental ice sheets. The work of the glacier in Orleans County scoured and widened pre-existing valleys, transported older glacial deposits, bedrock and soil, depositing them as widespread accumulations of till, stratified ice contact sediments, and outwash. The melting ice, ending approximately 12,000 years ago, produced large volumes of water. The meltwater subsequently shaped channels and deposited large accumulations of stratified, granular sediments.

As glacial ice retreated from the region, meltwater formed lakes in front of the ice margin. The Orleans County region is covered by these glaciolacustrine deposits. These proglacial lacustrine deposits consist principally of blanket sands and beach ridges which are occasionally underlain by proglacial silt and clay (NYS Museum & Science Service, 1975), indicative of calm or deep water deposits.

Granular deposits in the region frequently act as shallow aquifers since the proglacial lacustrine silts and clays, along with the tills, often inhibit groundwater movement. However, fine-grained, water-lain sediments, such as silts and clays frequently exhibit horizontal laminations and sand seams. These internal features create secondary porosity which facilitate lateral groundwater movement through otherwise low permeability materials.

#### Local Sensitive Environments

There are three NYS recognized freshwater wetlands in the vicinity of the Haight Farm site. They are located 3,000 feet to the southwest, 3,600 feet to the southeast and 3,800 feet to the northeast of the site (NYS Wetland Maps, 1984). There are no critical habitats for endangered species found near the site (Ozard, 1985).

#### SITE HYDROLOGY

Bedrock at the Haight Farm site is expected to be the Lockport Dolomite (NYS Museum & Science Service, 1970). This formation is described as grey, fine to coarse grained dolomite approximately 150 feet thick and fractured at the surface (LaSala, 1968). The depth to the Lockport Dolomite below the site may vary from 10 feet to over 70 feet below land surface. Solution channels and fractures along bedding planes within the Lockport Dolomite may create an aquifer system capable of yielding acceptable quality water to wells at rates between 4 and 90 gpm (LaSala, 1968).

Groundwater flow direction within the Lockport Dolomite may be to the south (regional trend), but may vary locally. The site may act as a potential recharge area for the shallow aquifer and probably recharges the deeper bedrock aquifer (ES Site Investigation, 1985). The soils which overlie the Lockport Dolomite have been identified as a stoney loam (USDA, 1977). This is a relatively permeable soil,  $10^{-3}$  to  $10^{-4}$  cm/sec (USDA, 1977), capable of allowing vertical and horizontal

movement of contaminants within the unconsolidated sediments. Ground-water wells of area residences located in the vicinity of the site are screened within the shallow aquifer zone. The depth to groundwater within the shallow aquifer, considered to be the aquifer of concern, is assumed to be between 5 and 20 feet below ground surface. The ground-water flow within the shallow aquifer probably parallels the ground surface flowing in a westerly direction (USGS Topographic Map: Holley Quadrangle, 1950). This assumption is further substantiated by the presence of groundwater contamination in private water wells to the west and southwest of the site (OCDOH, 1985).

#### SITE CONTAMINATION

In approximately 1970 Mr. Earl Haight accepted drums containing waste oil from a Rochester industry (allegedly the Erdle Perforating Company) (Bailey, 1985). The drums were stored in a field adjacent to Mr. Haight's residence. On December 15, 1984, several drums containing waste oil were spilled at the site during the handling/loading of the drums onto a flat-bed truck. An estimated 200 gallons of the oily liquid spilled onto the ground. NYS Troopers were overcome by fumes and later treated at a hospital. Subsequent analysis of the liquid indicated that it contained 0.7 to 65% trichloroethylene (TCE) (Banks, 1984; Tramontano, 1985; Maxfield, 1985).

The NYSDEC contracted a Niagara-based hazardous waste hauler to remove the barrels from the site. On December 19, 1984, Frontier Chemical Waste removed 30 barrels containing approximately 1,000 gallons of liquid waste. In addition, 13 empty barrels were also removed. Some of these barrels were corroded and exhibited signs of leakage.

Soil samples collected in 1984 by the NYSDEC indicated the presence of PCB's at 19 ppm. However, PCB's were not detected in the oily liquid waste at a detection limit of 80 mg/l. The high detection limits were

thought to be due to interference caused by the presence of TCE (Tramontano, 1985).

Six private wells were sampled by the OCDOH in 1984. Two of the wells contained TCE. One of the wells contained TCE levels above the NYS ambient water quality standards for GA class groundwater (NYSDEC, 1985; Tramontano, 1985). Subsequent analysis of this well has shown a continuous increase in TCE concentration (Sample 12/26/84 - 19 ug/l, Sample 9/3/85 - 690 ug/l, Sample 9/16/85 - 970 ug/l) (OCDOH, 1985). In addition, the well water also contains trace concentrations of benzene, chloroform, toluene, tetrachloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, and trans-1,2-dichloroethene (OCDOH, 1985). These compounds were detected at levels below the NYS ambient water quality standards (NYSDEC, 1985).

Organic vapors were detected at concentrations above background during a site investigation on December 17, 1984, when HNU readings indicated 5 ppm organic vapor (Leary and Farrar, 1984). Up- and down-gradient HNU meter readings taken during a recent site visit did not detect volatile organics above background levels (ES, 1985).

No surface water monitoring has been conducted at the site (NYSDEC Registry, 12/83).

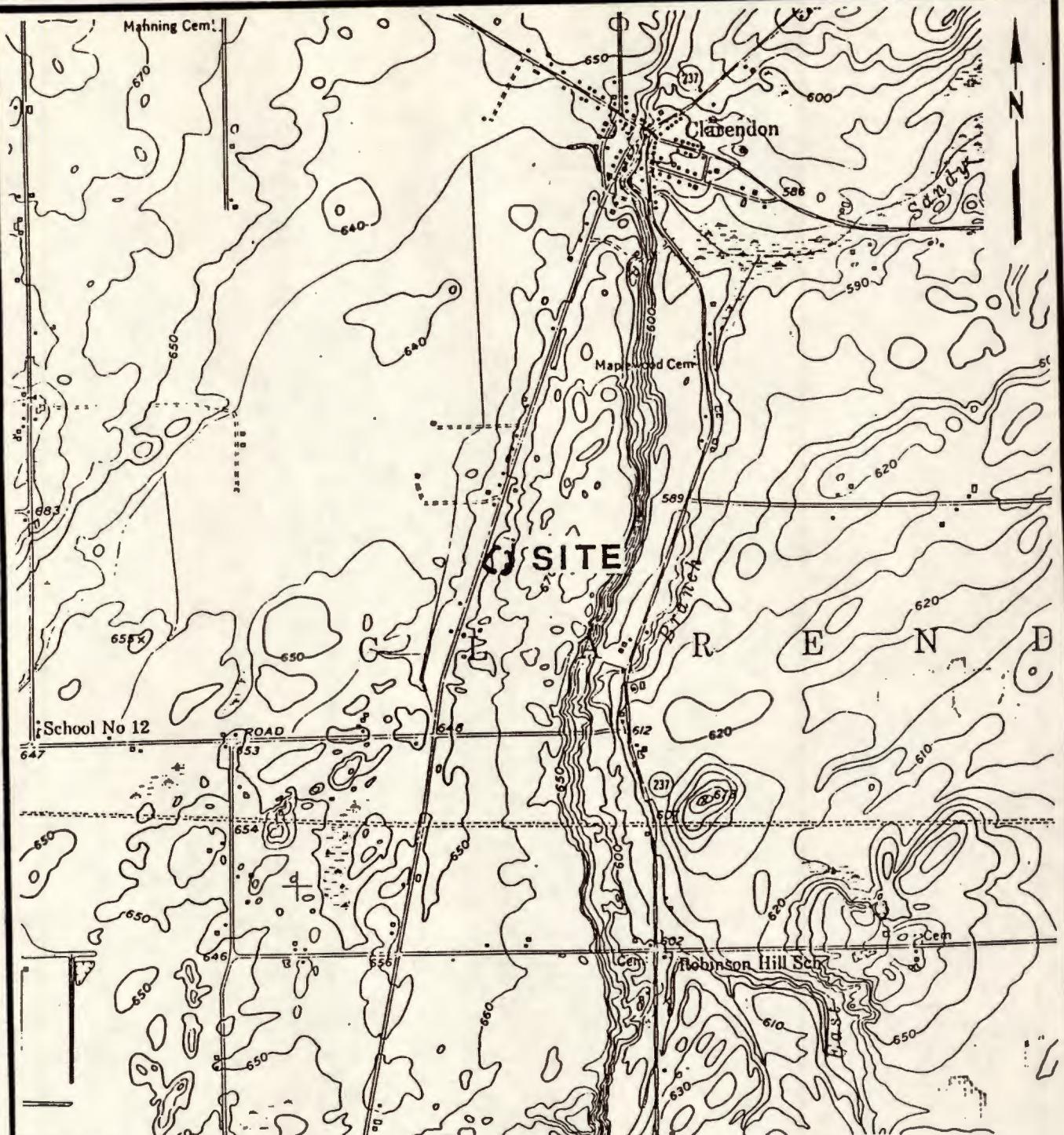
## NARRATIVE SUMMARY

The Haight Farm site is located adjacent to the home of Mr. Earl Haight on 4879 Upper Holley Road, Town of Clarendon, Orleans County, New York. Mr. Haight, the owner of the site, accepted 43 barrels of oil containing chlorinated solvents from a Rochester based industry (allegedly the Erdle Perforating Company) and stored them in a field adjacent to his house in approximately 1970 (Bailey, 1985; Banks, 1984). The storage area is estimated to be less than one acre (ES Site Visit, 1985).

On December 15, 1984, approximately 200 gallons of the oily liquid was spilled onto the ground during the handling of the drums containing the waste oils (Banks, 1984). Subsequent sampling and analysis of the drums and soil by NYSDEC and NYSDOH indicated that the liquid contained from 0.7 to 65% trichloroethylene (TCE) by weight (Tramontano, 1985; Maxfield, 1985). Additionally, soil samples collected by the NYSDEC contained 19 ppm of PCB's (Maxfield, 1985).

On December 19, 1984, Frontier Chemical Waste Process, Inc., under contract to the NYSDEC, removed 30 barrels of liquid waste (approximately 1,000 gallons) along with an additional 13 empty drums (Hazardous Waste Manifest, 12/85). The empty drums were corroded and showed evidence of leakage (Leary and Farrar, 1984). Subsequent sampling and analysis of nearby private wells by the OCDOH indicated that increasing levels of TCE and other organic priority pollutants were present in the groundwater (OCDOH, 1985). In one nearby groundwater well, TCE concentrations of 970 ppb have been detected while two other local private wells show trace concentrations of TCE in the groundwater (Tramontano, 1985; OCDOH, 1985).

There are three NYS recognized freshwater wetlands within one mile of the site (NYS Wetlands Maps).



LATITUDE:  $43^{\circ}10'13''$  N  
LONGITUDE:  $78^{\circ}04'36''$  W

SCALE  
0 1000 2000 3000 4000 FEET

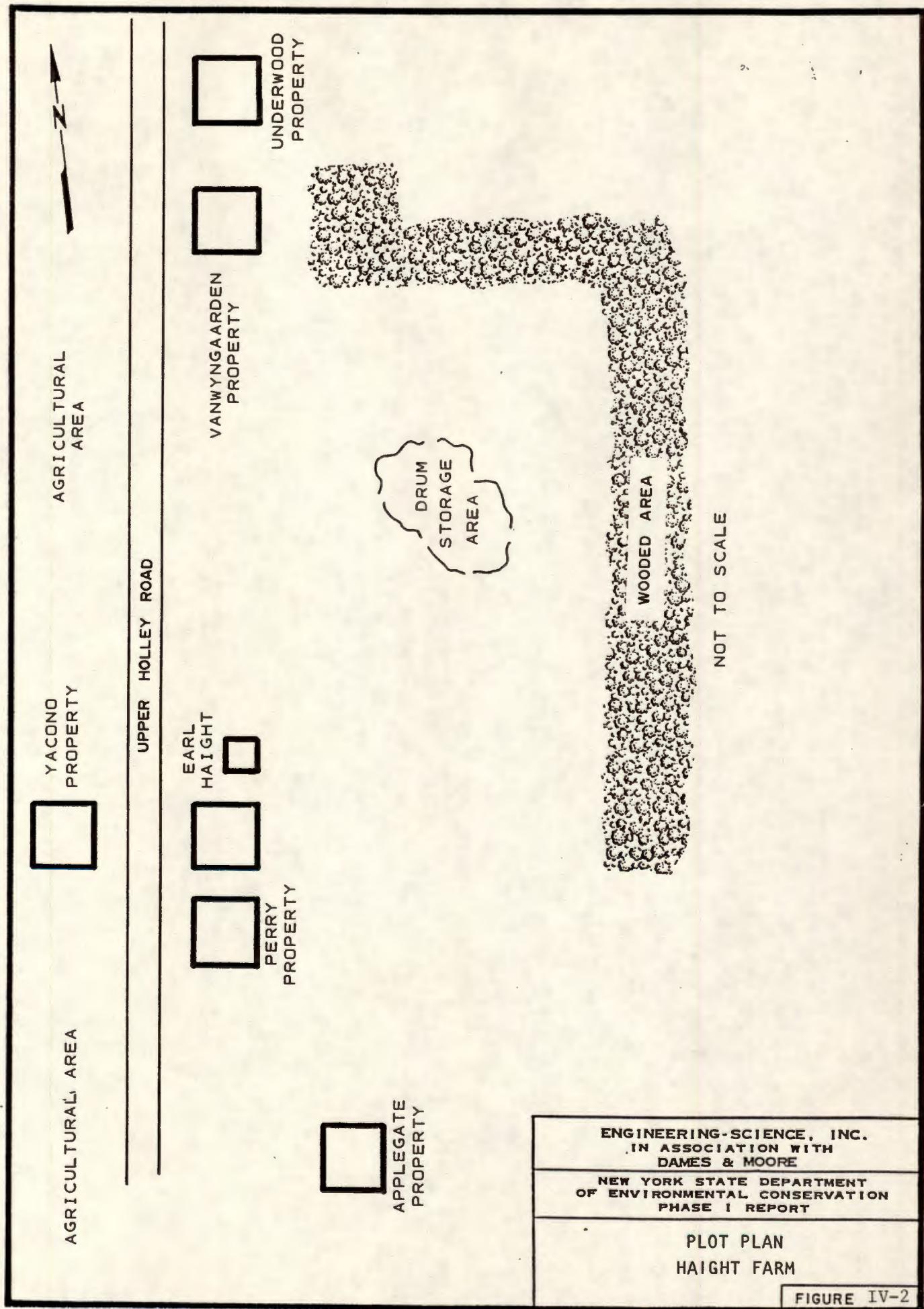
ENGINEERING-SCIENCE, INC.  
IN ASSOCIATION WITH  
DAMES & MOORE

NEW YORK STATE DEPARTMENT  
OF ENVIRONMENTAL CONSERVATION  
PHASE I REPORT

SITE LOCATION MAP  
HAIGHT FARM

REFERENCE: U.S.G.S. 7.5' Topographic Map  
Holley, NY (1950) Quadrangle

FIGURE IV-1



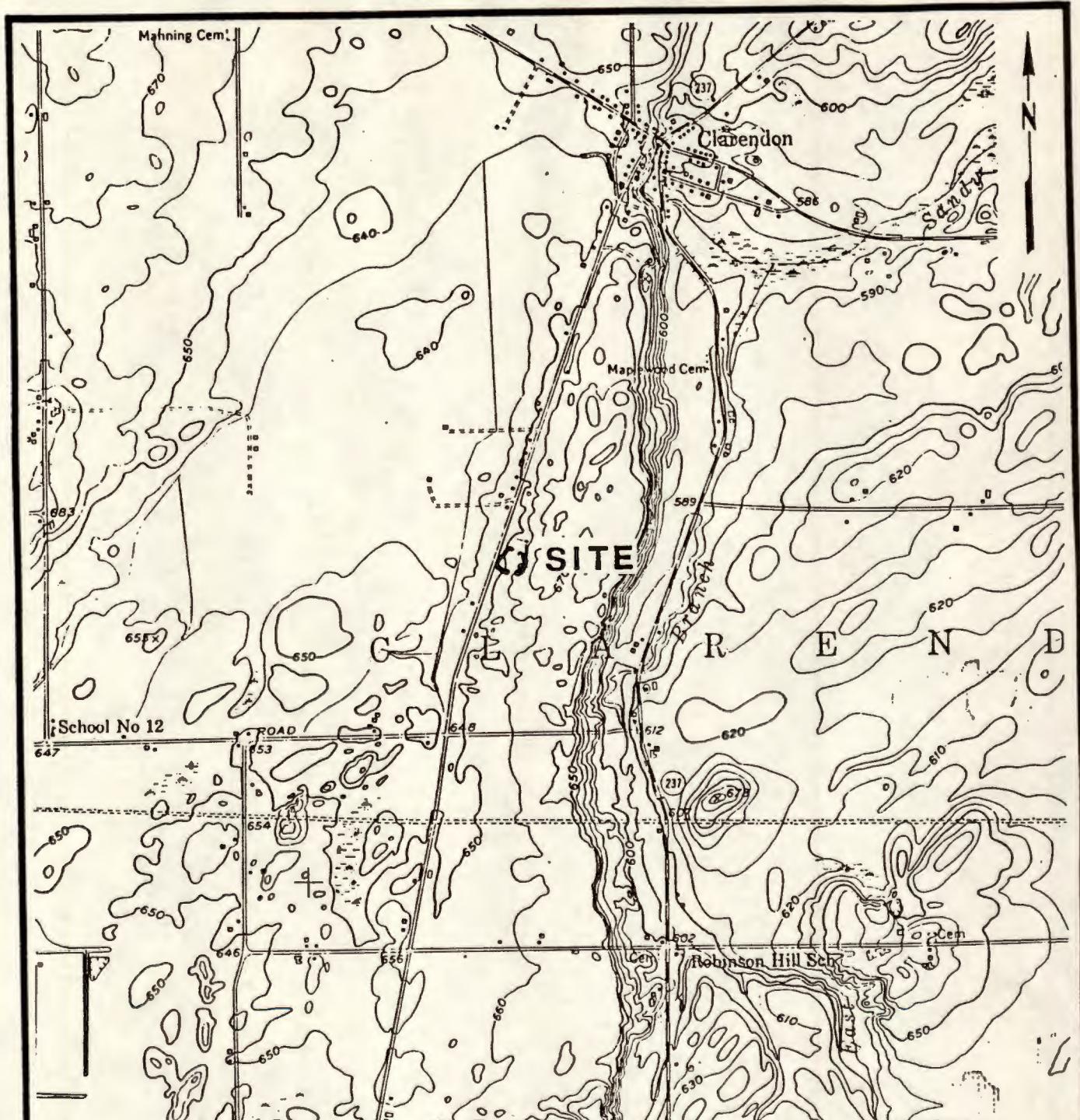
## NARRATIVE SUMMARY

The Haight Farm site is located adjacent to the home of Mr. Earl Haight on 4879 Upper Holley Road, Town of Clarendon, Orleans County, New York. Mr. Haight, the owner of the site, accepted 43 barrels of oil containing chlorinated solvents from a Rochester based industry (allegedly the Erdle Perforating Company) and stored them in a field adjacent to his house in approximately 1960 (Bailey, 1985; Banks, 1984). The storage area is estimated to be less than one acre (ES Site Visit, 1985).

On December 15, 1984, approximately 200 gallons of the oily liquid was spilled onto the ground during the handling of the drums containing the waste oils (Banks, 1984). Subsequent sampling and analysis of the drums and soil by NYSDEC and NYSDOH indicated that the liquid contained from 0.7 to 65% trichloroethylene (TCE) by weight (Tramontano, 1985; Maxfield, 1985). Additionally, soil samples collected by the NYSDEC contained 19 ppm of PCB's (Maxfield, 1985).

On December 19, 1984, Frontier Chemical Waste Process, Inc., under contract to the NYSDEC, removed 30 barrels of liquid waste (approximately 1,000 gallons) along with an additional 13 empty drums (Hazardous Waste Manifest, 12/85). The empty drums were corroded and showed evidence of leakage (Leary and Farrar, 1984). Subsequent sampling and analysis of nearby private wells by the OCDOH indicated that increasing levels of TCE and other organic priority pollutants were present in the groundwater (OCDOH, 1985). In one nearby groundwater well, TCE concentrations of 970 ppb have been detected while two other local private wells show trace concentrations of TCE in the groundwater (Tramontano, 1985; OCDOH, 1985).

There are three NYS recognized freshwater wetlands within one mile of the site (NYS Wetlands Maps).



LATITUDE:  $43^{\circ}10'13''$  N  
LONGITUDE:  $78^{\circ}04'36''$  W

SCALE  
0 1000 2000 3000 4000 FEET

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

NEW YORK STATE DEPARTMENT  
OF ENVIRONMENTAL CONSERVATION  
PHASE I REPORT

SITE LOCATION MAP  
HAIGHT FARM

REFERENCE: U.S.G.S. 7.5' Topographic Map  
Holley, NY (1950) Quadrangle

FIGURE V-1

HRS COVER SHEET

Facility Name: Haight Farm

Location: 4879 Upper Holley Road, Town of Clarendon, Orleans County, NY

EPA Region: II

Person(s) in charge of the facility: Mr. Earl Haight

Name of Reviewer: Cordone/Baker Date: 1/3/86

General Description of the facility:

On 12/15/84 approximately 200 gallons of "cutting oil" containing 0.7 to 65% TCE were spilled on the ground at the property of Earl Haight. Additionally, a soil sample collected by the NYSDEC from the spill area contained 19 ppm PCB's. On 12/19/85 a NYSDEC contractor removed the liquid contents of 30 filled or partially filled barrels along with 13 additional empty barrels. The additional barrels were corroded and showed signs of leakage. In approximately 1970, Mr. Haight received the waste oil, allegedly from the Erdle Perforating Company of Rochester, NY. Subsequent analyses of nearby private drinking water wells showed TCE contamination and the presence of several other organic compounds.

Scores:  $S_M = 26.82$  ( $S_{gw} = 45.53$ )  $S_{sw} = 8.95$   $S_a = 0$ )

$S_{FE} = 0$

$S_{DC} = 25.00$

Facility Name: Haight FarmDate: 1/3/86

## Ground Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multi- plier	Score	Max. Score	Ref. (Section)
<input type="checkbox"/> Observed Release	0 <u>45</u>	1	45	45	3.1
If observed release is given a score of 45, proceed to line <u>4</u> . If observed release is given a score of 0, proceed to line <u>2</u> .					
<input type="checkbox"/> 2 Route Characteristics					3.2
Depth to Aquifer of Concern	0 1 2 <u>3</u>	2	6	6	
Net Precipitation	0 1 <u>2</u> 3	1	2	3	
Permeability of the Unsaturated Zone	0 1 <u>2</u> 3	1	2	3	
Physical State	0 1 2 <u>3</u>	1	3	3	
Total Route Characteristics Score			<u>13</u>	15	
<input type="checkbox"/> 3 Containment	0 1 2 <u>3</u>	1	3	3	3.3
<input type="checkbox"/> 4 Waste Characteristics					3.4
Toxicity/Persistence	0 3 6 9 12 15 <u>18</u>	1	18	18	
Hazardous Waste Quantity	0 1 <u>2</u> 3 4 5 6 7 8	1	2	8	
Total Waste Characteristics Score			<u>20</u>	26	
<input type="checkbox"/> 5 Targets					3.5
Ground Water Use	0 1 2 <u>3</u>	3	9	9	
Distance to Nearest Well/Population Served	0 4 6 8 10 12 16 18 <u>20</u> 24 30 32 35 40	1	20	40	
Total Target's Score			<u>29</u>	49	
<input type="checkbox"/> 6 If line <u>1</u> is 45, multiply <u>1</u> x <u>4</u> x <u>5</u>	<u>26,100</u>				
If line <u>1</u> is 0, multiply <u>2</u> x <u>3</u> x <u>4</u> x <u>5</u>			57,330		
<input type="checkbox"/> 7 Divide line <u>6</u> by 57,330 and multiply by 100	$S_{gw} = 45.53$				

GROUND WATER ROUTE WORK SHEET

Surface Water Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi- plier	Score	Max. Score	Ref. (Section)
<input type="checkbox"/> 1 Observed Release	0 45	1	0	45	4.1
If observed release is given a value of 45, proceed to line <input type="checkbox"/> 4. If observed release is given a value of 0, proceed to line <input type="checkbox"/> 2.					
<input type="checkbox"/> 2 Route Characteristics					4.2
Facility Slope and Intervening Terrain	0 1 2 3	1	1	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			12	15	
<input type="checkbox"/> 3 Containment	0 1 2 3	1	3	3	4.3
<input type="checkbox"/> 4 Waste Characteristics					4.4
Toxicity/Persistence	0 3 6 9 12 15 18	1	19 2	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
Total Waste Characteristics Score			20	26	
<input type="checkbox"/> 5 Targets					4.5
Surface Water Use	0 1 2 3	3	6	9	
Distance to a Sensitive Environment	0 1 2 3	2	2	6	
Population Served/	0 4 6 8 10	1		40	
Distance to Water Intake Downstream	12 16 18 20 24 30 32 35	40			
Total Targets Score			8	55	
<input type="checkbox"/> 6	If line <input type="checkbox"/> 1 is 45, multiply <input type="checkbox"/> 1 x <input type="checkbox"/> 4 x <input type="checkbox"/> 5 If line <input type="checkbox"/> 1 is 0, multiply <input type="checkbox"/> 2 x <input type="checkbox"/> 3 x <input type="checkbox"/> 4 x <input type="checkbox"/> 5		5760 64,350		
<input type="checkbox"/> 7	Divide line <input type="checkbox"/> 6 by 64,350 and multiply by 100		$S_{sw} = 8.95$		

# SURFACE WATER ROUTE WORK SHEET

Facility Name: Haight Farm Date: 1/3/86

Air Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multi- plier	Score	Max. Score	Ref. (Section)
<input type="checkbox"/> Observed Release	<input type="radio"/> 0	45	1	<input type="radio"/> 0	45
Date and Location: <u>12/6/85 Haight Farm Site</u>					
Sampling Protocol: <u>HNu meter readings</u>					
If line <input type="checkbox"/> 1 is 0, the $S_a = 0$ . Enter on line <input type="checkbox"/> 5.					
If line <input type="checkbox"/> 1 is 45, then proceed to line <input type="checkbox"/> 2.					
<b>2 Waste Characteristics</b> 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		
<b>3 Targets</b> 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		
<b>4</b> Multiply <input type="checkbox"/> 1 x <input type="checkbox"/> 2 x <input type="checkbox"/> 3			35,100		
<b>5</b> Divide line <input type="checkbox"/> 4 by 35,100 and multiply by 100			$S_a = \textcircled{0}$		

**AIR ROUTE WORK SHEET**

Facility Name: Haight FarmDate: 1/3/86Worksheet for Computing  $S_M$ 

	$s$	$s^2$
Groundwater Route Score ( $s_{gw}$ )	45.53	2072.98
Surface Water Route Score ( $s_{sw}$ )	8.95	80.10
Air Route Score ( $s_a$ )	0	0
$s_{gw}^2 + s_{sw}^2 + s_a^2$		2153.08
$\sqrt{s_{gw}^2 + s_{sw}^2 + s_a^2}$		46.40
$\sqrt{s_{gw}^2 + s_{sw}^2 + s_a^2} / 1.73 = S_M =$		26.82

WORK SHEET FOR COMPUTING  $S_M$

Facility Name: Haught Farm Date: 1/3/86

Fire and Explosion Work Sheet												
Rating Factor	Assigned Value (Circle One)		Multi- plier	Score	Max. Score	Ref. (Section)						
<input type="checkbox"/> 1 Containment	1	3	1		3	7.1						
<input type="checkbox"/> 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						
<input type="checkbox"/> 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						
<input type="checkbox"/> 4 Multiply <input type="checkbox"/> 1 x <input type="checkbox"/> 2 x <input type="checkbox"/> 3						1,440						
<input type="checkbox"/> 5 Divide line <input type="checkbox"/> 4 by 1,440 and multiply by 100						$S_{FE} = 0$						

## FIRE AND EXPLOSION WORK SHEET

Facility Name: Haught Farm Date: 1/3/86

Direct Contact Work Sheet						
Rating Factor	Assigned Value (Circle One)		Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Incident	0	45	1	45	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	3	1	3	3	8.2
3 Containment	0 15		1	15		8.3
4 Waste Characteristics						
Toxicity	0 1 2 3	3	5	15	15	8.4
5 Targets						8.5
Population Within 1-Mile Radius	0 1 2 3 4 5	2	9	9	20	
Distance to a Critical Habitat	0 1 2 3		4	0	12	
Total Targets Score				8	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				5,400	21,600	
7 Divide line 6 by 21,600 and multiply by 100				S <sub>DC</sub> = 25.00		

## DIRECT CONTACT WORK SHEET

DOCUMENTATION RECORDS  
FOR  
HAZARD RANKING SYSTEM

FACILITY NAME: Haight Farm

LOCATION: 4879 Upper Holley Rd., Town of Clarendon, Orleans County, NY

## GROUND WATER ROUTE

### 1. OBSERVED RELEASE

Contaminants detected (5 maximum):

Trichloroethylene - 970 ppb; Benzene - 1 ppb; Chloroform - 1 ppb; Toluene - 1 ppb; Trans-1,2-dichloroethene - 3 ppb; 9/16/85 sample taken from the well of Mr. Frank Yacano, 4878 Upper Holley Road (OCDOH Lab Analysis).

Rationale for attributing the contaminants to the facility:

Analysis of samples taken from barrels on-site showed 0.7 to 65% TCE. During an unauthorized attempt to move the barrels on 12/15/84 approximately 200 gallons of waste spilled. Subsequent well samples taken at the nearby Yacona residence showed the following TCE concentrations: Sample 12/26/84 - 19 ppb; Sample 9/3/85 - 690 ppb; Sample 9/16/85 - 970 ppb (Tramontano, 1985; Banks, 1984; OCDOH, 1985; Maxfield, 1985).

\* \* \*

### 2. ROUTE CHARACTERISTICS

#### Depth to Aquifer of Concern

Name/description of aquifer(s) in concern:

Shallow unconsolidated deposits (shallow aquifer) is the aquifer of concern. No substrative confining aquifers expected. (USDA, Soil Survey, 1973; NYS Bedrock Geology Map, 1977).

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

Estimated between 5 to 20 feet (Turkow, 1985).

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

Zero. Spill Occurred on ground surface. (ES Site Visit, 1985)

Net Precipitation

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

Mean annual precipitation is 34" (U.S. Dept. of Commerce, National Climatic Center, 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. Dept. of Commerce, National Climatic Center, Climatic Atlas of the United States, 1979).

Net precipitation (subtract the above figures):

7" (34" - 27" = 7") (U.S. Dept. of Commerce, National Climatic Center, Climatic Atlas of the United States, 1979).

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Ontario stoney loam (USDA, Soil Survey, 1973).

Permeability associated with soil type

$10^{-3}$  to  $10^{-4}$  cm/sec (USDA, Soil Survey, 1973).

Physical State

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

Waste Oils/Solvents - Liquid (NYS Registry Sheet, 1985).

### 3. CONTAINMENT

#### Containment

Method(s) of waste or leachate containment evaluated:

No containment. Corroded barrels and record of spill onto ground surface (Leary and Farrar, 1984; Banks, 1984).

Method with highest score:

Leaking containers removed, waste liquids spilled on ground - score = 3 (Banks, 1984).

### 4. WASTE CHARACTERISTICS

#### Toxicity and Persistence

Compound(s) evaluated:

TCE - score = 12 (Tramontano, 1985).  
PCB - score = 18 (Maxfield, 1985).

Compound with highest score:

PCB - score = 18. The presence of PCB in soil samples was verified by lab data (Maxfield, 1985).

#### 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):

43 drums of waste oil containing TCE were received at the site. In 1984, an estimated 200 gallons of this material was spilled on-site. (Banks, 1984).

Basis of estimating and/or computing waste quantity:

43 drums of hazardous waste were received at the site which were reported to be corroded and leaking. Because there is evidence of waste spillage on-site (stained ground), all of the drums are used for the HRS quantity score (Bank, 1984; ES Site Visit, 1985).

### 3. CONTAINMENT

#### Containment

Method(s) of waste or leachate containment evaluated:

No containment. Corroded barrels and record of spill onto ground surface (Leary and Farrar, 1984; Banks, 1984).

Method with highest score:

Leaking containers removed, waste liquids spilled on ground - score = 3 (Banks, 1984).

### 4. WASTE CHARACTERISTICS

#### Toxicity and Persistence

Compound(s) evaluated:

TCE - score = 12 (Tramontano, 1985).  
PCB - score = 18 (Maxfield, 1985).

Compound with highest score:

PCB - score = 18. The presence of PCB in soil samples was verified by lab data (Maxfield, 1985).

#### 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):

43 drums of waste oil containing TCE were received at the site. In 1960, an estimated 200 gallons of this material was spilled on-site. (Banks, 1984).

Basis of estimating and/or computing waste quantity:

43 drums of hazardous waste were received at the site which were reported to be corroded and leaking. Because there is evidence of waste spillage on-site (stained ground), all of the drums are used for the HRS quantity score (Bank, 1984; ES Site Visit, 1985).

## 5. TARGETS

### Ground Water Use

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

Groundwater used as drinking water (Turkow, 1985).

### Distance to Nearest Well

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

Adjacent: less than 200 feet; the Haight residence (ES Site Visit, 1985).

Distance to above well or building:

Approximately 200 feet (ES Site Visit, 1985).

### 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:

220 (USGS Topographic Map, Holley Quadrangle).

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):

Water drawn from the aquifer of concern is not used for land irrigation (Herendeen, 1985).

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

220 residences x 3.8 people per residence = 836 people (Estimate based on house count using USGS Topographic Map, Holley Quadrangle).

SURFACE WATER ROUTE

1. OBSERVED RELEASE

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

No surface water samples collected (NYSDEC Registry Sheet, 1985).

Rationale for attributing the contaminants to the facility:

Not applicable.

2. ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

3 to 5% (USGS Topographic Map: Holley Quadrangle; ES Site Visit, 1985).

Name/description of nearest downslope surface water:

Drainage ditch west of Upper Holley Road, flowing north along a muck land and eventually into a wetland area (ES Site Visit, 1985; USGS Topographic Map: Holley Quadrangle)

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

3 to 5% (USGS Topographic Map: Holley Quadrangle)

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

No (ES Site Visit, 1985).

Is the facility completely surrounded by areas of higher elevation?

No (ES Site Visit, 1985; USGS Topographic Map: Holley Quadrangle)

1-Year 24-Hour Rainfall in Inches

2.1" (U.S. Department of Commerce Technical Paper No. 40).

Distance to Nearest Downslope Surface Water

800 feet (USGS Topographic Map: Holley Quadrangle)

Physical State of Waste

Waste Oil/Solvents - Liquid (NYSDEC Registry Sheet, 1/23/85).

3. CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Leaking containers, waste liquid spilled on-site (Banks, 1984).

Method with highest score:

Liquid waste spilled on ground - score = 3 (Banks, 1984).

#### 4. WASTE CHARACTERISTICS

##### Toxicity and Persistence

Compound(s) evaluated

Waste oil containing TCE, PCB (Tramontano, 1985; Schmied, 1985; Maxfield, 1985).

Compound with highest score:

PCB, HRS Score = 18 (Maxfield, 1985).

##### 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):

43 drums of waste oil containing TCE was received at the site. An estimated 200 gallons of this material was spilled on-site (Banks, 1984).

Basis of estimating and/or computing waste quantity:

43 drums of hazardous waste were received at the site which were reported to be corroded and leaking (Banks, 1984). Because there is evidence of waste spillage on-site (stained ground), all of the drums are used for the HRS quantity score (ES Site Visit, 1985).

\* \* \*

#### 5. TARGETS

##### Surface Water Use

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

Wetland area is used recreationally for fishing.

Is there tidal influence?

Not a coastal area (USGS Topographic Map: Holley Quadrangle).

Distance to a Sensitive Environment

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

Not applicable, not a coastal area (USGS Topographic Map: Holley Quadrangle).

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

Approximately 3,400 feet (NYS Wetlands Maps).

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

None within 1 mile (Ozard, 1985).

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:

Surface water is not used as a source of potable water within 3 miles of the site (Turkow, 1985).

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

Not applicable.

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:

Up- and downgradient HNU meter readings taken during the ES site visit did not detect volatile organic compounds above background levels (ES Site Visit, 1985).

Date and location of detection of contaminants:

Not applicable.

Methods used to detect the contaminants:

HNU meter

Rationale for attributing the contaminants to the site:

Contaminants are not attributed to the site because HNU meter readings for volatile organics were below background levels of 1 ppm.

\* \* \*

2. WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

TCE - given an NFPA level of 1 (Sax, 1985). However, for purposes of rating the air pathway, TCE is not scored because HNU meter readings for volatile organics were below background levels of 1 ppm (ES Site Visit, 1985).

Most incompatible pair of compounds:

No incompatible compounds are known to exist on-site (NYSDEC Registry Sheet, 1985).

### Toxicity

Most toxic compound:

PCB - 3 and TCE - level 3 (Sax). However, for purposes of rating the air pathway, TCE or PCB is not scored because up- and downgradient HNU meter readings for volatile organics were below background levels of 1 ppm (ES Site Visit, 1985).

### Hazardous Waste Quantity

Total quantity of hazardous waste:

A hazardous waste quantity score is not scored for the air pathway.

Basis of estimating and/or computing waste quantity:

The hazardous wastes that reportedly were spilled on-site must be observed (HNU meter) to be scored for the air pathway. Also, a past observed release incident (during chemical spillage) does not constitute a present observed release.

\* \* \*

### 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

Population 150 (1980 Census data).

#### Distance to a Sensitive Environment

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

Not applicable, not a coastal area (USGS Topographic Map: Holley Quadrangle).

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

Approximately 3,400 feet (NYS Wetlands Maps).

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

None within 1 mile (Ozard, 1985).

Land Use

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

None within 1 mile (ES Site Visit, 1985).

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

None within 2 miles (ES Site Visit, 1985; USGS Topographic Map: Holley Quadrangle).

Distance to residential area, if 2 miles or less:

Adjacent - approximately 200 feet (ES Site Visit, 1985).

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

200 feet (Tompkins, 1985).

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

200 feet (Orleans County Prime Farmland Map).

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

No (ES Site Visit, 1985).

## FIRE AND EXPLOSION

### 1. CONTAINMENT

Hazardous substances present:

No information was discovered during the Phase I study which indicates that a fire and explosion situation existed or presently exists at the site.

Type of containment, if applicable:

\* \* \*

### 2. WASTE CHARACTERISTICS

#### Direct Evidence

Type of instrument and measurements:

No measurements to determine the fire and explosion potential were taken on-site.

#### Ignitability

Compound used:

No ignitable compounds are known to exist on-site (NYSDEC Registry Sheet, 1985).

#### Reactivity

Most reactive compound:

No reactive compounds are known to exist on-site (NYSDEC Registry Sheet, 1985).

#### Incompatibility

Most incompatible pair of compounds:

No incompatible compounds are known to exist on-site (NYSDEC Registry Sheet, 1985).

### Hazardous Waste Quantity

Total quantity of hazardous substances at the facility:

No hazardous wastes with the potential to create a fire/explosion hazard are known to exist on-site (ES Site Visit, 1985; NYSDEC Registry Sheet, 1985).

Basis of estimating and/or computing waste quantity:

Organic solvents and waste oil spilled on-site are not a fire/explosion threat as these liquid wastes are absorbed in the on-site soil.

\* \* \*

### 3. TARGETS

#### Distance to Nearest Population

Site is located in a residential area (ES Site Visit, 1985).

#### Distance to Nearest Building

Less than 200 feet (ES Site Visit, 1985).

#### Distance to Sensitive Environment

Distance to wetlands:

Approximately 3,400 feet (NYS Wetlands Maps).

Distance to critical habitat:

None within 1 mile (Ozard, 1985).

#### Land Use

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

None within 1 mile (ES Site Visit, 1985).

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

None within 2 miles (ES Site Visit, 1985).

Distance to residential area, if 2 miles or less:

Site is located in a residential area.

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

200 feet (Tompkins, 1985).

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

200 feet (Orleans County Prime Farmlands Map).

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

No (ES Site Visit, 1985).

Population with 2-Mile Radius

180 residence x 3.8 people per house = 684 people (USGS, 1950).

Buildings Within 2-Mile Radius

Approximately 180 buildings (Estimate based on house count using USGS Topographic Map: Holley Quadrangle).

DIRECT CONTACT

1. OBSERVED INCIDENT

Date, location, and pertinent details of incident:

12/17/84 Haight Farm site: two state troopers arrived on the scene after receiving a complaint about someone moving barrels off Mr. Haight's property. Two state trooper cars were contaminated and the troopers were overcome by fumes from spilled material (Unidentified Memo to the NYSDEC File, 12/84).

\* \* \*

2. ACCESSIBILITY

Describe type of barrier(s):

No barriers on-site to control unauthorized entry (ES Site Visit, 1985).

\* \* \*

3. CONTAINMENT

Type of containment, if applicable:

Hazardous substances are accessible to direct contact because waste oil/solvent were spilled on-site and evidence (stained ground) exists on-site (Banks, 1984; ES Site Visit, 1985).

\* \* \*

4. WASTE CHARACTERISTICS

Toxicity

Compounds evaluated:

TCE (Tramontano, 1985).  
PCB (Maxfield, 1985).

Compound with highest score:

TCE = 3 (Tramontano, 1985).  
PCB = 3 (Maxfield, 1985).

5. TARGETS

Population within one-mile radius

150 people (1980 census data).

Distance to critical habitat (of endangered species)

None within 1 mile (Ozard, 1985).

HRS REFERENCES\*

1. Banks, D., NYSDEC, Memo to Commissioner Williams, 12/17/84.
2. Banks, D., NYSDEC, Memo to Commissioner Williams, 12/17/84.
3. Banks, D., NYSDEC, Memo to Commissioner Williams, 12/20/84.
4. Herendeen, Nate, Orleans County Cooperative Extension, Personal Communication, 12/18/85.
5. Leary, R., and Farrar, R., NYSDEC, Memo to the Clarendon File, 12/20/84.
6. Maxfield, R.E., Sampling Report, 1/11/85.
7. NYSDEC File, Memo from Bruce Finster to the Clarendon File, 12/84.
8. NYSDEC, Inactive Hazardous Waste Disposal Site Report, 1/24/85.
9. NYS Museum and Science Service Bedrock Geology Map, Map and Chart Series, No. 28 (Compiled by Muller, E.H.), 1977.
10. NYS Freshwater Wetlands Map, Orleans County.
11. Orleans County DOH, Letter to Frank Yacano, 10/4/85.
12. Ozard, John, NYSDEC Division of Fish and Wildlife, Personal Communication, 12/16/85.
13. Sax, Irving N., "Dangerous Properties of Industrial Materials, Sixth Edition, 1984.
14. Schmied, Paul, Memo to Frank Shattuck, 1/4/85.
15. Tompkins, Bill, District Conservationist of Orleans County, Personal Communication, 12/85.
16. Tramontano, R., NYSDOH, Memo to Dr. Kim, 1/4/85.
17. Turkow, David, Orleans County DOH, Personal Communication, 1/3/86.
18. USDA, Soil Conservation Service, Important Farmland Map, Orleans County, 1980.
19. USDA Soil Conservation Service, Orleans County Soil Survey, 1973.
20. US Department of Commerce Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.", 1963.
21. US Department of Commerce, "Climatic Atlas of the United States", 1979.
22. USGS Topographic Map, Holley Quadrangle, 1950.

\*For general references, see Appendix A.  
NYSDEC 8:21



(1)

## New York State Department of Environmental Conservation

## MEMORANDUM

**TO:** Commissioner Williams  
**FROM:** Darryl Banks by W. Miner *33M*  
**SUBJECT:** Orleans County Hazardous Waste Incident  
**DATE:** December 17, 1984

Bruce Finster, Region 8 Hazardous Material Spill Coordinator provided the following updated information on Saturday's Orleans hazardous waste incident.

The owner of the farm on which the drums were stored is in the process of selling the property and offered some type of compensation for removal of the drums. The Village of Claredon Police Chief L. Pascarell and a patrolman Fredricks, in an unofficial capacity, brought a flat-bed truck to the farm and began loading corroded drums on the truck. In the process, approximately 200 gallons of suspected trichloroethylene was spilled.

Two Troop A State Police, Investigator Lang and Trooper Howard, responded as a result of a citizen complaint. Once on scene both complained of throat irritation and experienced severe coughing. DEC BECI Investigator Mathis and Wildeman and ECO VanDurme also responded to the scene. Mathis collected samples from the drums and could be susceptible to pneumonia according to Finster. Lt. Snell was advised that Investigator Mathis should seek prompt medical attention.

The Orleans County Health Department was notified by Finster and they will alert Chief Pascarell and Officer Fredricks of the need for a medical checkup. Region 8 Chief ECO Captain William Powell was also alerted to the health concerns for ECO VanDurme. The two troopers affected by the chemical are scheduled to return to the hospital on December 21 for blood and liver tests.

Regional Attorney Peter Bush who is Acting Regional Director will be contacting the BECI unit to coordinate cleanup and collection of evidence. Finster also advises that the earlier report of the truck and barrels being at the Troop A headquarters is incorrect. The truck and barrels have been secured at the farm site in Claredon with the drums reported to be still leaking. The two State Police cars are at the Batavia barracks and will not be used until after proper decontamination.

C: L. Marsh T. Quinn  
R. Torkelson  
C. Bassett  
R. Cross  
G. Firth  
J. Greenthal  
W. Stasiuk (DOH)  
E. Seiffer ✓



New York State De

PIEF. 1

tal Conservation

#1 History

(2)

## MEMORANDUM

TO: Commissioner Williams  
FROM: Darryl Banks by B. Miner *AM*  
SUBJECT: Suspected Hazardous Waste Incident - Orleans County  
DATE: December 17, 1984

SEMO reported this morning that on Saturday, December 15, 1984, the State Police investigated a suspected illegal hazardous waste operation on the Earl Haight farm, 4899 Upper Holly Road, Town of Clarendon, Orleans County.

The investigators found a truck loading 47 drums of suspected trichloroethylene, a toxic solvent. The drums had been stored on the farm for the last 14 to 15 years *by* <sup>from</sup> an unknown chemical company from Rochester.

BECI Investigator D.L. Mathis and Region 8 EnCon Officer VanDurme were on scene with the State Police.

*No.*

The truck and drums are reported to have been impounded at the Batavia State Police barracks pending results of analyses on the drum contents. Two State Police cars have also been impounded at the barracks because these were also contaminated by two troopers who got the material on their clothing.

Region 8 Hazardous Material Spill Coordinator Bruce Finster was not aware of this incident as of this morning, but will follow up through Regional Director Seiffer.

c. L. Marsh  
R. Torkelson  
C. Bassett  
R. Cross  
G. Firth  
E. Seiffer ✓  
J. Greenthal  
W. Stasiuk (DOH)

*Copy*

*Schultz*  
*Snell*  
*Powell*  
*Schmid*  
*Stalnach*

**b**  
**P**  
(12/75)#5 Narr.  
#5 Narr  
③

## New York State Department of Environmental Conservation

## MEMORANDUM

TO: Commissioner Williams  
Darryl Banks by W. Miner  
SUBJECT: Orleans County Hazardous Waste Incident

DATE: December 20, 1984

Bruce Finster, Region 8 Hazardous Material Spill Coordinator, relayed the following updated information on the Orleans County Hazardous Waste Incident:

Frontier Chemical of Niagara Falls removed approximately 1000 gallons of waste material from the Haight Farm yesterday. They removed the contents of 43 drums, 29 of which had been loaded on to the flat-bed truck. The State Police have subsequently released the truck to the owner. Frontier will transport the empty drums to their Niagara Falls facility today.

As only four drums were previously sampled by BECI personnel, Frontier collected an additional four discrete and one composit of the drums contents. Preliminary results indicate that 28 drums contained some type of chlorinated solvent, 1 drum contained a cutting oil, 1 drum was one quarter full of an unknown substance, and the remaining 13 were empty. There was no cleanup of contaminated soil by Frontier at this time. As the regional water people have some concern over possible ground water pollution, there will be a meeting with Division of Solid & Hazardous Waste staff to determine how a soil removal operation could be best accomplished.

The State Police and the BECI Unit are continuing their investigation.

c: L. Marsh  
R. Torkelson  
C. Bassett  
R. Cross  
G. Firth  
J. Greenthal  
W. Stasiuk (DOH)  
T. Quinn  
E. Seiffer ✓

WM/bc

(2)

INTERVIEW FORM

INTERVIEWEE/CODE: Nate Herendeen

TITLE-POSITION:

ADDRESS: Orleans County Cooperative Extension

CITY:

PHONE: 716-433-2651

LOCATION: Telephone Interview

INTERVIEWER: Cordone

DATE/TIME: 12/18/85 - 1100

SUBJECT: Irrigation Practices in Orleans County

REMARKS:

Haight Farm - irrigation not practiced in the area. Muck lands to the south of the site practice surface water control.

Horan Road Landfill - no irrigation practiced in the vicinity of the site.

(4)

INTERVIEW FORMINTERVIEWEE/CODE Nate Herendeen

TITLE - POSITION \_\_\_\_\_

ADDRESS Orleans Co. Cooperative Extension

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

PHONE (716) 433 2651 RESIDENCE PERIOD \_\_\_\_\_ TO \_\_\_\_\_LOCATION telephone interview INTERVIEWER CordoneDATE/TIME 12/19/85 1100 hrsSUBJECT: Irrigation practices in Orleans county.REMARKS: Haight Farm - irrigation not practiced in the area. Much  
lands to the south of the site practice surface water-  
control.Horan Road Landfill - no irrigation practiced in the vicinity  
of the siteI agree with the above interview summary:Signature/Title:Comments:



15 (12/75)

## New York State Department of Environmental Conservation

F. Shattuck  
5

## MEMORANDUM

#4 Hist.

#6 Narr.

**TO:** Clarendon File  
**FROM:** Robert Leary and Dennis Farrar *RF*  
**SUBJECT:** Sampling of Drums *RJL*

**DATE:** 12/20/84

On December 17, 1984, we received notice of drums containing possible hazardous wastes near Clarendon. We arrived on the site at 2:15 p.m., after first meeting with Mr. Bill Wideman. At the site were Mr. David Turkow and Erie Wohlers of the Orleans County Health Dept., Mr. Jack McCarthy, Orleans County Fire Disaster Coordinator, and Mr. Gary Germeo, Assistant Fire Chief.

The site consisted of a flat bed truck with 28 drums, disturbed soils, and about 15 drums on the ground. A sketch of the site is attached. We first checked the area with an HNU meter and a combustible gas meter. A reading of 5 (0-20 scale) was obtained on the HNU meter. Due to this reading and a strong solvent odor, gas masks were worn during work near the truck.

The drums on the ground were empty and almost all were rusted through or crushed. The soil showed evidence of oily contamination. The 28 drums on the flatbed truck, which were numbered by spray paint, were also in poor condition. Many of these drums were rusted through on their sides and covers. The flatbed truck itself was covered with oily and slippery liquid. An inventory of the drums is as follows:

<u>DRUM #</u>	<u>VOLUME (gallons)</u>	<u>SAMPLED</u>
1	upside down	
2	25	
3	10	
4	25	
5	upside down	
6	upside down	
7	55	
8	10	
9	40	
10	upside down	
11	40	yes, one vial
12	25	yes, one vial
13	55	yes, three vials, one 250 ml
14	25	
15	upside down	
16	25	yes, one vial

**Versar** INC.

Maxfield  
Cacwood 25  
OCW  
Site  
⑥

March 25, 1985  
857-C-11

**RECEIVED.**

MAR 28 1985

Jack Ryan  
Room 317  
Bureau of Water Research  
NYS Dept. Environmental Conserv.  
50 Wolf Road  
Albany, New York 12233-0001

DIVISION OF HAZARDOUS  
WASTE ENFORCEMENT  
REGION 9

MAR 28 1985

BUREAU OF WATER  
DIVISION C

Reference: Versar Report Number 857-77

Dear Mr. Ryan:

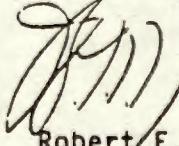
Please find enclosed our report for sample numbers:

P 884-V27-01, -13, -17, -19, -24

Received from D. Farrar on 1/11/85.

Should you have any questions concerning these data, please contact me at your earliest convenience and refer to the above report number.

Sincerely,  
Versar Inc.

  
Robert E. Maxfield, Manager  
Inorganic Chemistry Branch  
Laboratory Operations

REM:nan  
Enclosure

**RECEIVED**

MAR 27 1985

DIVISION OF  
ENVIRONMENTAL ENFORCEMENT  
CENTRAL OFFICE

(6)

**PCB DATA**

(6)

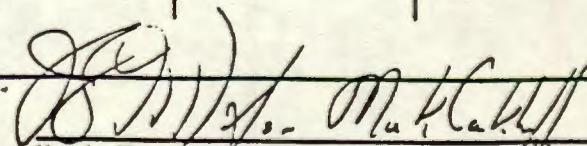
## PCB ANALYTICAL REPORT

PREPARED FOR: Mr. Jack Ryan  
 Room 317 Bureau of Water Research  
 NYS Dept. Environmental Conservation  
 50 Wolf Road  
 Albany, New York 12233-0001

REF. NO. 857 B.77

SAMPLE NO.	LAB NO.	CONCENTRATION PARTS/MILLION	AROCLOL	COMMENTS
P884-V27-01	3920	19	1242+1254+1260	Sediment
P884-V27-13	3921	< 1	----	011
P884-V27-17	3922	< 1	----	011
P884-V27-19	3923	< 1	----	011
P884-V27-24	3924	< 1	----	011

DATE:

5/25


Mark T. Carrhuff, Chief  
 Applied GC Section  
 Laboratory Operations

6850 VERSAR CENTER, SPRINGFIELD, VA 22151

TELEPHONE: (703) 750-3000

(6)

## ORGANICS QUALITY CONTROL

PROJECT NO. 857 8.77

DATE: 3/22/85

PCB ( $\mu\text{g/g}$ )

Duplicate Sample Results	Sample Number	Sample Result	
	P884-V27-01	Duplicate Result	18
		RPD	20
			10%

Spiked Sample Results	Sample Number	Sample Result	
		Spike Result	19
		Spike Added	56
		% Recovery	48
			77%

(6)

## ORGANICS QUALITY CONTROL

PROJECT NO. 857 8.77

DATE: 3/22/85

PCB ( $\mu\text{g/g}$ )

---

Duplicate Sample Results	Sample Number P884-V27-13	Sample Result Duplicate Result RPD	< 1 < 1 NA
-----------------------------	------------------------------	--	------------------

---

Spiked Sample Results	Sample Number	Sample Result	< 1
		Spike Result	50
		Spike Added	50
		X Recovery	100%

---

(6)

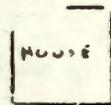
DATA SUMMARY

**Versair** INC.

6

ORGANICS DATA SUMMARY  
PROJECT 857.002 BATCH 77  
NYS CONTRACT NO. C000661

(6)

CLARENDON

NOT TO SCALE

ROAD

LAWN



DRIVEWAY



FIELD

DISTURBED  
AREA

FIELD

SOIL SAMPLE

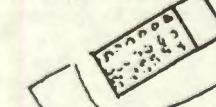
#01

GRADE UP

LABEL  
DETREX  
PERM A CLOR  
STABILIZED  
TRICHLOROETHYLENE  
CHEMICAL INDUSTRIES INC.  
DETROIT, MICHIGAN

TRUCK

26 DRUMS



RNL

12/10/84

J. J. KELLY  
HAZARDOUS MATERIALS SPECIALIST

955 - 4550

idum

(7)

Lewiston ----- 297-0755  
Batavia ----- 343-2200

- Regional Engineer  
for Environmental Quality

From: Bruce W. Finster - Water Division

Re: Possible Hazardous Materials Incident

Earl Height Property

4879 Upper Holley Road  
Clarendon Hts, Orleans (C)

Thermochlor  
Cutting oil  
trichloretylene  
perchloroethylene

Date: December 17, 1984

At 9:50 A.M. on this date I received a telephone request status report from Bill Miner regarding a hazardous materials incident in the above referenced Town. According to Bill Miner, some had <sup>just</sup> reported the incident to Central Office and Bill wanted a complete status report for the Commissioner. Since I had received (including the rest of water) no report over the weekend, I told him that I knew nothing about it but would get back to him. He advised me that the incident information included the illegal removal of 47 drums of trichloretylene and the contamination of 2 State Trooper cars plus 2 Troopers were allegedly overcome by fumes from the spilled material. Bill informed me that DEC Investigators Dan Mathis and Eco Mike van Durme were on site on

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

CLASSIFICATION CODE: 2a

REGION: 8

SITE CODE: 837006

(8)

NAME OF SITE : Haight Farm

STREET ADDRESS: 4899 Upper Holly Rd.

TOWN/CITY:

Clarendon

COUNTY:

Orleans

ZIP:

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

SITE OWNER/OPERATOR INFORMATION:

CURRENT OWNER NAME....: Earl Haight

CURRENT OWNER ADDRESS.: 4899 Upper Holly Rd., Clarendon, N.Y.

OWNER(S) DURING USE...: Earl Haight

OPERATOR DURING USE...: same

OPERATOR ADDRESS.....: 4899 Upper Holly Rd.

PERIOD ASSOCIATED WITH HAZARDOUS WASTE: From 1969 To 1984

SITE DESCRIPTION:

The site was a drum disposal area, in which drums may have come from an unknown chemical company in Rochester, N.Y., 14 to 15 years ago. On December 15, 1984 approximately 30 drums of suspected trichloroethylene was loaded on a truck, ultimate disposal unknown, approximately 200 gallons may have been spilled during loading. Frontier Chemical, contracted through the NYS Superfund Drum Removal Program, have properly disposed of the drummed wastes. However, private groundwater wells tested in the area, have shown contamination of trichloroethylene and other solvents.

HAZARDOUS WASTE DISPOSED: Confirmed-X Suspected -

-----IYEE-----

QUANTITY (units)

Trichloroethylene

unknown

SITE CODE: B37006

## ANALYTICAL DATA AVAILABLE:

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

## CONTRAVIENCTION OF STANDARDS:

Groundwater- Drinking Water- Surface Water- Air-

## LEGAL ACTION:

TYPE...	State-	Federal-
STATUS: In Progress-	Completed-	

## REMEDIAL ACTION:

Proposed- Under Design- In Progress- Completed-

## NATURE OF ACTION:

## GEOTECHNICAL INFORMATION:

SOIL TYPE: unknown

GROUNDWATER DEPTH: unknown

## ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

Additional information/sampling is necessary to adequately evaluate this site.

## ASSESSMENT OF HEALTH PROBLEMS:

Insufficient information

## PERSON(S) COMPLETING THIS FORM:

NEW YORK STATE DEPARTMENT OF  
ENVIRONMENTAL CONSERVATIONNAME.: Deborah Jackson  
TITLE: Gen. Eng. Tech.NAME.: Robert Glazagasti  
TITLE: SWMS

DATE.: 01/24/85

NEW YORK STATE DEPARTMENT  
OF HEALTHNAME.: R. Tramontano  
TITLE: Dir. Toxic Substance Assess.NAME.:  
TITLE:

DATE.: 01/24/85

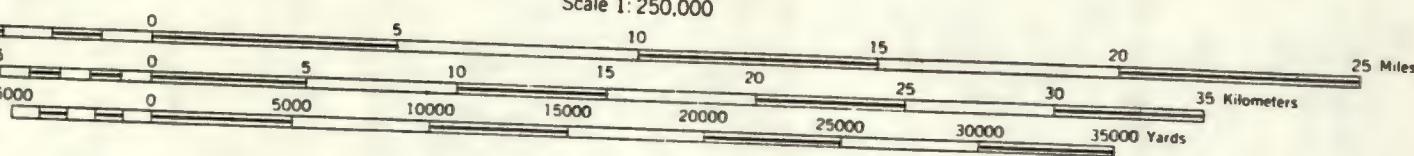
79°00'

45°

(9)

# ARY GEOLOGY OF NEW YORK, NIAGARA SH by Ernest H. Muller

Scale 1: 250,000



## MAP DATA SOURCES

1968, A sedimentological study of the Niagara Falls Moraine. M.A. thesis, 76p.

1956, Glacial geology of the East Aurora, New York Quadrangle. Univ. of

1955, A refinement of the upland glacial drift border in southern Cattaraugus. Cornell Univ. M.S. thesis, 127p.

1950, Strandlines and chronology of the Glacial Great Lakes in northwestern

1966, The physiography of southern Ontario. Univ. of

1957, Glacial Lake Tonawanda history and development. Unpub. M.S.

1956, Surficial geology and geomorphology of Potter County, Pennsylvania. Paper 288, 72p.

1959, Quaternary geology of the Niagara area, southern Ontario; Ontario Map P.764, 1:50,000.

1959, Quaternary geology of the Welland area, southern Ontario; Ontario Map P.796, 1:50,000.

10. Karrow, P.F., 1963, Pleistocene geology of the Niagara Falls area. Mines, Geol. Rep. 16, 68p. and Map 2033.

11. Kindle, E.M. and F.B. Taylor, 1913, Description of the Niagara Falls Area. U.S.G.S. Folio 190, 25p.

12. Leverett, Frank, 1902, Glacial formations and drifts of the Niagara Falls Area. U.S.G.S. Monograph 41, 802p.

13. Muller, E.H., 1963, Geology of Chautauqua County, New York. N.Y.S.M. Bull. 392, 60p.

14. Muller, E.H., Unpub. field mapping of the Niagara Falls area.

15. Shepps, V.C., G.W. White, J.E. Miller, 1963, Geology of the Niagara Falls Area, Pennsylvania. Penna. Geol. Surv. Bull. 100, 100p.

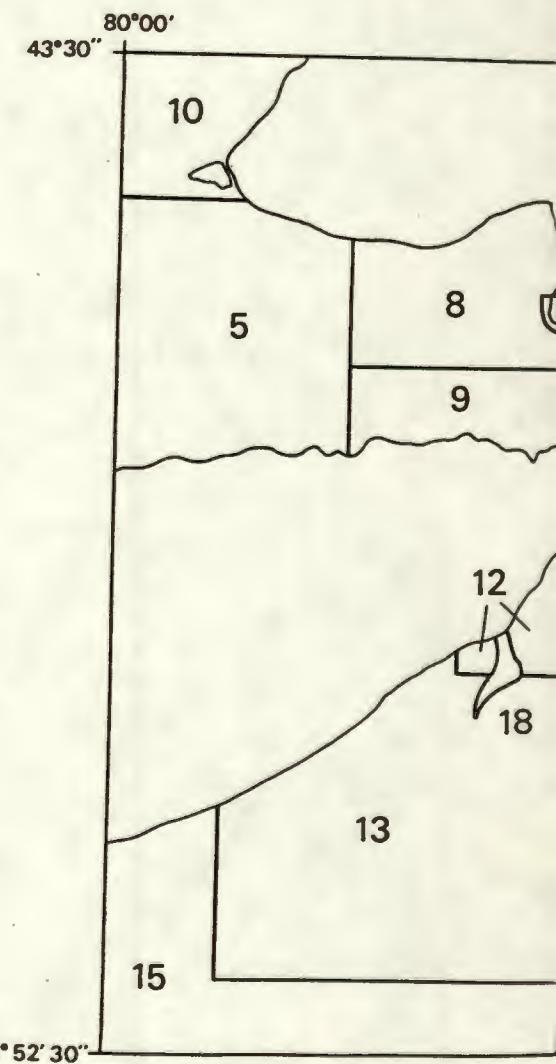
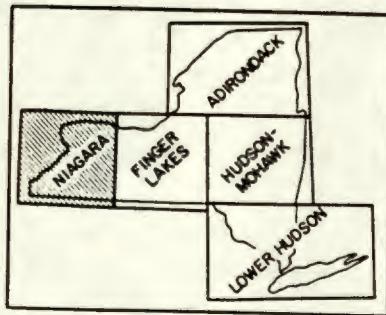
16. Sweeney, J.F., 1969, Geology of the Ashford Hollow, New York area. U.S.G.S. Bull. 1440, 100p.

17. Symecko, R.J., 1963, Geology of the Buffalo, New York area. U.S.G.S. Bull. 1440, 100p.

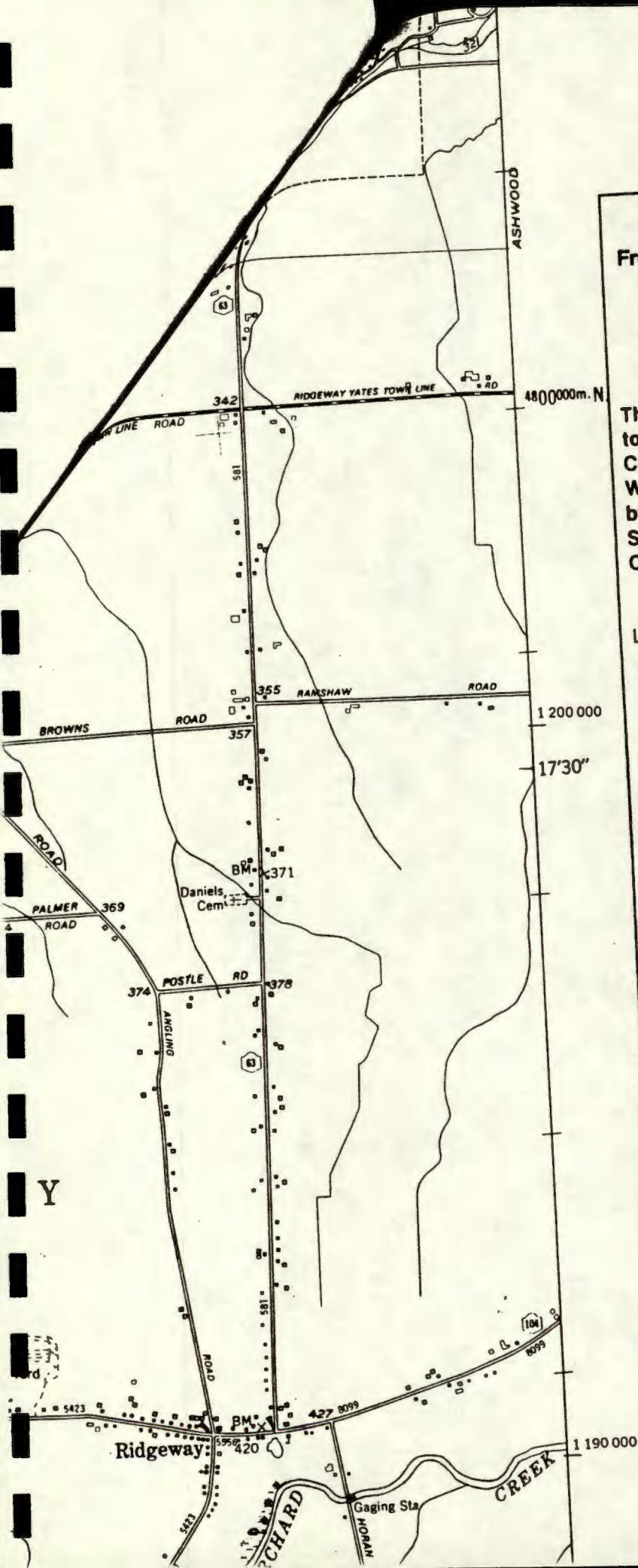
18. Weller,

Muller, Ernest H. (1977)  
New York State Museum and Science Service  
Map and Chart Series Number 28

(9)







(10)

**New York State  
Freshwater Wetlands Map**

**Orleans County**

**Map 1 of 10**

This map was promulgated, pursuant to Article 24 of the Environmental Conservation Law (The Freshwater Wetlands Act) on July 30, 1984 by the Commissioner of New York State Department of Environmental Conservation.

**LEGEND:**

- Approximate wetland boundary
- Upland inclusion
- AA-00** Wetland identification code

**NOTES:**

This map indicates the approximate location of the actual boundaries of wetlands regulated according to the Freshwater Wetlands Act.

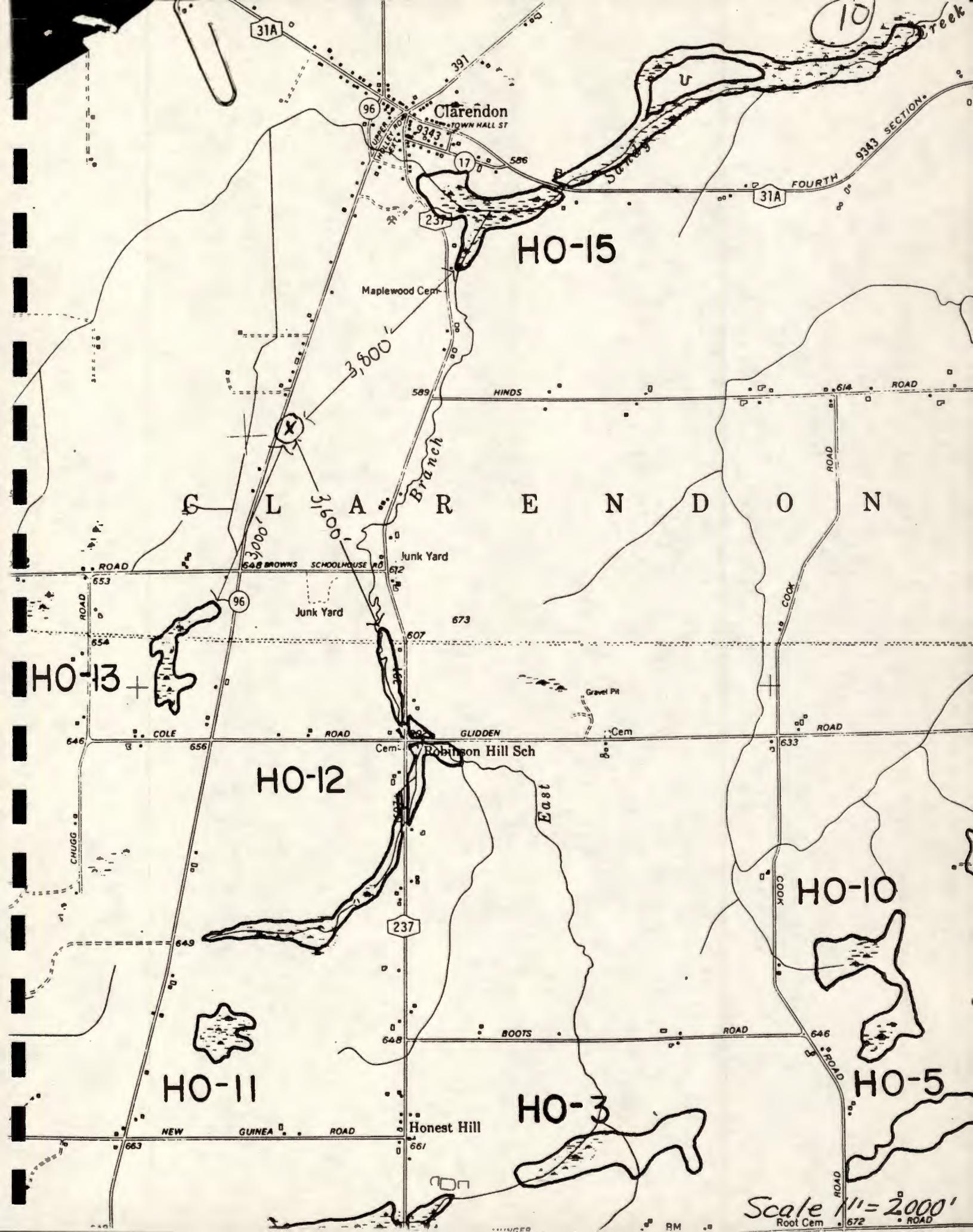
Map information other than the wetland boundaries was prepared by the New York State Department of Transportation and the United States Geological Survey. The locational information provided on the map is for reference only. Marsh symbols do not necessarily indicate the location of a regulated wetland.

Adjacent areas of the regulated wetlands are those areas within 100 feet of the boundary of the wetland. These areas are subject to regulation pursuant to the Freshwater Wetlands Act but are not delineated on this map. An adjacent area may be extended by special order of the Commissioner of the New York State Department of Environmental Conservation or the local regulatory authority.

Copies of Freshwater Wetlands Maps are available from the regional offices of the Department of Environmental Conservation. Maps are available for inspection at these offices and local government clerk's offices.

**REVISIONS**

Date	Wetland #	Description of change



#7 Narrative  
#8 Narrative



(11)

Ref = We should send a  
copy to Central Office. This  
site should have a high  
priority RECEIVED  
because of

COUNTY OF ORLEANS  
DEPARTMENT OF HEALTH

JOHN H. STAEBLE, M.P.H.  
Public Health Director

14012 Route 31  
Albion, New York 14411  
17161 589-5673

groundwater contamination  
SOLID WASTE  
D.E.C. REG. #8

October 04, 1985

in private well

FES

Mr. Frank Yacono  
4878 Upper Holley Road  
Holley, New York 14470

RE: Summary of Well Water Analysis  
Results

Dear Frank:

Please find enclosed a copy of the test results for each sample that has been collected at your residence thus far. I have underlined all positive results. Keep in mind that although several contaminants have shown up, the only chemical with a concentration of any significance is the trichloroethylene (TCE).

Following is a tabulated listing of all the samples, the detected chemicals, and their concentrations expressed in units of micrograms per liter (MCG/L) or equivalently parts per billion (ppb).

SAMPLE DATE	CONTAMINANT NAME	CONCENTRATION (MCG/L)
2/26/85	Trichloroethylene	19
	Carbon Tetrachloride	1
	Chloroform	1
	Tetrachloroethylene	1
	1,1,1 Trichloroethane	1
2/12/85	Polychlorinated biphenyls (PCB)	< 0.05 (none detected)
2/03/85	Trichloroethylene	690
	Benzene	1
	Trans-1,2-Dichloroethene	2
1/16/85	Trichloroethylene	970
	Benzene	1
	Chloroform	1
	Toluene	1
	Trans-1,2-Dichloroethene	3

Haight Farms

## INTERVIEW FORM

INTERVIEWEE/CODE: John Ozard

TITLE-POSITION:

ADDRESS: NYSDEC Wildlife Resources Center

CITY: Delmar, NY 12054

PHONE: (518) 439-7486

LOCATION: Phone Interview INTERVIEWER: L. Cordone

DATE/TIME: 12/16/85

SUBJECT: Critical Habitats Near Phase I - 4th Round Sites

REMARKS: John informed me that there are no critical habitats for endangered species in the vicinities of any of the following Phase I sites: Lindley Landfill, Cedar Street Dump, Horan Road Landfill, Livonia Landfill, Haight Farm, Route 19 Drum Disposal, U.S. Chrome, Sampson State Park, William Benson Landfill, Penn Yann Boats, and Conrail Site.

INTERVIEW FORMINTERVIEWEE/CODE John Ozard

TITLE - POSITION

ADDRESS NYSDEC Wildlife Resources CenterCITY Delmar, N.Y. STATE  ZIP 14054PHONE (518) 439 7436 RESIDENCE PERIOD  TO LOCATION phone Interview INTERVIEWER DATE/TIME 12/16/85 /SUBJECT: Critical Habitats near Phase I - 4<sup>th</sup> round sites.

REMARKS: John informed me that there are no critical habitats for endangered species in the vicinities of any of the following Phase I sites: Lindley Landfill, Cedar St. Dump, Horan Road Landfill, Livonia Landfill, Haight Farm, Route 19 Dump Disposal, U.S. Chrome, Sampson State Park, William Benson Landfill, Penn Yann Bounts, Conrail Site.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I agree with the above interview summary:Signature/Title:Comments:  
\_\_\_\_\_

# Dangerous Properties of Industrial Materials

Sixth Edition

N. Irving Sax

## 2622 alpha-TRICHLOROETHYLIDENE GLYCEROL

slt-mus-ipr 1 mmol/L  
dns-mus-orl 2500 mg/L  
dns-mus:bmr 1 mmol/L  
hma-mus:smc 400 mg/kg

MUREAV 46,202,77  
NTIS\*\* AD-A080-636  
NTIS\*\* AD-A080-636  
JEPTDQ 1,411,78

## REPRODUCTIVE EFFECTS

## DATA:

ihl-rat TCLo: 1800 ppm/24H (1-2D preg)  
ihl-rat TCLo: 100 ppm/4H (6-22D preg)  
ihl-rat TCLo: 1800 ppm/6H (1-20D preg)

CODEN:  
APTOD9 19,A22,80

JPHYA7 276,24P,78  
TXCYAC 14,153,79

## TUMORGENIC DATA:

ihl-rat TCLo: 500 ppm/6H/77W-I:ETA  
orl-mus TDLo: 455 g/kg/78W-I:CAR  
ihl-mus TCLo: 100 ppm/6H/77W-I:ETA  
ihl-ham TCLo: 100 ppm/6H/77W-I:ETA  
orl-mus TD: 912 g/kg/78W-I:CAR  
ihl-mus TC: 500 ppm/6H/77W-I:ETA

CODEN:  
ARTODN 43,237,80

NCITR\* NCI-CG-TR-2,76  
ARTODN 43,237,80  
ARTODN 43,237,80  
NCITR\* NCI-CG-TR-2,76  
ARTODN 43,237,80

## TOXICITY DATA:

orl-hmn LDLo: 7 g/kg  
ihl-hmn TCLo: 6900 mg/M<sup>3</sup>/10M:CNS  
ihl-hmn TCLo: 160 ppm/83M:CNS  
ihl-hmn TDLo: 812 mg/kg:SYS  
ihl-man TCLo: 110 ppm/8H:IRR  
ihl-man LCLo: 2900 ppm  
orl-rat LD50: 4920 mg/kg  
ihl-rat LCLo: 8000 ppm/4H  
orl-mus LD50: 2402 mg/kg  
ihl-mus LCLo: 3000 ppm/2H  
ipr-mus LD50: 3000 mg/kg  
ivn-mus LD50: 34 mg/kg  
orl-dog LDLo: 5860 mg/kg  
ipr-dog LD50: 1900 mg/kg  
scu-dog LDLo: 150 mg/kg  
ivn-dog LDLo: 150 mg/kg  
orl-cat LDLo: 5866 mg/kg  
ihl-cat LCLo: 32500 mg/M<sup>3</sup>/2H  
orl-rbt LDLo: 7330 mg/kg  
scu-rbt LDLo: 1800 mg/kg  
ihl-gpg LCLo: 37200 ppm/40M

CODEN:  
ARTODN 35,295,76  
AHBAAM 116,131,36

AIHAAP 23,167,62  
BMJOAE 2,689,45  
BJIMAG 28,293,71  
NZMJAX 50,119,51  
AIHAAP 30,470,69  
AIHAAP 30,470,69  
NTIS\*\* AD-A080-636  
AEPPAE 141,19,29  
JETOAS 7(4),247,74  
CBCCT\* 6,141,54  
12VXA8 10,1069,68  
TXAPA9 10,119,67  
HBTXAC 5,76,59  
QJPPAL 7,205,34  
NBTXAC 5,76,59  
AMBAAM 116,131,36  
HBTXAC 5,76,59  
QJPPAL 7,205,34  
HBTXAC 5,76,59

Aquatic Toxicity Rating: TLm96: 1000-100 ppm  
WQCHM\* 3,-,74. Carcinogenic Determination: Animal Positive IARC\*\* 20,545,79; IARC\*\* 11,263,76.  
TLV: TWA 50 ppm; STEL 150 ppm DTLVS\* 4,406,80.

Toxicology Review: JTEHD6 2(3),671,77; CLPTAT 8, 91,67; JOCMA7 16(3),194,74; JOCMA7 17(9),603,75; FNCSA6 2,67,73; BNYMAM 54,413,78; 27ZTAP 3,146,69. OSHA Standard: Air: TWA 100 ppm; C1200; Pk 300/5M/2H (SCP-J) FEREAC 39,23540,74. DOT: ORM-A, Label: None FEREAC 41,57018,76. Occupational Exposure to Trichloroethylene recm std: Air: TWA 100 ppm; CL 150 ppm/10M NTIS\*\*. Occupational Exposure to Waste Anesthetic Gases and Vapors recm std: Air: CL 2 ppm/1H NTIS\*\*. NCI Carcinogenesis Bioassay Completed; Results Positive: Mouse (NCITR\* NCI-CG-TR-2,76); Results Negative: Rat (NCITR(NCI-CG-TR-2,76). Currently tested by NTP for carcinogenesis by Standard Bioassay Protocol as

of April 1982. NTP Carcinogenesis Bioassay Completed as of April 1982. "NIOSH Manual of Analytical Methods" VOL 1 127, Vol 3, S336. NIOSH Current Intelligence Bulletin 2, 1975. Reported in EPA TSCA Inventory, 1980. EPA TSCA 8e NO: 05780146. Followup sent as of April, 1979.

**THR:** A strong skin, eye irr. MUT data. An exper TER ETA, CARC. HIGH ivn, scu, ihl; MOD ihl, orl, ipr, LOW orl, ihl. Inhal of high conc causes narcosis and anesthesia. A form of addiction has been observed in exposed workers. Prolonged inhal of mod conc cause headache and drowsiness. Fatalities following severe acute exposure have been attributed to ventricular fibrillation resulting in cardiac failure. There is damage to liver and other organs from chronic exposure. Cases have been reported but are of questionable validity. Determination of the metabolites trichloracetic acid and trichloroethanol in urine reflects the absorption of trichloroethylene. A food additive permitted in food for human consumption. A common air contaminant.

**Fire Hazard:** Low, when exposed to heat or flame. High conc of trichloroethylene vapor in high-temp air can be made to burn mildly if plied with a strong flame. Though such a condition is difficult to produce, flame or arcs should not be used in closed equipment which contains any solvent residue or vapor.

**Spontaneous Heating:** No.

**Disaster Hazard:** Dangerous. When heated to decompose it emits tox fumes of Cl<sup>-</sup>. See chlorides.

For further information see Vol. 1, No. 2 and Vol. No. 1 of DPIM Report.

**Incomp:** Can react violently with Al, Ba, N<sub>2</sub>O<sub>4</sub>, Li, Mg, liquid O<sub>2</sub>, O<sub>3</sub>, KOH, KNO<sub>3</sub>, Na, NaOH, Ti.

## alpha-TRICHLOROETHYLIDENE GLYCEROL

CAS RN: 4692493

NIOSH #: JI 33800

mf: C<sub>5</sub>H<sub>7</sub>Cl<sub>3</sub>O<sub>3</sub>; mw: 221.47

**SYN:** ALPHA-2-(TRICHLOROMETHYL)-1,3-DIOXOLANE-4-METHYL

**TOXICITY DATA:** 2

**CODEN:**

JPETAB 81,72,44

ipr-mus LD50: 920 mg/kg

JPETAB 81,72,44

ivn-mus LD50: 520 mg/kg

THR: MOD ipr, ivn.

**Disaster Hazard:** When heated to decompose it emits fumes of Cl<sup>-</sup>.

## beta-TRICHLOROETHYLIDENE GLYCEROL

CAS RN: 4692493

NIOSH #: JI 34400

mf: C<sub>5</sub>H<sub>7</sub>Cl<sub>3</sub>O<sub>3</sub>; mw: 221.47

**SYN:** BETA-2-(TRICHLOROMETHYL)-1,3-DIOXOLANE-4-METHYL

**TOXICITY DATA:** 2

**CODEN:**

JPETAB 81,72,44

ipr-mus LD50: 959 mg/kg

JPETAB 81,72,44

ivn-mus LD50: 518 mg/kg

THR: MOD ipr, ivn.

**Disaster Hazard:** When heated to decompose it emits fumes of Cl<sup>-</sup>.

## TRICHLORO ETHYLENE 2621

## CHLOROETHANOL

RN: 115208 NIOSH #: KM 3850000

 $\text{C}_2\text{H}_5\text{Cl}_2\text{O}$ ; mw: 149.40mp: 17.8°, bp: 150° @ 765 mm, d: 1.54 @ 25°/  
ap. press: 1 mm @ 20°, vap. d: 5.16.CHLOROETHANOL  
CHLOROETHYL ALCOHOL

2,2,2-TRICHLOROETHYL ALCOHOL

TOXICITY DATA:  
5 uL/plate/2H  
LD<sub>50</sub>: 600 mg/kg  
LD<sub>Lo</sub>: 300 mg/kg  
LD<sub>50</sub>: 201 mg/kg  
LD<sub>Lo</sub>: 50 mg/kg3-2 CODEN:  
CBINA8 30,9,80  
12VXA5 8,1069,68  
JPETAB 63,453,38  
28ZPAK -.78,72  
JPETAB 63,453,38Listed in EPA TSCA Inventory, 1980.  
HIGH via ivn and ipr routes. MOD via oral route.

Anesthetic. MUT data.

Disaster Hazard: Dangerous; see chlorides.

## CHLOROETHENYLSILANE

RN: 75945 NIOSH #: VV 6125000

 $\text{C}_2\text{H}_5\text{Cl}_3\text{Si}$ ; mw: 161.49

Liquid. bp: 90.6°; d: 1.265 @ 25°/25°; flash p:

S:

CHLOR(VINYL)SILANE  
BROVINYL SILICANEVINYL SILICON TRICHLORIDE  
VINYL TRICHLOROSILANETOXICITY DATA:  
1 mg/24H  
625 mg open SEV  
0 ug SEV  
LD<sub>50</sub>: 1280 mg/kg  
LC<sub>Lo</sub>: 500 ppm/4H  
LD<sub>50</sub>: 3160 mg/kg  
LC<sub>50</sub>: 3020 mg/m<sup>3</sup>/4H  
LD<sub>50</sub>: 680 mg/kg2 CODEN:  
AMIHBC 10,61,54  
UCDS\*\* 1/19/72  
AMIHBC 10,61,54  
AMIHBC 10,61,54  
UCDS\*\* 1/19/72  
HYSAAV 34,334,69  
HYSAAV 34,334,69  
AMIHBC 10,61,54acute Toxicity Rating: TLm96: 100-10 ppm WQCHM\*  
74. DOT: Flammable Liquid, Label: Flammable  
List FEREAC 41,57018,76. Reported in EPA TSCA  
Inventory, 1980.

MOD orl, ihl, skn. A skn, eye irr. See also chlorosilane.

Disaster Hazard: Dangerous; reacts violently with water,  
not air.Disaster Hazard: When heated to decompose it emits toxic fumes of Cl<sup>-</sup>. Will react with water or steam to produce  
corrosive fumes.

## TRICHLORO-1-ETHOXYETHANOL

RN: 515833 NIOSH #: KM 4725000

 $\text{C}_4\text{H}_7\text{Cl}_3\text{O}_2$ ; mw: 193.46Sol, less sol in water than chloral hydrate, sol in  
solvents. d: 1.143, mp: 47.5°, bp: 116°.

S:

CHLORAL ALCOHOLATE  
CHLORAL ETHYLALCOHOLATECHLORAL, ETHYL HEMIACETAL  
TRICHLOROACETALDEHYDE  
MONOETHYLACETAL

## TOXICITY DATA:

2 LD<sub>50</sub>: 880 mg/kg  
LD<sub>Lo</sub>: 1200 mg/kg  
LD<sub>50</sub>: 500 mg/kg  
LD<sub>Lo</sub>: 1100 mg/kg

## CODEN:

JPETAB 78,340,43  
JPETAB 78,340,43  
JPETAB 78,340,43  
JPETAB 78,340,43

Reported in EPA TSCA Inventory, 1980.

THR: MOD via oral route.

Disaster Hazard: When heated to decompose it emits toxic fumes of Cl<sup>-</sup>.

## TRICHLOROETHYLAMINE

NIOSH #: KR 9850000

mf:  $\text{C}_2\text{H}_5\text{Cl}_3\text{N}$ ; mw: 148.41

SYN: TCEA

## TOXICITY DATA:

mmo-asn 1700 umol/L

CODEN:  
SOGEbz 6,220,70

THR: MUT data.

Disaster Hazard: When heated to decompose it emits very toxic fumes of Cl<sup>-</sup> and NO<sub>x</sub>.

## TRICHLOROETHYL CARBAMATE

CAS RN: 107697 NIOSH #: FD 1750000

mf:  $\text{C}_3\text{H}_4\text{Cl}_3\text{NO}_2$ ; mw: 192.43

SYN: CARBAMIC ACID 2,2,2-TRICHLOROETHYL ESTER

## TOXICITY DATA:

3 ipr-mus TD<sub>Lo</sub>: 3250 mg/kg/13W-I  
TFX: NEO  
ipr-mus LD<sub>50</sub>: 500 mg/kg

## CODEN:

JNCIAM 8,99,47  
JNCIAM 8,99,47

THR: An exper NEO. MOD ipr. See also esters, carbamates.

Disaster Hazard: When heated to decompose it emits very toxic fumes of Cl<sup>-</sup> and NO<sub>x</sub>.

## TRICHLORO ETHYLENE

CAS RN: 79-01-6

NIOSH #: KX 4550000

mf:  $\text{C}_2\text{HCl}_3$ ; mw: 131.38Mobile liquid; characteristic odor of chloroform. d: 1.4649  
@ 20°/4°; bp: 86.7°; flash p: 89.6°F; lel = 12.5%; uel = 90% @ above 30°; mp: -73°; fp: -86.8°; autoign. temp.: 788°F; vap. press: 100 mm @ 32°; vap. d: 4.53.

SYNS:

ACETYLENE TRICHLORIDE  
1-CHLORO-2,2-DICHLOROETHYLENE  
1,1-DICHLORO-2-CHLOROETHYLENE  
DOW-TRIETHYLENE TRICHLORIDENCI-CO4546  
TRICHOORETHEEN (DUTCH)  
TRICHLORAETHEN (GERMAN)  
TRI-CLENE  
TRICLORETENE (ITALIAN)  
VESTROL

## SKIN AND EYE IRRITATION

## DATA:

3 eye-hmn 5 ppm  
skn-rbt 500 mg/24H SEV  
eye-rbt 20 mg/24HSEV

## CODEN:

JOCMA7 2,383,60  
28ZPAK -.28,72  
28ZPAK -.28,72

## MUTATION DATA:

mma-sat 100 uL/plate  
mma-sat 5 pph/2H  
mma-smc 10 mL/L

## CODEN:

NIOSH# SAUG77  
ARTODN 41,249,79  
MUREAV 48,173,77

~~REF ID: A6591~~  
TO: >FRANK STAATMICK

do not type 14

FROM: Paul Scutried

SUBJECT: EARL HAIGHT PROPERTY

BARRIER INCIDENT

CLARENDON (I), ORLEANS (C)

DATE: 1-4-85

The following preliminary results were furnished  
to us via Eric Wohlers, Orleans (C) Health Department,  
by the State Health Department Laboratory.

5 wells sampled, all drinking water wells  
samples were EPA 601, purgeable halocarbons  
and EPA 503.1, purgeable compounds

Haight well not sampled, permission refused  
by owner

3 wells - nothing found

Perry residence, 4885 Upper Holley Rd. 5 ppb TCE

YACANO, 4878 Upper Holley, 19 ppb trichloroethylene (TCE)

1 " tetra " " "

1 " 1,1,1 trichloroethane

1 " carbon tetrachloride

1 " chloroform

NYSDH guideline is non-detectable

potential buyer of property - Chris & Diane Harris 244-0814

Realtor Jim Givens Coldwell Banker Residential 637-3171

(14)

Samples discussed with Dave Tunkow on 1/2/85

- 4 waste samples sent to Albany on 12/21/84  
from

barrel #13, #17 and #24; also composite

#13 - .7% Trichloroethane

#17 - 1.5% "

#24 - 1% "

composite from Frontier 1% "

- On 12/26/84

5 well samples were collected

Haight would allow them to sample  
no results yet

3 - Called Grant P.K. and ask him  
what he found in soil sample

2 samples between 6-9 ppm  
of PCB



United States  
Department of  
Agriculture

Rec.: 12/16/85

re: Wetlands / prime Ag. land  
for Haight Farm/Horner Rd  
Phase I sites.  
Dept. of Soil Conservation

LC

401 West Avenue  
Albion, N.Y. 14411  
#1 Surg. Env't.

(15)

December 12, 1985

Dear Les,

Enclosed are the copies of the important farmland and wetland maps that you requested. As you can see there aren't any wetlands very close to the Medina site but are closer at the Clarandon site. It is nearly three miles to a wetland for Medina but less than a mile for Clarandon.

If I can be of any further help please feel free to call me.

Yours in Conservation,  
Bill Tompkins

District Conservationist  
of Orleans County



The Soil Conservation Service  
is an agency of the  
Department of Agriculture

SCS-AS-1  
10-79

#3 Narr.

#2 Narr.

S Bates

16

STATE OF NEW YORK - DEPARTMENT OF HEALTH  
INTEROFFICE MEMORANDUM

TO: Dr. Nancy Kim

1/4/95

FROM: Mr. Tramontano

SUBJECT: Orleans County Hazardous Waste Incident  
DEC - Emergency Operations Incident Report 84-12-17a  
Haight Farm, (T) Clarendon

As reported previously, we analyzed waste liquids from the drums found on the farm and five nearby private wells.

Using a hall detector (halogen specific) and the mass spec, the laboratory has preliminarily reported the drum results as follows:

<u>Drum</u>	<u>Accession #</u>	<u>Trichloroethylene % by Weight</u>
13	45612	0.7
17	45613	1.5
24	45614	1.0
composite	45615	1.0

Since a concern about PCBs was raised, the waste liquids were analyzed for those compounds as well and none were found at a detection limit of 80 ppb. The high limit of detection was caused by the high concentration of trichloroethylene in the samples.

The preliminary results for the private wells are as follows:

Var. Wygaard - Drinking water results for EPA 601 & EPA 503.1 (list attached), are all less than 1 ppb.  
Tennant  
Applegate

Perry Trichloroethylene 5 ppb - all other 601 and 503.1 less than 1 ppb\*

Yacono Closest house to the site  
chloroform 1 ppt  
1,1,1, - trichloroethane 1 ppb  
carbon tetrachloride 1 ppb  
trichloroethylene 19 ppb ←  
tetrachloroethylene 1 ppb  
all other 601 and 503.1 less than 1 ppb\*

\*detection limit for 4 compounds at 5 ppb as noted

The county and region have been notified of these preliminary results, our drinking water guidelines and our ability and willingness to assist them in advising the homeowners and their

## INTERVIEW FORM

INTERVIEWEE/CODE: David Turkow

TITLE-POSITION: Public Health Sanitarian

ADDRESS: Orleans County DOH

CITY: Albion, NY

PHONE: 716-589-7004

LOCATION: Phone interview

INTERVIEWER: Cordone

DATE/TIME: 1/3/86 - 1100

SUBJECT: Horan Road Landfill/Haight Farm Site

REMARKS:

Water Supply Around Medina:

- City of Medina, Ridgeway, Shelby Center receive public water originating in Niagara County.
- Houses on Maple Ridge Road west of Millville are using private wells.
- Residences in the vicinity of North Shelby Center, Salt Works Road are using private wells.
- Glenwood Lake is not used as a public water supply.

Haight Farm Area Water Supply:

- Houses in the vicinity of Haight Farm use private well water supplies.
- Town of Clarendon uses private well water supplies.

(17)

REC'D JAN 24 1986

INTERVIEW FORM

INTERVIEWEE/CODE David Tur-Kow  
TITLE - POSITION Public Health Sanitarian  
ADDRESS Orleans County DOH  
CITY Albion STATE NY ZIP   
PHONE (716) 589 7004 RESIDENCE PERIOD  TO   
LOCATION phone interview INTERVIEWER   
DATE/TIME 1/3/86 / 11:00  
SUBJECT: Horan Road Landfill / Haight Farm Site

REMARKS: Water Supply Around Medina:

- City of Medina, Ridgeway, Shelby Center receive public water originating in Niagara County.
- Houses on Maple Ridge Road west of Millville are using private wells.
- Residences in the vicinity of North Shelby Center, Salt Works Road are using private wells.
- Glenwood Lake is not used as a public water supply.

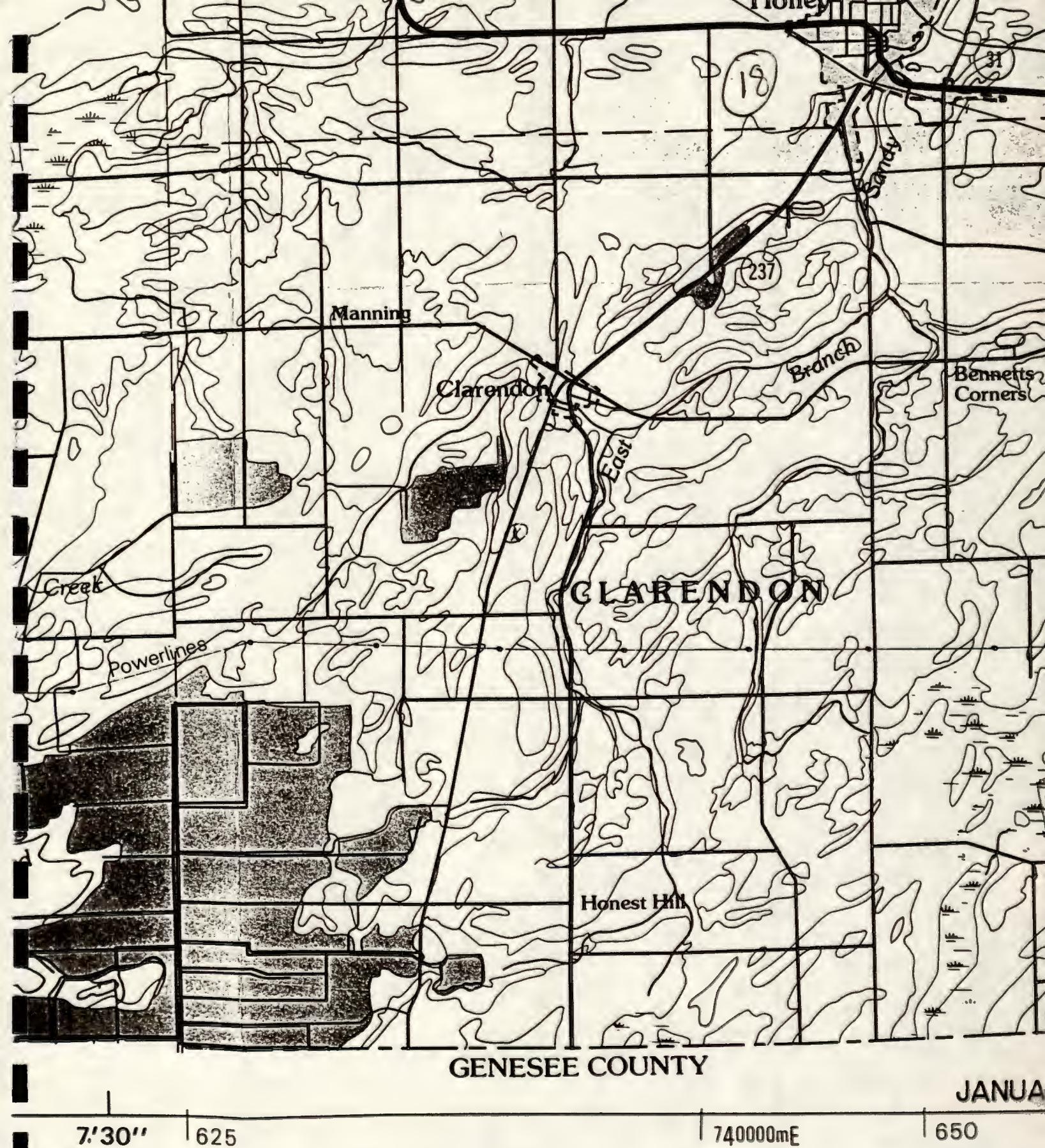
Haight Farm Area Water Supply:

- Houses in the vicinity of Haight Farm use private well water supplies.
- Village of Clarendon uses private well water supplies.  
(Town)

I agree with the above interview summary:

Signature/Title: David P. Tur-Kow, P.H.S.

Comments:



Base Source: USGS 1:100,000 county  
Projection and 10,000-metre grid ticks  
Transverse Mercator, 25,000-foot grid  
New York coordinate system, west zone  
1927 North American datum

1175

18

## LEGEND

Prime farmland

Total acres 163,129

Unique farmland, other than prime

Total acres 5,120

Additional farmland of  
statewide importance

Total acres 52,469

Other land

Water areas

Approximate urban and  
built-up areas

Because of the limitations of map scale, some  
delineations may contain inclusions of soils  
that do not meet the definition of that category.

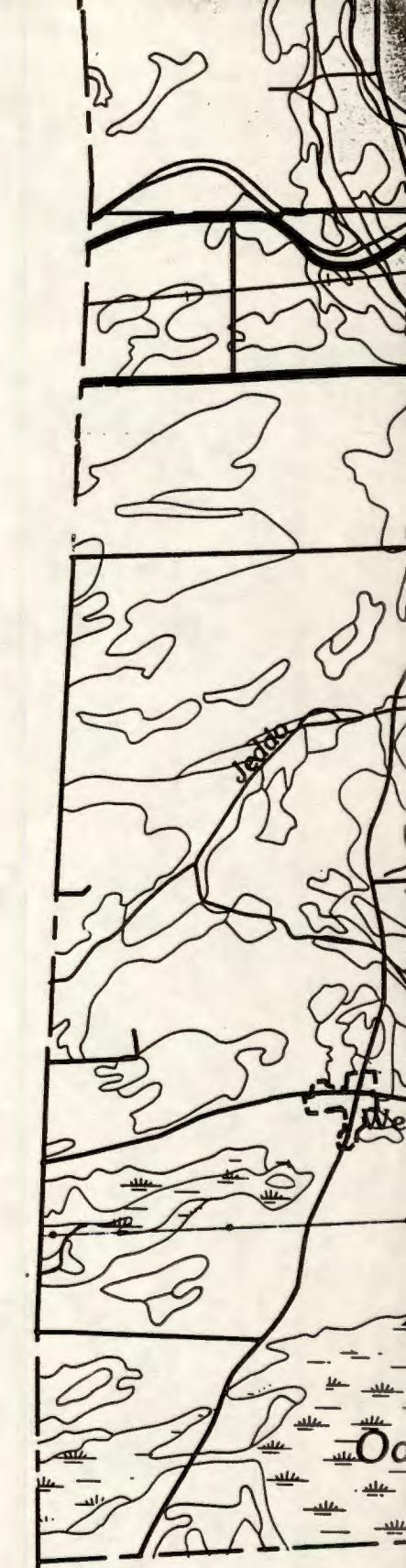
1 150 000

FEET

478

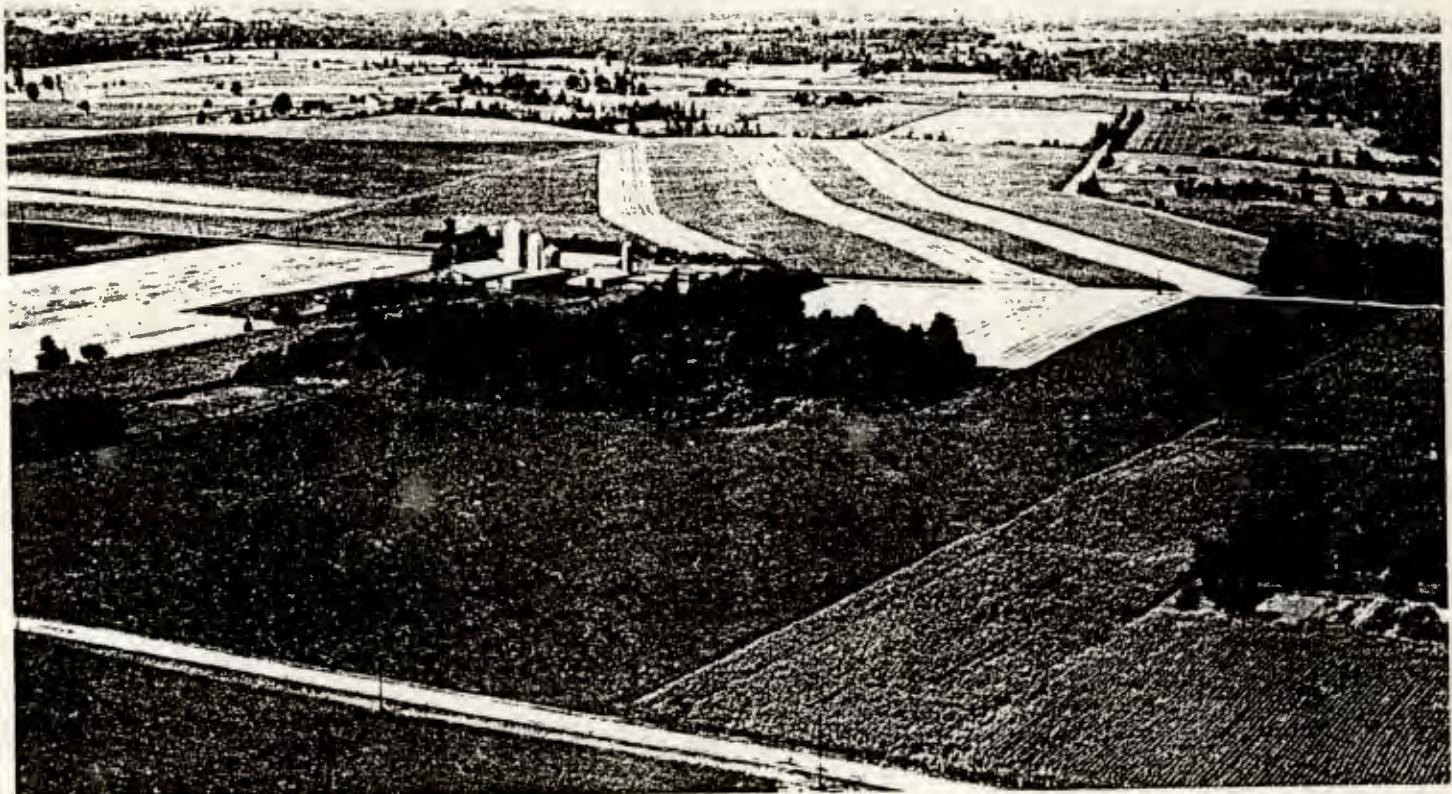
43°07'30"

78°28'30"



Interpretations derived from soil map constructed  
by Cartographic Division, Soil Conservation Service  
of Orleans County, New York.

SOIL SURVEY OF  
**Orleans County, New York**



United States Department of Agriculture  
Soil Conservation Service  
in cooperation with  
Cornell University Agricultural Experiment Station

19



## GUIDE TO MAPPING UNITS

19

Map symbol	Mapping unit	Page	Capability unit	Woodland group
			Symbol	Number
A1B	Alton gravelly sandy loam, 3 to 8 percent slopes-----	19	IIIIs-1	3ol
AnA	Appleton silt loam, 0 to 3 percent slopes-----	19	IIIw-1	3wl
AnB	Appleton silt loam, 3 to 8 percent slopes-----	19	IIIw-3	3wl
ArB	Arkport very fine sandy loam, 0 to 6 percent slopes-----	21	IIe-3	2ol
ArC	Arkport very fine sandy loam, 6 to 12 percent slopes-----	21	IIIe-2	2ol
AsD	Arkport-Collamer complex, 6 to 20 percent slopes-----	21	IVe-1	2rl
Ba	Barre silt loam-----	21	IVw-1	5wl
BoA	Bombay fine sandy loam, 0 to 3 percent slopes-----	22	IIw-1	2ol
BoB	Bombay fine sandy loam, 3 to 8 percent slopes-----	22	IIe-2	2ol
BrA	Brockport silty clay loam, 0 to 2 percent slopes-----	22	IIIw-2	3wl
BrB	Brockport silty clay loam, 2 to 6 percent slopes-----	22	IIIw-3	3wl
BrC	Brockport silty clay loam, 6 to 12 percent slopes-----	22	IIIe-3	3wl
Ca	Canandaigua soils-----	23	IIIw-5	4wl
Cb	Carlisle muck-----	23	IIIw-6	5wl
CcB	Cayuga silt loam, 2 to 6 percent slopes-----	24	IIe-5	2ol
CeA	Cazenovia silt loam, 0 to 3 percent slopes-----	24	IIw-1	2ol
CeB	Cazenovia silt loam, 3 to 8 percent slopes-----	24	IIe-2	2ol
CfA	Cazenovia gravelly silt loam, shale substratum, 0 to 3 percent slopes-----	24	IIw-1	2ol
CfB	Cazenovia gravelly silt loam, shale substratum, 3 to 8 percent slopes-----	24	IIe-2	2ol
Cg	Cheektowaga fine sandy loam-----	25	IIIw-5	5wl
ChA	Churchville silt loam, 0 to 2 percent slopes-----	25	IIIw-2	3wl
ChB	Churchville silt loam, 2 to 6 percent slopes-----	25	IIIw-3	3wl
C1B	Claverack loamy fine sand, 0 to 6 percent slopes-----	26	IIw-2	3sl
CmA	Collamer silt loam, 0 to 2 percent slopes-----	26	IIw-1	2ol
CmB	Collamer silt loam, 2 to 6 percent slopes-----	27	IIe-4	2ol
CmC3	Collamer silt loam, 6 to 12 percent slopes, severely eroded-----	27	IVe-1	2rl
CoB	Colonie loamy fine sand, 0 to 6 percent slopes-----	27	IIIIs-1	4sl
CoC	Colonie loamy fine sand, 6 to 12 percent slopes-----	27	IVs-1	4sl
Cs	Cosad loamy fine sand-----	28	IIIw-4	4wl
Ed	Edwards muck-----	28	IVw-3	5wl
E1B	Elnora loamy fine sand, 0 to 6 percent slopes-----	29	IIw-2	4sl
FaB	Farmington silt loam, 0 to 8 percent slopes-----	29	IIIIs-2	5dl
FaC	Farmington silt loam, 8 to 15 percent slopes-----	29	IVe-2	5dl
FH	Fluvaquents and Humaquepts, ponded-----	29	VIIIw-1	---
Fo	Fonda mucky silt loam-----	30	IVw-1	5wl
Fr	Fredon loam-----	30	IIIw-1	3wl
GaA	Galen very fine sandy loam, 0 to 2 percent slopes-----	30	IIw-2	2ol
GaB	Galen very fine sandy loam, 2 to 6 percent slopes-----	30	IIw-2	2ol
Ha	Hamlin silt loam-----	30	IIw-3	2o2
HbA	Hilton loam, 0 to 3 percent slopes-----	40	IIw-1	2ol
HbB	Hilton loam, 3 to 8 percent slopes-----	40	IIe-2	2ol
HcA	Hilton loam, rock substratum, 0 to 3 percent slopes-----	40	IIw-1	2ol
HcB	Hilton loam, rock substratum, 3 to 8 percent slopes-----	40	IIe-2	2ol
HnB	Hilton-Cazenovia stony silt loams, 0 to 8 percent slopes-----	41	IIIs-2	2ol
HoB	Howard gravelly loam, 3 to 8 percent slopes-----	41	IIIs-1	2ol
HpC	Howard soils, 8 to 25 percent slopes-----	42	IVe-3	2r2
Ju	Junius loamy fine sand-----	42	IIIw-4	4wl
KaA	Kendaia and Appleton silt loams, rock substratum, 0 to 3 percent slopes-----	43	IIIw-1	3wl
LaB	Lairdsville silt loam, 0 to 6 percent slopes-----	44	IIe-5	3ol
Lk	Lakemont silty clay loam-----	45	IVw-1	5wl
Lm	Lakemont silt loam, shale substratum-----	45	IVw-1	5wl
Ln	Lamson soils-----	46	IIIw-5	4wl
Lo	Lockport silty clay loam-----	46	IIIw-2	3wl
Ly	Lyons silt loam-----	47	IVw-2	4wl
Lz	Lyons silt loam, rock substratum-----	47	IVw-2	4wl
Ma	Madalin silt loam-----	48	IVw-1	5wl
MdB	Madrid fine sandy loam, 3 to 8 percent slopes-----	49	IIe-1	2ol
Mdc	Madrid fine sandy loam, 8 to 15 percent slopes-----	49	IIIe-1	2ol
Me	Martisco muck-----	50	Vw-2	5wl

## GUIDE TO MAPPING UNITS--Continued

Map symbol	Mapping unit	Page	Capability unit	Woodland group
			Symbol	Number
Mn	Massena fine sandy loam-----	50	IIIw-1	3wl
Mo	Minoa very fine sandy loam-----	51	IIIw-1	3wl
Ne	Newstead silt loam-----	52	IIIw-7	3wl
NgA	Niagara silt loam, 0 to 2 percent slopes-----	53	IIIw-1	3wl
NgB	Niagara silt loam, 2 to 6 percent slopes-----	53	IIIw-3	3wl
OdA	Odessa silt loam, 0 to 2 percent slopes-----	54	IIIw-2	3wl
OdB	Odessa silt loam, 2 to 6 percent slopes-----	54	IIIw-3	3wl
OnB	Ontario loam, 3 to 8 percent slopes-----	55	Ile-1	2ol
OnC	Ontario loam, 8 to 15 percent slopes-----	55	IIIe-1	2ol
OoB	Ontario stony loam, 3 to 8 percent slopes-----	55	Ile-1	2ol
OsC	Ontario very stony loam, 3 to 15 percent slopes-----	55	VIs-1	2ol
OtB	Ontario loam, rock substratum, 0 to 8 percent slopes-----	55	Ile-1	2ol
OvA	Ovid silt loam, 0 to 3 percent slopes-----	57	IIIw-1	3wl
OvB	Ovid silt loam, 3 to 8 percent slopes-----	57	IIIw-3	3wl
OwA	Ovid silt loam, shale substratum, 0 to 4 percent slopes-----	57	IIIw-1	3wl
Pm	Palms muck-----	58	IVw-3	5wl
Pp	Phelps gravelly fine sandy loam-----	59	IIw-1	2ol
RhA	Rhinebeck silt loam, 0 to 2 percent slopes-----	59	IIIw-2	3wl
RhB	Rhinebeck silt loam, 2 to 6 percent slopes-----	60	IIIw-3	3wl
ScB	Schoharie silt loam, 2 to 6 percent slopes-----	61	Ile-5	2ol
ShE	Shale outcrop, steep-----	61	VIIIs-1	---
Su	Sun silt loam-----	61	IVw-2	4wl
Te	Teel silt loam-----	62	IIw-3	2ol
UD	Udifluvents, frequently flooded-----	62	Vw-1	4wl
WmB	Wampsville gravelly loam, 3 to 8 percent slopes-----	63	Ile-1	2ol
WsA	Wassaic silt loam, 0 to 3 percent slopes-----	64	IIs-1	2ol
WsB	Wassaic silt loam, 3 to 8 percent slopes-----	64	Ile-2	2ol
Wy	Wayland silt loam-----	64	Vw-1	4wl

Soil permeability

19

TABLE 7.—Estimated physical

Soil series and map symbols	Hydro-logic soil group	Depth to—		Depth from surface	USDA texture	Classification	
		Bedrock	Seasonal high water table			Unified	AASHTO
		Feet	Feet	Inches			
Massena: Mn -----	C	>4	½-1½	0-12 12-24 24-50	Fine sandy loam -- Loam to fine sandy loam. Gravelly fine sandy loam to loam.	SM, GM, or ML ML or SM SM, GM, or ML	A-4 A-2 or A-4 A-2 or A-4
Minoa: Mo -----	C	>6	½-1½	0-45 45-50	Very fine sandy loam to loamy fine sand. Silty clay loam --	SM or ML ML or CL	A-4 A-6
Newstead: Ne -----	C	1½-3½	½-1½	0-14 14-26 26	Silt loam ----- Flaggy silt loam to sandy loam. Limestone bedrock.	ML or SM SM, GM, or ML	A-2 or A-4 A-2 or A-4
Niagara: NgA, NgB -----	C	>4	½-1½	0-13 13-24 24-50	Silt loam ----- Silt loam or silty clay loam. Silt loam to stratified layers of silt, fine sand, and clay.	ML ML or CL ML	A-4 A-4 A-4
Odessa: OdA, OdB -----	D	>4	½-1	0-8 8-41 41-50	Silt loam ----- Silty clay to silty clay loam. Silty clay loam to varved silt and clay.	ML, CL, or OL CL, CH, or ML CL or CH	A-6 or A-7 A-6 or A-7 A-6 or A-7
Ontario: OnB, OnC, OoB, OsC, OiB. Unit OiB is underlain by bedrock at a depth of 3½ to 6 feet.	B	>3½	>3	0-16 16-38 38-72	Loam ----- Silt loam to gravelly fine sandy loam. Loam to gravelly fine sandy loam.	ML or SM SM, GM, or ML SM, GM, or ML	A-4 or A-2 A-4 or A-2 A-4 or A-2
Ovid: OvA, OvB, OwA ----- Unit OwA is underlain by shale bedrock at a depth of 3½ to 6 feet.	C	>3½	½-1½	0-13 13-28 28-72	Silt loam ----- Silty clay loam to gravelly clay loam. Silty clay loam to gravelly clay loam.	ML, SM, or CL CL or ML CL, ML, or GC	A-4 or A-6 A-4, A-6, or A-7 A-4, A-6, or A-7
Palms: Pm -----	D	>6	0	0-34 34-54	Muck ----- Silty clay loam to fine sandy loam.	Pt CL, ML, or SM	A-6 or A-4
Phelps: Pp -----	B	>3½	1½-2	0-8 8-34 34-50	Gravelly fine sandy loam. Gravelly loamy fine sand, gravelly sandy loam, and gravelly loam. Very gravelly loamy sand to stratified sand and gravel.	SM or GM SM or GM GM or GW-GM	A-2 or A-4 A-2 or A-4 A-1

## ORLEANS COUNTY, NEW YORK

91

19

## Chemical properties—Continued

Coarse fraction greater than 3 inches	Percentage less than 3 inches passing sieve—				Permeability	Available water capacity	Reaction	K factor
	No. 4 (4.7 mm)	No. 10 (2.0 mm)	No. 40 (0.42 mm)	No. 200 (0.074 mm)				
Percent					Inches per hour	Inches per inch of soil	pH	
<5	65-95	60-90	70-90	45-70	0.6-2.0	0.15-0.18	6.1-7.3	0.32
<5	75-95	65-90	50-80	30-60	0.6-2.0	0.09-0.14	6.1-7.3	.28
5-15	50-85	50-85	40-80	25-60	0.6-0.06	0.06-0.14	6.6-8.4	.24
0	100	95-100	70-95	40-65	0.6-2.0	0.08-0.17	5.6-7.6	.32
0	100	100	95-100	85-95	0.06-0.2	0.08-0.13	7.9-8.4	.32
<5	80-90	75-85	45-80	20-75	0.6-2.0	0.12-0.18	6.1-7.3	0.32
5-20	60-90	55-85	30-80	15-60	0.6-2.0	0.09-0.15	6.1-7.3	.28
0	95-100	90-100	75-95	60-80	0.6-2.0	0.17-0.22	6.1-7.3	.49
0	95-100	95-100	90-100	80-90	0.2-0.6	0.16-0.20	6.1-7.3	.43
0	95-100	95-100	70-100	55-90	0.6-0.06	0.12-0.20	7.4-8.4	.64
<2	100	95-100	80-100	75-95	0.2-0.6	0.18-0.20	6.1-7.3	.49
0	100	95-100	90-100	85-100	0.06-0.2	0.12-0.14	6.1-7.8	.28
0	100	90-100	90-100	80-100	<0.2	0.12-0.14	7.9-8.4	.28
<10	85-95	70-90	60-85	30-60	0.6-2.0	0.13-0.20	6.1-7.3	0.32
<15	65-90	60-85	55-80	20-60	0.6-2.0	0.10-0.18	6.1-7.3	.28
<20	55-80	55-70	50-65	20-55	0.06-0.2	0.08-0.14	7.4-8.4	.24
<5	90-100	85-100	70-90	40-80	0.6-2.0	0.18-0.20	6.1-7.8	.37
<5	65-100	70-95	70-90	70-90	0.6-0.06	0.14-0.17	6.1-7.8	.37
<10	75-100	70-95	65-90	45-85	0.06-0.2	0.11-0.16	7.9-8.4	.28
0	100	100	70-100	40-90	2.0-6.0 0.6-2.0	0.35-0.45 0.14-0.18	5.6-7.3 7.4-8.4	.43
<5	65-75	60-70	45-60	25-45	0.6-6.0	0.10-0.12	5.6-7.3	.24
<5	60-75	55-70	45-65	25-50	0.6-6.0	0.07-0.10	6.1-7.3	.28
<10	30-40	20-30	10-20	5-15	2.0-20.0	0.01-0.02	7.4-8.4	.17

(26)



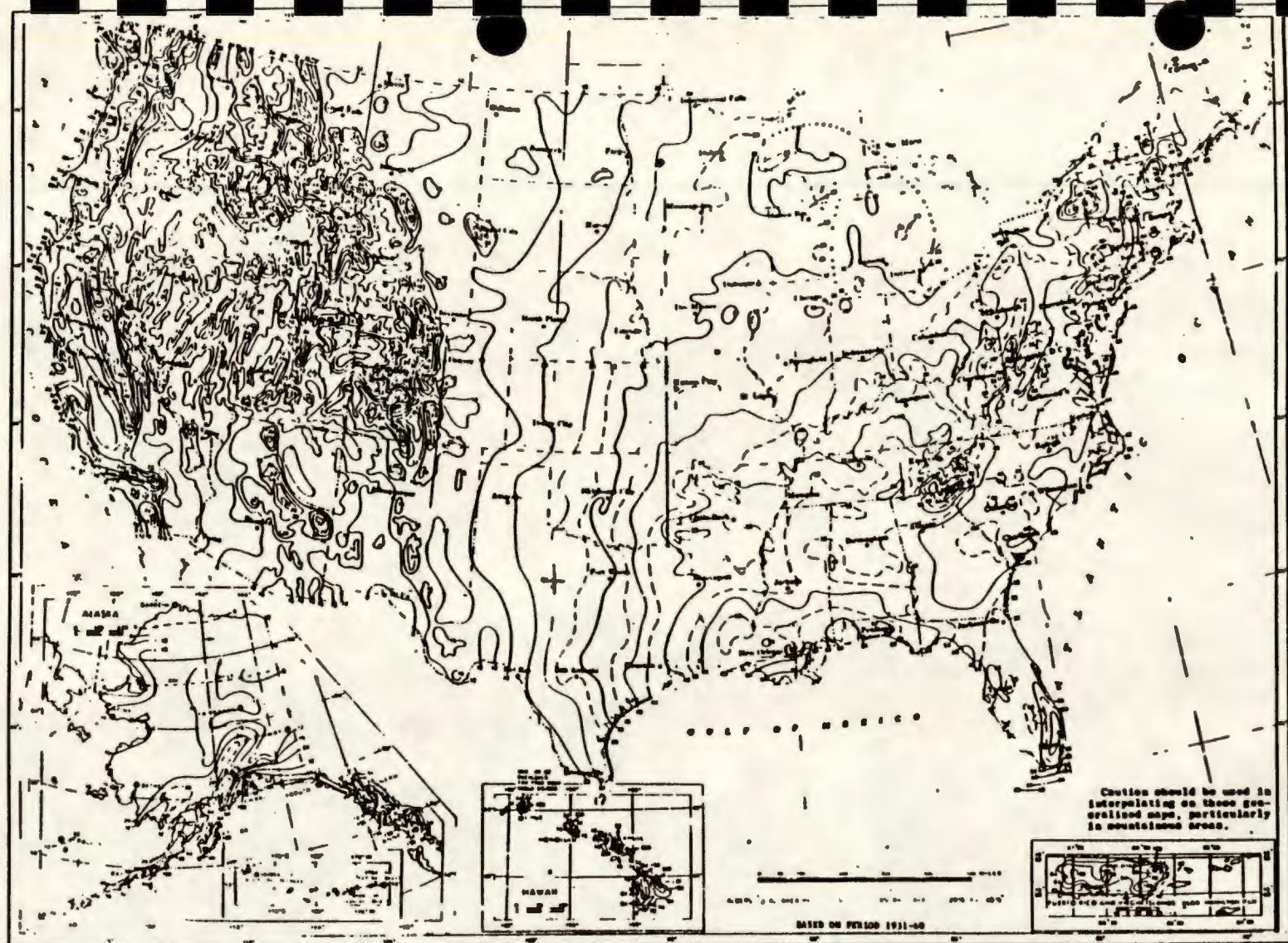
Source: Rainfall Frequency Atlas of the United States, Technical Paper No. 40, U.S. Department of Commerce,  
U.S. Government Printing Office, Washington, D.C., 1963.

Figure 8

1-Year 24-Hour Rainfall (Inches)

[Appendix A]

Pointed // water closure

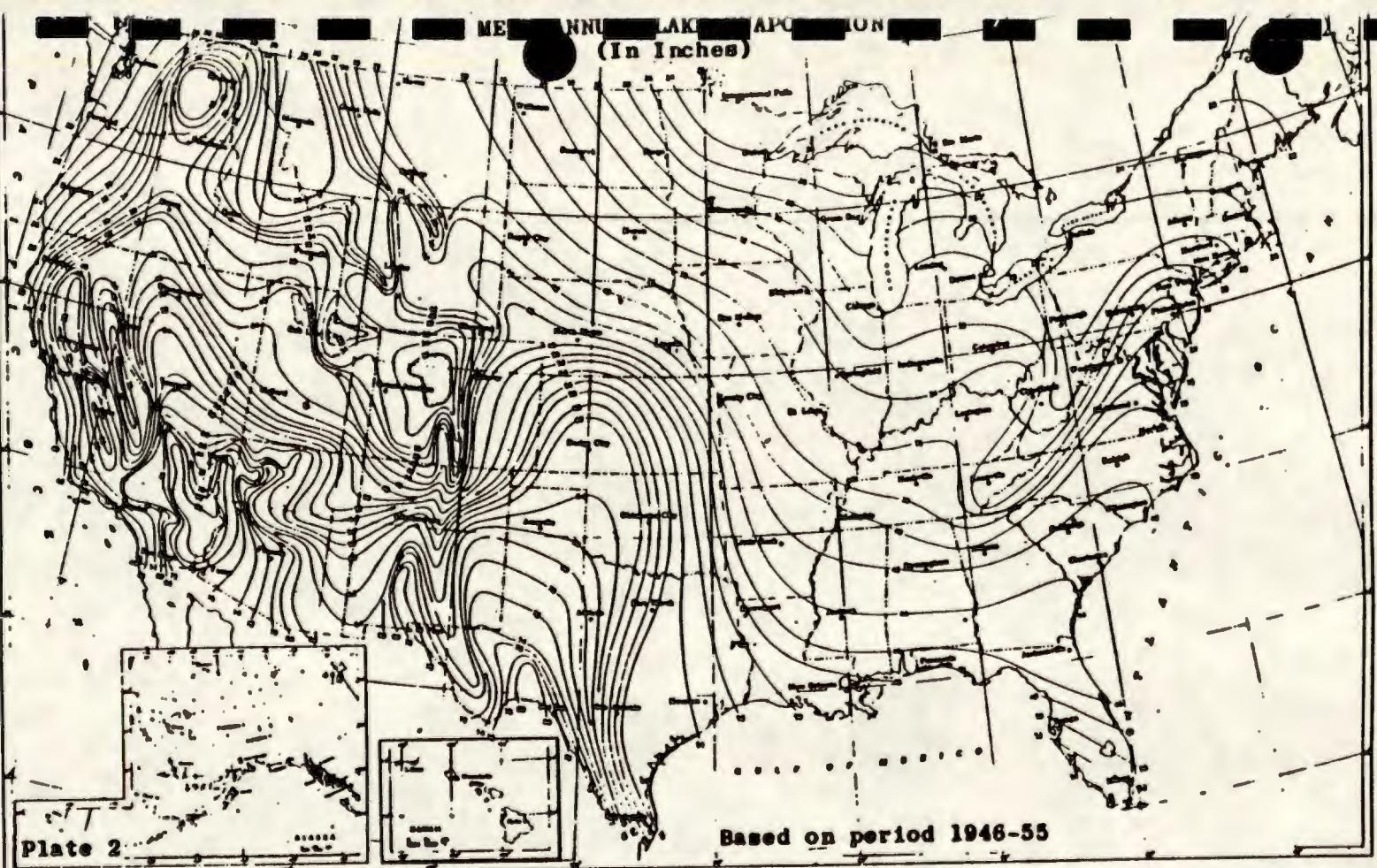


Source: Climatic Atlas of the United States, U.S. Department of Commerce, National Climatic Center, Asheville, N.C., 1979.

Figure 5  
Normal Annual Total Precipitation (inches)

BILLING CODE 6560-50-C

(21)

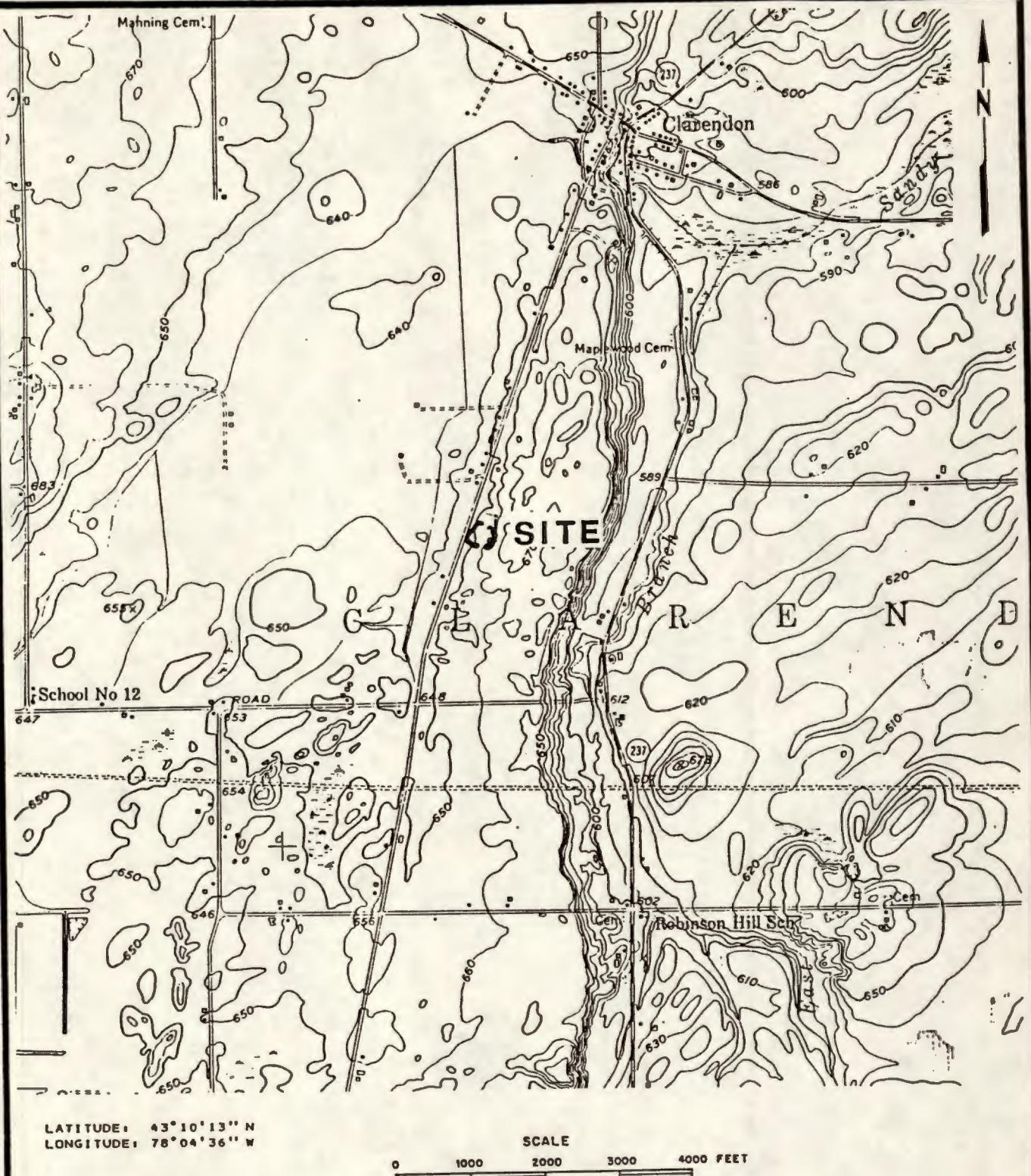


Source: Climatic Atlas of the United States, U.S. Department of Commerce, National Climatic Center, Asheville, N.C., 1979.

Figure 4

Mean Annual Lake Evaporation (In Inches)

21



REFERENCE: U.S.G.S. 7.5' Topographic Map  
Holley, NY (1950) Quadrangle

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

NEW YORK STATE DEPARTMENT  
OF ENVIRONMENTAL CONSERVATION  
PHASE I REPORT

SITE LOCATION MAP  
HAIGHT FARM

FIGURE V-1



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

I. IDENTIFICATION  
01 STATE NY 02 SITE NUMBER no EPA FF  
NY #837006

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)  
Haight Farm

02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER  
4879 Upper Holley Road

03 CITY

Town of Clarendon, Holley

04 STATE NY

05 ZIP CODE 14470

06 COUNTY Orleans

07 COUNTY CODE

08 CONG DIST

09 COORDINATES LATITUDE

43 10 41.

LONGITUDE

078 04 28.

10 DIRECTIONS TO SITE (Starting from nearest public road)

From the village of Clarendon in Orleans county, N.Y. Proceed south on Upper Holley Road to 4879 Upper Holley Road. (east side of road).

III. RESPONSIBLE PARTIES

01 OWNER (if known)

Earl Haight

02 STREET (Business, mailing, residential)

4879 Upper Holley Road

03 CITY

Town of Clarendon

04 STATE NY

05 ZIP CODE 14470

06 TELEPHONE NUMBER ( )

07 OPERATOR (if known and different from owner)

08 STREET (Business, mailing, residential)

09 CITY

10 STATE

11 ZIP CODE

12 TELEPHONE NUMBER

( )

13 TYPE OF OWNERSHIP (Check one)

A. PRIVATE  B. FEDERAL: \_\_\_\_\_ (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

BY (Check all that apply)

YES DATE 12/6/85  
 NO MONTH DAY YEAR

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)

03 YEARS OF OPERATION

A. ACTIVE  B. INACTIVE  C. UNKNOWN

~1960 1984

BEGINNING YEAR

ENDING YEAR

UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

43 barrels of "cutting oil" containing 0.7 to 1.5% TCE. When discovered, 30 barrels filled or partially filled, 13 barrels empty.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Groundwater contamination, Direct contact, surface water contamination.

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  
(Inspection time available desired)

D. NONE  
(No further action needed. Complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT

G.W. Christopher

02 OF (Agency, Organization)

Engineering Science, Inc.

03 TELEPHONE NUMBER

(315)457-9560

04 PERSON RESPONSIBLE FOR ASSESSMENT

L. Cordone

05 AGENCY

Engineering  
Science

06 ORGANIZATION

→

07 TELEPHONE NUMBER

(315)451-9560

08 DATE  
12/6/85  
MONTH DAY YEAR



**POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 2 - WASTE INFORMATION**

<b>I. IDENTIFICATION</b>	
01 STATE NY	02 SITE NUMBER no EPA #

## **II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS**

<b>01 PHYSICAL STATES</b> (Check all that apply)		<b>02 WASTE QUANTITY AT SITE</b> <i>(Measures of waste quantities must be independent)</i>	<b>03 WASTE CHARACTERISTICS</b> (Check all that apply)					
<input type="checkbox"/> A. SOLID	<input type="checkbox"/> E. SLURRY	TONS _____	<input checked="" type="checkbox"/> A. TOXIC	<input type="checkbox"/> E. SOLUBLE	<input type="checkbox"/> I. HIGHLY VOLATILE			
<input type="checkbox"/> B. POWDER, FINES	<input checked="" type="checkbox"/> F. LIQUID	CUBIC YARDS _____	<input type="checkbox"/> B. CORROSIVE	<input type="checkbox"/> F. INFECTIOUS	<input type="checkbox"/> J. EXPLOSIVE			
<input type="checkbox"/> C. SLUDGE	<input checked="" type="checkbox"/> G. GAS	NO. OF DRUMS _____	<input type="checkbox"/> C. RADIOACTIVE	<input type="checkbox"/> G. FLAMMABLE	<input type="checkbox"/> K. REACTIVE			
<input type="checkbox"/> D. OTHER _____ <i>(Specify)</i>		43	<input checked="" type="checkbox"/> D. PERSISTENT	<input type="checkbox"/> H. IGNITABLE	<input type="checkbox"/> L. INCOMPATIBLE	<input type="checkbox"/> M. NOT APPLICABLE		

### **III. WASTE TYPE**

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE	43	DR	cutting oil containing 0.7-1.5% TCE.
SOL	SOLVENTS			30 barrels filled/partially filled; 13 barrels empty.
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

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

#### V FEEDSTOCKS (See Appendix for CAS Numbers)

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

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

State files, sample analysis reports  
(NYSDEC), (NYSDOH Interoffice Memo; to: Dr. Nancy Kia, From: Mr. Tronontano; 1/4/85)  
(NYSDEC Memo; To: Commissioner Williams, From: Darryl Banks by W. Miner, 12/20/84)



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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	No EPA #

II. HAZARDOUS CONDITIONS AND INCIDENTS

01  A. GROUNDWATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: 836

02  OBSERVED (DATE: 12/15/84)

POTENTIAL

ALLEGED

04 NARRATIVE DESCRIPTION

Illegal attempt to move drums from the property of Earl Haight on the above date resulted in the spilling of 200 gallons of haz. liquid on the ground. Subsequent analyses of a downgradient private well showed the following TCE concentrations: 12/26/84 - 19 ug/l; 9/3/85 - 650 ug/l; 9/16/85 - 970 ug/l.

01  B. SURFACE WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: 0

02  OBSERVED (DATE: \_\_\_\_\_)

POTENTIAL

ALLEGED

04 NARRATIVE DESCRIPTION

not observed

01  C. CONTAMINATION OF AIR

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02  OBSERVED (DATE: 12/15/84)

POTENTIAL

ALLEGED

04 NARRATIVE DESCRIPTION

During above mentioned incident, authorities were called to the scene and two state troopers were overcome by fumes. Their cars were also splashed with the haz. liquid. Subsequent HMN readings indicated 5 ppm organic vapors above background at the site.

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: 12/15/84)

POTENTIAL

ALLEGED

04 NARRATIVE DESCRIPTION

see above

01  F. CONTAMINATION OF SOIL

03 AREA POTENTIALLY AFFECTED: 1 (Acres)

02  OBSERVED (DATE: 12/6/85)

POTENTIAL

ALLEGED

04 NARRATIVE DESCRIPTION

Haz. Liquid spilled on ground. During site visit discolored, oily soil was observed.

01  G. DRINKING WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: 836

02  OBSERVED (DATE: 12/12/84)

POTENTIAL

ALLEGED

04 NARRATIVE DESCRIPTION

In addition to the well contamination cited above, several other nearby wells showed levels of TCE and other organic compounds.

01  H. WORKER EXPOSURE/INJURY

03 WORKERS POTENTIALLY AFFECTED: \_\_\_\_\_

02  OBSERVED (DATE: 12/15/84)

POTENTIAL

ALLEGED

04 NARRATIVE DESCRIPTION

see above

01  I. POPULATION EXPOSURE/INJURY

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02  OBSERVED (DATE: \_\_\_\_\_)

POTENTIAL

ALLEGED

04 NARRATIVE DESCRIPTION



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE | 02 SITE NUMBER  
NY | no EPA #

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01  J. DAMAGE TO FLORA  
04 NARRATIVE DESCRIPTION

02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

not observed

01  K. DAMAGE TO FAUNA  
04 NARRATIVE DESCRIPTION (Include name(s) of species)

02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

not observed

01  L. CONTAMINATION OF FOOD CHAIN  
04 NARRATIVE DESCRIPTION

02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

not observed

01  M. UNSTABLE CONTAINMENT OF WASTES  
(Soils/runoff/standing aquatics/leaking drums)

02  OBSERVED (DATE: 12/15/84)  POTENTIAL  ALLEGED

03 POPULATION POTENTIALLY AFFECTED:

04 NARRATIVE DESCRIPTION

Drums were removed by a contracted haz. waste handler on 12/17/84.

01  N. DAMAGE TO OFFSITE PROPERTY  
04 NARRATIVE DESCRIPTION

02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

not observed

01  O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs

02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

04 NARRATIVE DESCRIPTION

no.

01  P. ILLEGAL/UNAUTHORIZED DUMPING  
04 NARRATIVE DESCRIPTION

02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

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

State files indicated that soil samples taken from the site may have contained ppm levels of PCB's. No PCB's were detected in the drum samples at the 80 mg/l level. High detection limit was due to TCE interference of PCB analysis.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 836 (estimated pop. using groundwater in 3 mile radius).

IV. COMMENTS

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

State files, sample analysis reports, Orleans County DOH.  
(NYSDEC memo to the Clarendon File from Robert Leary and Dennis Farrar, 12/10/84)  
(Hazardous Waste Manifest, 12/19/84) (NYSDEC memo from Paul Schmied to Frank Shattuck, 1/4/85)

POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT

## PART 1 - SITE LOCATION AND INSPECTION INFORMATION

## I. IDENTIFICATION

01 STATE    02 SITE NUMBER

NY    no EPA #

NYS # 837006

## II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER					
Haight Farm		4879 Upper Holley Road					
03 CITY		04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST	
Town of Clarendon		NY	14470	Orleans			
09 COORDINATES LATITUDE 43 10 41.		LONGITUDE 078 04 28.	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 12, 6, 85 MONTH DAY YEAR	02 SITE STATUS <input type="checkbox"/> ACTIVE <input checked="" type="checkbox"/> INACTIVE	03 YEARS OF OPERATION 21960    1984 BEGINNING YEAR    ENDING YEAR	UNKNOWN		
--	---	---	---------	--	--

## 04 AGENCY PERFORMING INSPECTION (Check all that apply)

<input type="checkbox"/> A. EPA	<input type="checkbox"/> B. EPA CONTRACTOR	<input type="checkbox"/> C. MUNICIPAL	<input type="checkbox"/> D. MUNICIPAL CONTRACTOR	(Name of firm)
<input type="checkbox"/> E. STATE	<input checked="" type="checkbox"/> F. STATE CONTRACTOR	Engineering Science, Inc.	<input type="checkbox"/> G. OTHER	(Name of firm)

05 CHIEF INSPECTOR James Baker	06 TITLE Geo. Baker	07 ORGANIZATION ES	08 TELEPHONE NO. (315)451-9560
09 OTHER INSPECTORS L. Cordone	10 TITLE Environmental Engineer	11 ORGANIZATION ES	12 TELEPHONE NO. (315)451-9560
Glen Bailey	Lawyer	NYSDEC	( )
			( )
			( )
			( )
			( )

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

17 ACCESS GAINED BY (Check one) <input checked="" type="checkbox"/> PERMISSION <input type="checkbox"/> WARRANT	18 TIME OF INSPECTION 1000 hrs	19 WEATHER CONDITIONS Slight Flurries
--	-----------------------------------	--

## IV. INFORMATION AVAILABLE FROM

01 CONTACT W. G. Christopher	02 OF (Agency/Organization) Engineering Science, Inc.	03 TELEPHONE NO. (315)451-9560		
04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM L. Cordone	05 AGENCY —	06 ORGANIZATION ES, Inc.	07 TELEPHONE NO. 315-451-9560	08 DATE 12, 6, 85 MONTH DAY YEAR



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

<b>I. IDENTIFICATION</b>	
<b>01 STATE</b> NY	<b>02 SITE NUMBER</b> no EPA# .

## **II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS**

01 PHYSICAL STATES (Check off that apply)		02 WASTE QUANTITY AT SITE <small>(Measures of waste quantities must be independent)</small>	03 WASTE CHARACTERISTICS (Check off that apply)		
<input type="checkbox"/> A. SOLID	<input type="checkbox"/> E. SLURRY	<input checked="" type="checkbox"/> TONS _____	<input checked="" type="checkbox"/> A. TOXIC	<input type="checkbox"/> E. SOLUBLE	<input type="checkbox"/> I. HIGHLY VOLATILE
<input type="checkbox"/> B. POWDER, FINES	<input checked="" type="checkbox"/> F. LIQUID	<input type="checkbox"/> C. SLUDGE	<input type="checkbox"/> B. CORROSIVE	<input type="checkbox"/> J. EXPLOSIVE	
<input type="checkbox"/> C. SLUDGE	<input type="checkbox"/> G. GAS	<input type="checkbox"/> D. OTHER _____ <small>(Specify)</small>	<input type="checkbox"/> C. RADIOACTIVE	<input type="checkbox"/> K. REACTIVE	
		<input type="checkbox"/> D. OTHER _____ <small>(Specify)</small>	<input checked="" type="checkbox"/> D. PERSISTENT	<input type="checkbox"/> G. FLAMMABLE	<input type="checkbox"/> L. INCOMPATIBLE
		<input type="checkbox"/> NO. OF DRUMS _____	<input type="checkbox"/> H. IGNITABLE	<input type="checkbox"/> M. NOT APPLICABLE	

### **III. WASTE TYPE**

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE	43	barrels	cutting oil with 0.7 - 6.5% TCE.
SOL	SOLVENTS			30 barrels were filled/partially filled
PSD	PESTICIDES			10 barrels were empty.
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

#### **IV. HAZARDOUS SUBSTANCES** (See Appendix for most frequently used CAS Numbers)

#### **V. FEEDSTOCKS** (See Appendix for CAS Numbers)

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

#### **VI. SOURCES OF INFORMATION** (Cite specific references, e.g., Sims (1982), etc.)

NYSDEC files (NYSDEC memo from Tromantano to Kim, 1/4/85), (NYSDEC memo from Banks to Williams, 12/20/84).



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS.

I. IDENTIFICATION

01 STATE NY  
02 SITE NUMBER no EPA #

II. HAZARDOUS CONDITIONS AND INCIDENTS

01  A. GROUNDWATER CONTAMINATION

02  OBSERVED (DATE: 12/15/84)

POTENTIAL

ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 836

04 NARRATIVE DESCRIPTION

Illegal attempt to remove drums from the property of Earl Haight resulted in the spilling of 200 gallons of haz. liquid on ground. Subsequent analyses of a downgradient well showed the following TCE concentrations on the dates given: 12/26/84 - 19 mg/l, 9/3/85 - 650 mg/l, 9/16/85 - 970 mg/l

01  B. SURFACE WATER CONTAMINATION

02  OBSERVED (DATE: )

POTENTIAL

ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 0

04 NARRATIVE DESCRIPTION

not observed

01  C. CONTAMINATION OF AIR

02  OBSERVED (DATE: )

POTENTIAL

ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

During the above mentioned incident authorities were called to the scene and two state troopers were overcome by fumes. Their cars were also splashed with haz. liquid. Subsequent HNU readings on site indicated 5 ppm Organic vapor above background.

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: 12/15/84)

POTENTIAL

ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

see above

01  F. CONTAMINATION OF SOIL

02  OBSERVED (DATE: 12/6/85)

POTENTIAL

ALLEGED

03 AREA POTENTIALLY AFFECTED: 1

(Acres)

04 NARRATIVE DESCRIPTION

Haz. liquid spilled on ground. Oily soil observed during E-S, Inc. site visit.

01  G. DRINKING WATER CONTAMINATION

02  OBSERVED (DATE: 12/15/84)

POTENTIAL

ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 835

04 NARRATIVE DESCRIPTION

In addition to the well contamination cited above, several nearby wells showed levels of TCE (predominantly) and other organic compounds. 835 people estimated to use groundwater as drinking water in a 3 mile radius. From the site (Shallow aquifer)

01  H. WORKER EXPOSURE/INJURY

02  OBSERVED (DATE: 12/15/84)

POTENTIAL

ALLEGED

03 WORKERS POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

see above

01  I. POPULATION EXPOSURE/INJURY

02  OBSERVED (DATE: )

POTENTIAL

ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE NY  
02 SITE NUMBER no EPA#

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01  J. DAMAGE TO FLORA  
04 NARRATIVE DESCRIPTION

02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

not observed

01  K. DAMAGE TO FAUNA  
04 NARRATIVE DESCRIPTION (Include name(s) of species)

02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

not observed

01  L. CONTAMINATION OF FOOD CHAIN  
04 NARRATIVE DESCRIPTION

02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

not observed

01  M. UNSTABLE CONTAINMENT OF WASTES  
(Soils/Runoff/Standing liquids, Leaking drums)

02  OBSERVED (DATE: 12/16/84)  POTENTIAL  ALLEGED

03 POPULATION POTENTIALLY AFFECTED:

04 NARRATIVE DESCRIPTION

Drums were removed by a contracted haz. waste hauler on 12/17/84.

01  N. DAMAGE TO OFFSITE PROPERTY  
04 NARRATIVE DESCRIPTION

02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

not observed

01  O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs  
04 NARRATIVE DESCRIPTION

02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

no

01  P. ILLEGAL/UNAUTHORIZED DUMPING  
04 NARRATIVE DESCRIPTION

02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

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

State files indicated that soil samples taken from the site may have contained ppm levels of PCB's. No PCB's were detected in the drum samples at a lower detectable limit of 80 mg/l. High LDL was due to TCE interference.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 836

IV. COMMENTS

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

NYSDEC Files, Laboratory reports, Orleans County DOH (NYSDEC memo from Miner to Williams, 12/11/84); (NYSDEC memo from Schmid to Shattuck, 1/4/85); (Haz. Waste ManiFest, 12/19/84); (Memo from NYSDEC Regional Engineer to Water Division, 12/17/84); (County of Orleans DOH letter to Yacano, 10/4/85)



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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	no EPA#

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
<input type="checkbox"/> A. NPDES				
<input type="checkbox"/> B. UIC				
<input type="checkbox"/> C. AIR				
<input type="checkbox"/> D. RCRA				
<input checked="" type="checkbox"/> E. RCRA INTERIM STATUS	NYPDUO 851253	12/19/84		30 day Provisional Iden. #
<input type="checkbox"/> F. SPCC PLAN				
<input type="checkbox"/> G. STATE (Specify)				
<input type="checkbox"/> H. LOCAL (Specify)				
<input type="checkbox"/> I. OTHER (Specify)				
<input type="checkbox"/> J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE	04 TREATMENT (Check all that apply)	05 OTHER
<input type="checkbox"/> A. SURFACE IMPOUNDMENT			<input type="checkbox"/> A. INCINERATION	
<input type="checkbox"/> B. PILES			<input type="checkbox"/> B. UNDERGROUND INJECTION	
<input checked="" type="checkbox"/> C. DRUMS, ABOVE GROUND	43	DR	<input type="checkbox"/> C. CHEMICAL/PHYSICAL	
<input type="checkbox"/> D. TANK, ABOVE GROUND			<input type="checkbox"/> D. BIOLOGICAL	
<input type="checkbox"/> E. TANK, BELOW GROUND			<input type="checkbox"/> E. WASTE OIL PROCESSING	
<input type="checkbox"/> F. LANDFILL			<input type="checkbox"/> F. SOLVENT RECOVERY	
<input type="checkbox"/> G. LANDFARM			<input type="checkbox"/> G. OTHER RECYCLING/RECOVERY	
<input type="checkbox"/> H. OPEN DUMP			<input type="checkbox"/> H. OTHER _____ (Specify)	
<input type="checkbox"/> I. OTHER _____ (Specify)				

07 COMMENTS

30 drums were filled or partially filled. 13 were empty (some crushed and corroded). Liquid contents of drums were pumped and hauled away by a NYSDEC approved/hired contractor.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)	<input type="checkbox"/> A. ADEQUATE, SECURE	<input type="checkbox"/> B. MODERATE	<input type="checkbox"/> C. INADEQUATE, POOR	<input checked="" type="checkbox"/> D. INSECURE, UNSOUND, DANGEROUS

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

No drums on site during visit. At time of removal, drums were allegedly in bad condition; some leaking, corroded, etc...

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE:  YES  NO  
02 COMMENTS

No fence on property.

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

NYSDEC Files, (Memo from Miner to Williams NYSDEC, 12/20/84);  
(Hazardous Waste Manifest, 12/19/84)



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

I. IDENTIFICATION	
01 STATE <b>NY</b>	02 SITE NUMBER <b>AO EPA #</b>

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)		02 STATUS			03 DISTANCE TO SITE		
		SURFACE	WELL	ENDANGERED	AFFECTED	MONITORED	
COMMUNITY		A. <input type="checkbox"/>	B. <input type="checkbox"/>	A. <input type="checkbox"/>	B. <input type="checkbox"/>	C. <input type="checkbox"/>	A. _____ (mi)
NON-COMMUNITY		C. <input type="checkbox"/>	D. <input checked="" type="checkbox"/>	D. <input checked="" type="checkbox"/>	E. <input checked="" type="checkbox"/>	F. <input checked="" type="checkbox"/>	B. <b>0.04</b> (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

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

02 POPULATION SERVED BY GROUND WATER 836 (3 mile radius)      03 DISTANCE TO NEAREST DRINKING WATER WELL 0.04 (mi)

04 DEPTH TO GROUNDWATER estimated <u>0-5</u> (ft)	05 DIRECTION OF GROUNDWATER FLOW <u>locally to the west</u>	06 DEPTH TO AQUIFER OF CONCERN (ft)	07 POTENTIAL YIELD OF AQUIFER (gpd)	08 SOLE SOURCE AQUIFER <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
---	--	---	---	---

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

5 private wells nearby. One downgradient well presently has levels > NYS regulations.  
Wells are believed to be in the shallow soil aquifer.

10 RECHARGE AREA

<input type="checkbox"/> YES	COMMENTS
<input type="checkbox"/> NO	

11 DISCHARGE AREA

<input type="checkbox"/> YES	COMMENTS
<input type="checkbox"/> NO	

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

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

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER - none within 3 miles

NAME:

AFFECTED      DISTANCE TO SITE

_____	_____ (mi)
_____	_____ (mi)
_____	_____ (mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE  
**A. 150**  
NO. OF PERSONS

TWO (2) MILES OF SITE  
**B. 684**  
NO. OF PERSONS

THREE (3) MILES OF SITE  
**C. \_\_\_\_\_**  
NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION

\_\_\_\_\_ (mi)

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

180

04 DISTANCE TO NEAREST OFF-SITE BUILDING

\_\_\_\_\_ (mi)

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

This is a rural area. There are approximately 8 or 9 residences on Upper Holley Rd. that are within viewing distance of the site. Generally, this is a sparsely populated area.



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

I. IDENTIFICATION

01 STATE NY 02 SITE NUMBER no EPA #

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

10-70 (ft)

04 DEPTH OF CONTAMINATED SOIL ZONE

0-20 (ft)

05 SOIL pH

06 NET PRECIPITATION

7 (in)

07 ONE YEAR 24 HOUR RAINFALL

2.1 (in)

08 SLOPE SITE SLOPE

3-5

DIRECTION OF SITE SLOPE

\* west; southwest

TERRAIN AVERAGE SLOPE

3-5 \*

09 FLOOD POTENTIAL

10

SITE IS IN \_\_\_\_\_ YEAR FLOODPLAIN

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

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE

QTHR

A. \_\_\_\_\_ (mi)

B. 0.64 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

> 1 (mi)

ENDANGERED SPECIES: \_\_\_\_\_

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL

RESIDENTIAL AREAS; NATIONAL/STATE PARKS,  
FORESTS, OR WILDLIFE RESERVES

AGRICULTURAL LANDS  
PRIME AG LAND      AG LAND

A. \_\_\_\_\_ (mi)

B. \_\_\_\_\_ (mi)

C. 0.04 (mi)      D. \_\_\_\_\_ (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Site is situated in a level area. Topography slopes gently to the west, southwest.

VII. SOURCES OF INFORMATION (See specific references, e.g., State Nos. sample analysis, reports)

NYSDEC files, conversations with soil conservationists, soil survey, (Soil Survey of Orleans County), (Orleans County DOH letter to Yacano, 10/4/85);



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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	no EPA #

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER		Groundwater samples taken by OCDOH	available
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL		taken by NYSDEC or OCDOH	unknown
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
HNu Meter	During site visit on 12/6/85 all readings were < 1 ppm in breathing zone up- and downgradient of site.

IV. PHOTOGRAPHS AND MAPS

01 TYPE <input checked="" type="checkbox"/> GROUND <input type="checkbox"/> AERIAL	02 IN CUSTODY OF <u>Engineering Science, Inc.</u> <small>Name of organization or individual</small>
03 MAPS <input type="checkbox"/> YES <input type="checkbox"/> NO	04 LOCATION OF MAPS <u>Engineering Science, Inc.</u>

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

Site map drawn showing disturbed area and approximate distances to nearby residences.

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

site visit conducted by ES on 12/6/85; NYSDEC files.



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

I. IDENTIFICATION	
01 STATE NY	02 SITE NUMBER 110 EPA #

II. CURRENT OWNER(S)			PARENT COMPANY (if applicable)			
01 NAME Earl Haight	02 D+B NUMBER	08 NAME	09 D+B NUMBER			
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 4879 Upper Holley Rd.	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE			
05 CITY Holley	06 STATE NY.	07 ZIP CODE 14470	12 CITY	13 STATE	14 ZIP CODE	
III. PREVIOUS OWNER(S) (List most recent first)			IV. REALTY OWNER(S) (if applicable; list most recent first)			
01 NAME	02 D+B NUMBER	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	
V. SOURCES OF INFORMATION (List specific references, e.g., state files, sample analysis, reports)						
NYSDEC files, site visit.						



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

I. IDENTIFICATION  
01 STATE | 02 SITE NUMBER  
NY | no EPA #

II. CURRENT OPERATOR (Provide # different from owner)			OPERATOR'S PARENT COMPANY (if applicable)		
01 NAME <i>inactive</i>	02 D+B NUMBER	10 NAME	11 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER				
III. PREVIOUS OPERATOR(S) (List most recent first; provide only # different from owner)			PREVIOUS OPERATORS' PARENT COMPANIES (if applicable)		
01 NAME <i>Earl Haight</i>	02 D+B NUMBER	10 NAME	11 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				
01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				
01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				

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



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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	no EPA #

II. ON-SITE GENERATOR

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

III. OFF-SITE GENERATOR(S)

01 NAME <i>Erdle Perforating Company</i>	02 D+B NUMBER	01 NAME	02 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.) <i>100 Pixley Industrial Parkway</i>	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		
05 CITY <i>Rochester</i>	06 STATE <i>NY</i>	07 ZIP CODE <i>14624</i>	05 CITY	06 STATE	07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

IV. TRANSPORTER(S)

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

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

NYSDEC files.

*(Letter from Bailey to Erdle Perforating Company, 9/25/85)*



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

L IDENTIFICATION  
01 STATE NY  
02 SITE NUMBER no EPA #

II. PAST RESPONSE ACTIVITIES

01  A. WATER SUPPLY CLOSED  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_  
03 AGENCY \_\_\_\_\_

01  B. TEMPORARY WATER SUPPLY PROVIDED  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_  
03 AGENCY \_\_\_\_\_

01  C. PERMANENT WATER SUPPLY PROVIDED  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_  
03 AGENCY \_\_\_\_\_

01  D. SPILLED MATERIAL REMOVED  
04 DESCRIPTION

02 DATE 12/19/84  
03 AGENCY \_\_\_\_\_

Drums and liquid removed by Frontier Chem. Waste of Niagara Falls, N.Y.

01  E. CONTAMINATED SOIL REMOVED  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_  
03 AGENCY \_\_\_\_\_

01  F. WASTE REPACKAGED  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_  
03 AGENCY \_\_\_\_\_

01  G. WASTE DISPOSED ELSEWHERE  
04 DESCRIPTION

Frontier Chem. Waste removed drums and liquid. Destination not indicated.

02 DATE 12/19/84  
03 AGENCY \_\_\_\_\_

01  H. ON SITE BURIAL  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_  
03 AGENCY \_\_\_\_\_

01  I. IN SITU CHEMICAL TREATMENT  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_  
03 AGENCY \_\_\_\_\_

01  J. IN SITU BIOLOGICAL TREATMENT  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_  
03 AGENCY \_\_\_\_\_

01  K. IN SITU PHYSICAL TREATMENT  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_  
03 AGENCY \_\_\_\_\_

01  L. ENCAPSULATION  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_  
03 AGENCY \_\_\_\_\_

01  M. EMERGENCY WASTE TREATMENT  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_  
03 AGENCY \_\_\_\_\_

01  N. CUTOFF WALLS  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_  
03 AGENCY \_\_\_\_\_

01  O. EMERGENCY DIKING/SURFACE WATER DIVERSION  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_  
03 AGENCY \_\_\_\_\_

01  P. CUTOFF TRENCHES/SUMP  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_  
03 AGENCY \_\_\_\_\_

01  Q. SUBSURFACE CUTOFF WALL  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_  
03 AGENCY \_\_\_\_\_



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

I. IDENTIFICATION	
01 STATE NY	02 SITE NUMBER no EPA#

II PAST RESPONSE ACTIVITIES (Continued)

01  R. BARRIER WALLS CONSTRUCTED  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

01  S. CAPPING/COVERING  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

01  T. BULK TANKAGE REPAIRED  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

01  U. GROUT CURTAIN CONSTRUCTED  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

01  V. BOTTOM SEALED  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

01  W. GAS CONTROL  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

01  X. FIRE CONTROL  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

01  Y. LEACHATE TREATMENT  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

01  Z. AREA EVACUATED  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

01  1. ACCESS TO SITE RESTRICTED  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

01  2. POPULATION RELOCATED  
04 DESCRIPTION

no

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

01  3. OTHER REMEDIAL ACTIVITIES  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

Nearby homeowners were identified. Activated carbon filter may have been installed in one of the highly contaminated residence wells.

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

NYSDEC Files, site visit.  
(NYSDEC letter to Yacano, 1985),



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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	no EPA #

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION  YES  NO

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

After discovery of barrels Mr. Haight was notified that he must clean the area. He did not respond immediately. NYSDEC hired a contractor to haul the waste. Litigations are in the making for action against both Mr. Haight and the Erdle Perforating Company (the alleged generator of the waste).

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

Glen Bailey - NYSDEC lawyer.

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 proposed 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:

Geophysical Survey - A geophysical study consisting of an electrical resistivity survey is recommended. The electrical resistivity survey will be performed at various locations within and beyond the perimeter of the site to investigate site stratigraphy, delineate significant discontinuities and assess the presence and location of contaminant plumes.

Groundwater - A groundwater monitoring system consisting of 4 wells screened in the shallow aquifer are recommended. Borings will be drilled to a maximum depth of 50 feet; soil samples will be taken every 5 feet or more frequently 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 HSL organics and metals. 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.

Surface Water and Sediment - A surface water and sediment monitoring system consisting of one upgradient and one downgradient monitoring station is recommended. The stations will be located on the north flowing ditch, located west of the site. The surface water and sediment samples will be analyzed for HSL organics and metals.

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

Surface Soil Samples - Two surface soil samples will be taken at the former drum storage area.

TASK DESCRIPTION

The proposed Phase II tasks are described in Table VI-2.

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.

TABLE VI-1  
ASSESSMENT OF ADEQUACY OF DATA

HRS Data Requirement	Comments on Data
<b>Observed Release</b>	
Groundwater	Adequate data to score an observed release
Surface Water	Insufficient data to score an observed release
Air	Inadequate data to score an observed release
<b>Route Characteristics</b>	
Groundwater	Adequate data to score
Surface Water	Adequate data to score
Air	Adequate data to score
Containment	Adequate data to score
<b>Waste Characteristics</b>	
	Insufficient data - priority pollutant scan needed to identify all contaminants
Targets	Adequate data to score
Observed Incident	Adequate data to score
Accessibility	Adequate data to score

TABLE VI-2  
PHASE II WORK PLAN - TASK DESCRIPTION  
HAIGHT FARM SITE

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	Conduct resistivity survey.
II-C Conduct Boring/Install Monitoring Wells	Install 1 upgradient and 3 down-gradient wells screened in the shallow aquifer. The borings will be drilled to a maximum depth of approximately 50 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	No further studies necessary.
Soil samples from surface soils	A total of two surface soil samples will be collected at the former drum storage area.
Soil samples from auger holes/test pits	No further studies necessary.
Sediment samples from surface water	2 sediment samples are to be collected and analyzed for HSL organics and metals.
Groundwater samples	4 groundwater samples are to be collected and analyzed for HSL organics and metals.
Surface water samples	2 surface water samples are to be collected and analyzed for HSL organics and metals.

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

Tasks	Description of Task
Air samples	Using the HNu determine the presence of organics.
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.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
PHASE II INVESTIGATION  
COST ESTIMATE

SITE ID #: 837006  
SITE NAME: HAIGHT FARMS  
CONSULTANT: ENGINEERING SCIENCE

TABLE VI-3

TASK DESCRIPTION	ESTIMATED HOURS OF DIRECT TECHNICAL LABOR (DTL)										TOTAL	
	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	HOURS	COST
II-A UPDATE WORKPLAN	4	24	4	12	4	72	32	40	24	52	268	3801.20
II-B CONDUCT GEOPHYSICAL STUDIES	2	2				40		80	6	6	136	1790.40
II-C CONDUCT BORING/INSTALL MONITORING WELLS	4	4					80		8	10	12	1461.20
II-D CONSTRUCT TEST PITS/AUGER HOLES											0	0.00
II-E SAMPLING AND ANALYSIS											0	0.00
Soil samples from borings											0	0.00
Soil samples from surface soils		2					8		8		18	267.20
Soil samples from auger holes/test pits											0	0.00
Sediment samples from surface water		2					8		8		18	267.20
Groundwater samples		2					32		32		66	917.60
Surface water samples		2					8		8		18	267.20
Air samples											0	0.00
Waste samples											0	0.00
II-F CALCULATE FINAL HRS SCORE	8	16	4	2	8	48	40	16	8	8	158	2528.20
II-G CONDUCT SITE ASSESSMENT	2	40	4		8	72	40	8	60	100	334	4450.00
II-H PROJECT MANAGEMENT	4	30	4		16					48	102	1662.40
TOTAL HOURS	24	124	16	14	36	288	192	200	106	224		
HOURLY RATE \$	33.40	25.20	22.00	19.70	17.00	15.10	13.30	12.00	9.60	8.60		
DIRECT LABOR COSTS \$	801.60	3124.80	352.00	275.80	612.00	4348.80	2553.60	2400.00	1017.60	1926.40		
2/7/86											TOTAL DTL COSTS	17412.60
											INDIRECT LABOR COSTS	20546.87
											TOTAL LABOR COSTS	37959.47
											PROFIT (15%)	5693.92
											TOTAL PRICE	43653.39

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
PHASE II INVESTIGATION  
COST ESTIMATE

SITE ID #: 837006  
SITE NAME: HAIGHT FARMS  
CONSULTANT: ENGINEERING SCIENCE

TABLE VI-4

TASK DESCRIPTION	DIRECT HOURS	LABOR COST (\$)	SUBCONTR. COSTS \$	SUPP. & EQUIP. \$	MISC. \$	TRAVEL & PER DIEM \$	TOTALS \$
II-A UPDATE WORKPLAN	268	3801		360	210	350	4721.20
II-B CONDUCT GEOPHYSICAL STUDIES	136	1790		750	50	910	3500.00
II-C CONDUCT BORING/INSTALL MONITORING WELLS	12	1461	19000	1800	100	210	22571.20
II-D CONSTRUCT TEST PITS/AUGER HOLES							0.00
II-E SAMPLING AND ANALYSIS			18000	500	50	850	19400.00
Soil samples from borings							0.00
Soil samples from surface soils	18	267					267.20
Soil samples from test pits/auger holes							0.00
Sediment samples from surface water	18	267					267.00
Groundwater samples	66	918					917.60
Surface water samples	18	267					267.20
Air samples							0.00
Waste samples							0.00
II-F CALCULATE FINAL HRS SCORE	158	2528		50	75		2653.00
II-G CONDUCT SITE ASSESSMENT	334	4450		750	1000	165	6365.00
II-H PROJECT MANAGEMENT	102	1662		400	150		2212.00
SUBTOTAL	1130	17411.40	37000.00	4610.00	1635.00	2485.00	
INDIRECT LABOR (118% DTL)		20545.45					
PROFIT (%)		15	5	5	5	0	
PROFIT (\$)		5693.53	1850.00	230.50	81.75		
TOTAL COSTS (\$)		43650.38	38850.00	4840.50	1716.75	2485.00	91542.63

2/7/86

AGRICULTURAL AREA

YACONO  
PROPERTY

AGRICULTURAL  
AREA



UPPER HOLLEY ROAD /

PERRY  
PROPERTY

EARL  
HAIGHT

MW-2

MW-3

VANWYNGAARDEN  
PROPERTY

UNDERWOOD  
PROPERTY



APPLEGATE  
PROPERTY

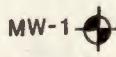


SS-1  
DRUM  
STORAGE  
AREA  
SS-2

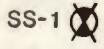
MW-1

WOODED AREA

NOT TO SCALE



PROPOSED GROUNDWATER MONITORING WELL LOCATION



PROPOSED SURFACE SOIL SAMPLING LOCATION

NOTE:

PROPOSED SURFACE WATER SAMPLING LOCATIONS SHOWN ON  
FIGURE IV-1 (UNNAMED TRIBUTARY TO SANDY CREEK)

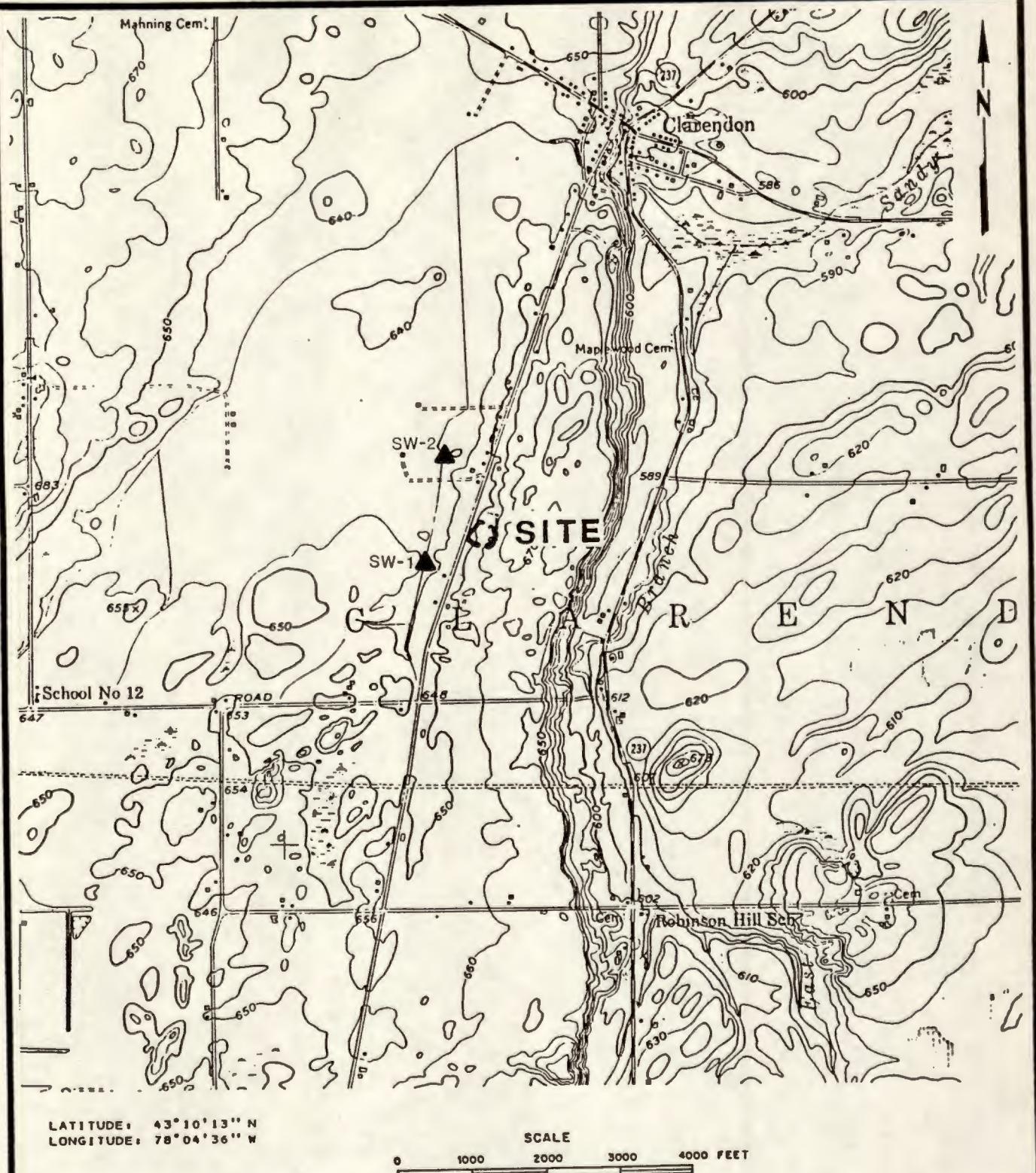
ENGINEERING-SCIENCE, INC.  
IN ASSOCIATION WITH  
DAMES & MOORE

NEW YORK STATE DEPARTMENT  
OF ENVIRONMENTAL CONSERVATION

PHASE I REPORT

PROPOSED MONITORING LOCATIONS  
HAIGHT FARM

FIGURE VI-1



**SW-1** ▲ PROPOSED SURFACE WATER  
SAMPLING POINT (UNNAMED  
TRIBUTARY TO SANDY CREEK)

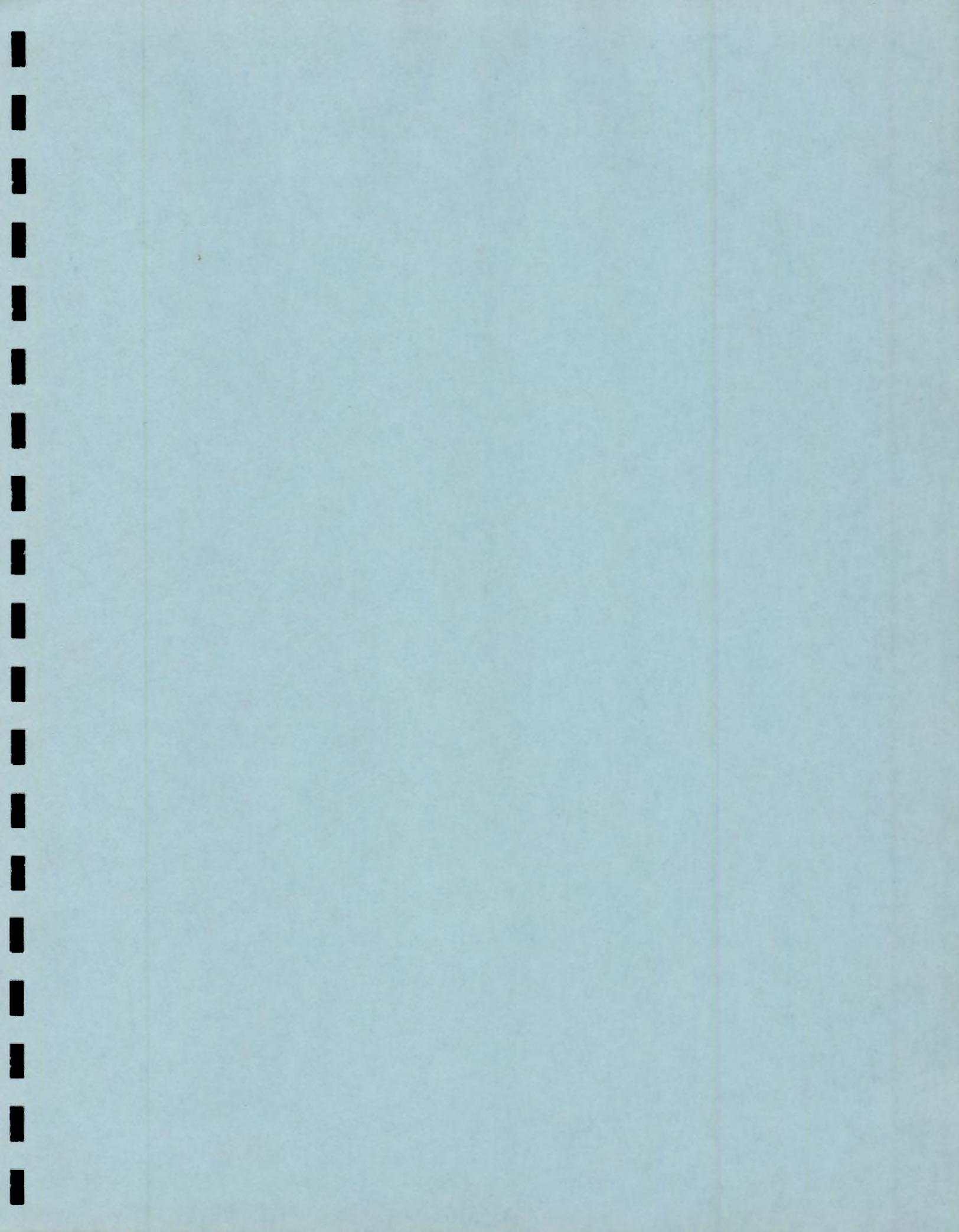
REFERENCE: U.S.G.S. 7.5' Topographic Map  
Holley, NY (1950) Quadrangle

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

NEW YORK STATE DEPARTMENT  
OF ENVIRONMENTAL CONSERVATION  
PHASE I REPORT

PROPOSED MONITORING LOCATIONS  
HAIGHT FARM

FIGURE VI-2



**APPENDIX A  
REFERENCES**

**Sources Contacted  
Documentation**

SOURCES CONTACTED SUMMARY SHEET

Person Contacted/ Location	Telephone #	Date	Information Collected
Mel Hauptman USEPA - Region II OERR, Room 402 26 Federal Plaza New York, NY 10278	212-264-7681	12/31/85	EPA Identification Number.
Bob Hannaford NYSDEC - Division of Water 50 Wolf Road Albany, NY 12233	518-457-6716	11/22/85	Reviewed SPDES Permit Index to see if any permits were issued to site.
Frank Estabrook NYSDEC - Division of Monitoring & Assessment 50 Wolf Road Albany, NY 12233	518-457-2672	11/22/85	Reviewed surface water monitoring locations to see if any were close to site.
Kevin Walters NYSDEC - Division of Environmental Enforcement 50 Wolf Road Albany, NY 12233	518-457-4346	11/22/85	Determined that no legal action was presently occurring at site.
John Ozard NYSDEC - Division of Fish & Wildlife Delmar, NY 12054	518-439-7486	12/16/85	Collected general information concerning critical habitats of threatened or endangered species.
Fred Gilbert NYS Soil Conservation Office J. M. Hanley Federal Bldg. Syracuse, NY 13221	315-423-5510	11/23/85	County soil survey was forwarded.
Maninohan Mehta NYSDEC - Division of Solid & Haz. Waste P.O. Box 57 Avon, NY	716-226-2466	11/22/85	Collected general information from site files.
Pat Marshall Roger Waller Rich Renalds US Geological Survey 343 US P.O. & Courthouse Albany, NY 12201 NYSDEC 8:20	518-472-2815 518-472-2825 518-472-2824	12/16/85 12/18/85 12/18/85	Collected and reviewed geological information.

SOURCES CONTACTED SUMMARY SHEET

Person Contacted/ Location	Telephone #	Date	Information Collected
Vince Dick NYSDEC - Division of Monitoring & Assessment P.O. Box 57 Avon, NY	716-226-2466	12/17/85	Collected and reviewed additional geological information.
Peter Bush NYSDEC - Division of Environmental Enforcement P.O. Box 57 Avon, NY	716-226-2466	11/22/85	Reviewed list of sites to determine if legal action has occurred in the past, is in progress, and/or scheduled in the near future.
Bill Tompkins Dept. of Soil Conservation - Orleans County 401 West Ave. Albion, NY 14411	716-589-5959	12/12/85	Collected information on sensitive environments and agricultural lands near the site.
Nate Herendeen Orleans County Cooperative Extension Albion, NY 14411	716-433-2651	12/18/85	Provided information on irrigation practices in the Clarendon area.
David Turkow Orleans County DOH Albion, NY 14411	716-589-7004	11/27/85	Provided information concerning water use in the site area.
Glen Bailey NYSDEC - Region 9 Attorney 600 Delaware Ave. Buffalo, NY 14202	716-847-4582	12/6/85	Provided information concerning any litigation in progress that may involve the site.

REFERENCES\*

23. Bailey, Glen, NYSDEC, Letter to Mr. Earl Haight, 9/25/85.
24. Bailey, Glen, NYSDEC, Letter to the Erdle Perforating Company, 9/25/85.
25. LaSala, "Groundwater Resources of the Erie-Niagara Basin", New York, 1968.
26. NYSDEC, Memo Regarding "Ambient Water Quality Standards and Guidance Values", (Originator - John Zambrano), 7/24/85.
27. NYSDEC, Hazardous Waste Manifest, Filed by Frontier Chemical Waste, 4626 Royal Ave., Niagara Falls, NY, 12/19/84.
28. NYS Museum and Science Service Quaternary Geology Map, Niagara Sheet, 1977.

\*Does not include "HRS References" which are provided directly after the HRS Documentation Records in Section V.

For Ref.

~~Former~~ Shallowell

(23)

Seiffer

600 Delaware Avenue, Buffalo, New York 14202-1073

10

10/22

~~Yanki Joseph~~

#1 Sister

#1 Narr.

Dear Sirs:  
I am here acting as  
acting for Oct 25 C

September 25, 1985

10 AM in the

Office

Mr. Gary Knight  
4075 Upper Falls Road  
Buffalo, NY 14217

Dear Mr. Knight:

In December of 1984, this Department had thirty drums of chlorinated solvents and additional empty drums removed from your property in order to protect the public health and the environment. Laboratory analysis of the chlorinated solvents confirmed that the material in the drums consisted of percentage levels of trichloroethylene. Waste trichloroethylene is a listed hazardous waste due to its recognized toxicity and trichloroethylene in the environment represents a significant threat to the public health and the environment. While agents and employees of the Department were on your property, they noted that the drums were in poor condition and there was evidence that spillage and leakage had occurred.

As a precautionary measure, and in an attempt to determine whether or not the spilled trichloroethylene on your property had contaminated the local groundwater, the Department of Health sampled the water supply wells used by the neighboring families. Two of those wells did show some low levels of trichloroethylene contamination. Subsequent re-analysis of wells has shown an increasing level of this contamination. It therefore appears that a plume of contamination is migrating from your property.

Under the circumstances, it is imperative that a remedial program be developed and implemented to address the contamination caused by the trichloroethylene which was stored on your property. This letter is to demand that you develop and implement such a program subject to the prior approval of the Department. Under the provisions of 27-1313 of the Environmental Conservation Law, this Department may issue an Order requiring such a program from owners and/or other persons responsible.

Please consult with your homeowner's insurance carrier and/or your attorney and contact the undersigned at (716) 847-4581 to expedite this matter. A duplicate copy of this letter is inclosed for your convenience for this purpose. A similar letter is also being sent to Erdie Perforating Company, the original generator of the wastes. If I have not heard from you by Wednesday, October 9, 1985, an Order and Notice of Hearing on this matter will be issued. I hope that cooperative settlement can be achieved as soon as possible.

Sincerely,

*John R. Bailey*  
John R. Bailey  
Senior Attorney  
Division of Environmental  
Enforcement

GRB:jb

cc: Norman Wosencruck  
David King  
John Greenthal  
Eric Seifert  
Ronald Tramontano

RECEIVED

SEP 25 1985

THIS LETTER PRESENTS THE INITIATION OF A CLAIM WHICH MAY BE  
HANDLED BY YOUR HOMEOWNER'S INSURANCE. PLEASE DELIVER A COPY  
OF THIS LETTER TO YOUR CARRIER OR AGENT.

24

600 Delaware Avenue, Buffalo, New York 14202-1073

September 25, 1985

Brdle Perforating Company  
190 Pixley Industrial Parkway  
Rochester, New York 14624

Re: Contamination from Hazardous wastes

Dear Sir:

In December of 1984, this Department had thirty drums of chlorinated solvents and additional empty drums removed from the property of Earl Haught at 4879 Upper Holley Road in Holley, New York. This removal action was undertaken in order to protect the public health and the environment. Laboratory analysis of the chlorinated solvents confirmed that the material in the drums consisted of percentage levels of trichloroethylene. Waste trichloroethylene is a listed hazardous waste due to its recognized toxicity and trichloroethylene in the environment represents a significant threat to the public health and the environment. While agents and employees of the Department were undertaking this removal action, they noted that the drums were in poor condition and there was evidence that spillage and leakage had occurred.

As a precautionary measure, and in an attempt to determine whether or not the spilled trichloroethylene has contaminated the local groundwater, the Department of Health sampled the water supply wells used by the neighboring families. Two of those wells did show some low level of trichloroethylene contamination. Subsequent re-analysis of wells has shown an increasing level of this contamination. It therefore appears that a plume of contamination is migrating from the hazardous waste disposal site.

In tracing the source of the wastes in question the Department has determined that the wastes were generated by your company. Approximately fifteen years ago your company asked Mr. Haught to take these wastes during a transition period between other disposal arrangements. Under the laws of this State, your company may be held liable for damages and expenses resulting from wastes which you have generated.

-2-

Given the circumstances showing groundwater contamination, it is imperative that a remedial program be developed and implemented to address the contamination caused by this trichloroethylene. This letter is to demand that you develop and implement such a program subject to the prior approval of the Department. Under the provisions of 27-1313 of the Environmental Conservation Law, this Department may issue an order requiring such a program from owners and/or other persons responsible.

Please consult with your insurance carrier and/or your attorney and contact me undersigned at (716) 667-4632 to expedite this matter. A duplicate copy of this letter is inclosed for your convenience for this purpose. A similar letter is also being sent to Earl Baight, the owner of the property involved. If I have not heard from you by Wednesday, October 9, 1985, an Order and Notice of Hearing on this matter will be issued. I hope that cooperative settlement can be achieved as soon as possible.

Sincerely,

Glen R. Bailey  
Senior Attorney  
Division of Environmental  
Enforcement

D'EIC REC'D #9  
2010 N.Y.V.L.  
OCT 12 1985

GRB:jb

cc: Norman Rosencnuck  
David King  
John Greenthal  
Eric Seiffer  
Ronald Tramontano

RECEIVED

SEP 25 1985

NYC DEPT. OF ENVIRONMENTAL  
COMMISSIONER - RECORDS &  
REGULATIONS DIRECTOR

# Erie-Niagara Basin

## Ground-Water Resources

ERIE-NIAGARA BASIN REGIONAL WATER  
RESOURCES PLANNING BOARD

The water-bearing properties of the soluble rocks developed to a large degree in response to the composition of the rocks (lithology) and the primary sedimentary structures (bedding). The soluble rocks are composed of dense materials that are innately not water bearing. These rocks transmit water only through fractures and solution openings. The nature of the water-bearing openings can be studied both from exposures of the rocks and from data on wells. How good any unit is as a source of water can be judged from records of wells. All of these hydrologic properties and characteristics for each rock unit will be discussed in the following sections.

### LOCKPORT DOLOMITE

#### Bedding and lithology

The lowest aquifer, the Lockport Dolomite, consists mainly of gray, fine- to coarse-grained dolomite. The Gasport Limestone Member near the base of the formation is a light-gray limestone. The thickness of the Lockport is approximately 150 feet. A general summary of the lithology and thickness of the lithologic units is given in figure 5.

The rock units within the Lockport are bedded and dip southward in study area at 35 to 40 feet per mile. In the extensive exposures Johnston (1964, p. 22) observed in excavations for the Niagara Power Project at Niagara Falls, the beds ranged generally from 1 inch to 3 feet in thickness. In some zones, beds were only 1/4 inch thick. On the other hand, a few massive beds are as much as 8 feet thick at places. The beds thicken and thin laterally. Approximate positions of some fairly persistent zones of massive and thin beds are shown in figure 5 by the widths of the bands of lithologic symbols. The bedding planes are flat except at the few places where they curve over ancient reefs in the upper part of the formation. These reefs are massive (nonbedded) structures as much as 50 feet across and 20 feet thick. Nodules of gypsum 1/2 to 5 inches across are common in the dolomite. Particles composed of the sulfide minerals of zinc, lead, and iron are disseminated through the rock.

#### Water-bearing openings

With respect to water-bearing openings in the Lockport Dolomite near Niagara Falls, Johnston's (1964) report may be considered a type study for rocks of this sort. Johnston found that bedding-plane joints are the principal water-bearing openings in the Lockport. Vertical joints and voids from which gypsum nodules were dissolved are minor water-bearing openings.

Water-bearing bedding-plane joints can occur at any stratigraphic horizon in the Lockport Dolomite. However, those that are persistent commonly occur in zones of thin beds overlain by thick or massive beds. Johnston identified seven persistent water-bearing joints or zones (several closely spaced joints) in the Niagara Falls area. (His findings are summarized in figure 5.) These joints are continuous for some miles, but they are not wa-

Many domestic-supply wells penetrate from 1 foot to a few feet into the soluble rocks and produce small but adequate yields. On the other hand, industrial wells that were intended to produce large supplies of water give a truer picture of the water-supply potential of the rocks. Data on industrial wells show that the Camillus Shale will yield as much as 1,200 gpm and the limestone unit as much as 300 gpm and probably more. But the data also show that the rocks produce low yields at places. This is shown by such wells as 301-848-1 which was drilled to obtain a large supply for an industry but which yielded only 30 gpm. The water-bearing zones obviously are unevenly distributed through the rocks. Factors that control the occurrence of the water-bearing zones cannot be evaluated at the present time to the extent necessary to predict exactly where the zones occur.

The Lockport Dolomite is the least productive unit of the soluble rocks. Within the Erie-Niagara basin yields of wells in the Lockport range from about 4 to 90 gpm. Depth of the wells range from 20 to 70 feet. Most of the deeper wells were drilled where the depth to bedrock is greatest. Domestic-supply wells generally are finished in the fracture zone at the rock surface or in a bedding joint within the upper most 30 feet of the rock. It is usually not necessary to drill deeper into the Lockport if only a small supply is needed.

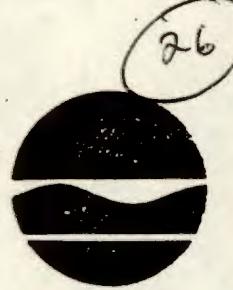
Drilling deeper in an attempt to intersect additional bedding-plane openings at depth would provide higher yields but, generally, at the expense of lower water levels and therefore higher pump lifts. Johnston (1964) collected data on a much larger number of wells along the outcrop belt of the Lockport Dolomite than were inventoried in the Erie-Niagara basin. He found that wells drawing water from the lower 40 feet of the Lockport (the northern part of the outcrop area) yield from 1/2 to 20 gpm and have an average yield of 7 gpm. Wells finished in the upper part of the Lockport (the southern part of the outcrop area) yield from 2 to 110 gpm and have an average yield of 31 gpm. Yields of as much as 50 or 100 gpm are possible from the Lockport in the Erie-Niagara basin but would be exceptional.

### CAMILLUS SHALE

#### Bedding and lithology

The Camillus Shale lies above the Lockport Dolomite and crops out to the south of where the dolomite is exposed. Exposures of the Camillus Shale are rare in the Erie-Niagara basin because of the low relief of outcrop area and the cover of glacial deposits. Geologists who have studied the Camillus in the study basin agree that it consists mostly of gray shale. (For example, see Buehler and Tesmer, 1963, p. 29-30.) Subsurface data, on the other hand, indicate that a considerable amount of gray limestone and dolomite is interbedded with the shale. Along with these carbonates, gypsum comprises a significant part of the Camillus Shale. Some of the gypsum beds are as much as 5 feet thick. Gypsum also occurs in the Camillus as thin lenses and veins. Table 1,

New York State Department of Environmental Conservation  
50 Wolf Road, Albany, New York 12233-0001



Henry G. Williams  
Commissioner

July 24, 1985

MEMORANDUM

TO: Bureau Directors, Regional Water Engineers, Section Chiefs  
SUBJECT: Division of Water Technical and Operational Guidance Series  
(85-W-38)  
  
Ambient Water Quality Standards and Guidance Values  
(Originator: John Zambrano)

I. Purpose

The purpose of this document is to provide a compilation of water quality standards and guidance values for toxic and non-conventional pollutants to be used in the Department's regulatory programs, including the SPDES permit program.

II. Discussion

This substantial revision of TOGS 85-W-38 is the result of the promulgation of amendments to 6 NYCRR Part 701-702, effective on August 2, 1985, governing the development and use of surface water quality standards and guidance values. This revision uses a new format in the tabulation and does not include the methodologies for the development of standards and guidance values. The user is referred to the regulations for a description of the methodologies.

III. Guidance

The Quality Evaluation Section will use the attached list in developing SPDES permit water quality-based effluent limits. The Criteria and Standards Section will maintain and revise the list on a regular basis.

*Daniel M. Barolo, P.E.*  
for Daniel M. Barolo, P.E.  
Director  
Division of Water

Attachments

cc: Dr. Banks  
Mr. Pagano  
Mr. Mt. Pleasant  
Regional Engineers for Environmental Quality  
Ms. Chrimes

## NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

Date of Revision: July 24, 1985

(26)

SUBSTANCE (CAS NO.)	WATER CLASSES	MICROGRAMS/LITER			TYPE	NOTES
		STANDARD	GUIDANCE VALUES			
Cadmium (7440-43-9)	A, A-S, AA, AA-S	10			H	Q
	GA	10			H	S
	A, A-S, AA, AA-S, B, C	*			A	I
	D	**			A	H
	SA, SB, SC		2.7		A	M
	I		2.7		A	M
	SD		2.7		A	M
Remarks: * $\exp(0.7852 [\ln (\text{ppm hardness})] - 3.490)$ ** $\exp(1.128 [\ln (\text{ppm hardness})] - 3.828)$ All standards and values except Human apply to acid-soluble form.						
§ Captan (133-06-2)	A, A-S, AA, AA-S				H	
	GA	17.5			H	S
	A, A-S, AA, AA-S, B, C				A	
	D				A	
	SA, SB, SC				A	
	I				A	
	SD				A	
§ Carbaryl (63-25-2)	A, A-S, AA, AA-S				H	
	GA	28.7			H	S
	A, A-S, AA, AA-S, B, C				A	
	D				A	
	SA, SB, SC				A	
	I				A	
	SD				A	
§ Carbofuran (1563-66-2)	A, A-S, AA, AA-S	15			H	B
	GA		15		H	B
	A, A-S, AA, AA-S, B, C	1.0			A	J
	D	10			A	K
	SA, SB, SC				A	
	I				A	
	SD				A	
✓ § Carbon tetra-chloride (56-23-5)	A, A-S, AA, AA-S		0.4		H	A
	GA	5			H	S
	A, A-S, AA, AA-S, B, C				A	
	D				A	
	SA, SB, SC				A	
	I				A	
	SD				A	
§ Chlordane (57-74-9)	A, A-S, AA, AA-S		0.02		H	A
	GA	0.1			H	S
	A, A-S, AA, AA-S, B, C		0.002		A	M
	D		0.002		A	M
	SA, SB, SC		0.002		A	M
	I		0.002		A	M
	SD		0.002		A	M

## NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

26

Date of Revision: July 24, 1985

SUBSTANCE (CAS NO.)	WATER CLASSES	MICROGRAMS/LITER		
		STANDARD	GUIDANCE VALUES	TYPE
<sup>§</sup> Azinphosmethyl (86-50-0)	A, A-S, AA, AA-S		0.07	H
	GA	4.4		H S
	A, A-S, AA, AA-S, B, C	0.005		A J
	D			A
	SA, SB, SC	0.01		A J
	I		0.01	A J
<sup>§</sup> Azobenzene (103-33-3)	SD			A
	A, A-S, AA, AA-S		0.5	H
	GA		0.5	H A
	A, A-S, AA, AA-S, B, C			A
	D			A
	SA, SB, SC			A
Barium (7440-39-3)	I			A
	SD			A
	A, A-S, AA, AA-S	1,000		H Q
	GA	1,000		H S
	A, A-S, AA, AA-S, B, C			A
	D			A
<sup>§</sup> Benefin (1861-40-1)	SA, SB, SC			A
	I			A
	SD			A
	A, A-S, AA, AA-S		35.0	H S
	GA			A
	A, A-S, AA, AA-S, B, C			A
<sup>§</sup> Benz(a)anthracene (56-55-3)	D			A
	SA, SB, SC			A
	I			A
	SD			A
	A, A-S, AA, AA-S	0.002		H D
	GA	0.002		H D
<sup>✓</sup> <sup>§</sup> Benzene (71-43-2)	A, A-S, AA, AA-S, B, C			A
	D			A
	SA, SB, SC			A
	I			A
	SD			A
	A, A-S, AA, AA-S	ND	1.0	H A S
<sup>§</sup> Benzidine (92-87-5)	GA			H A
	A, A-S, AA, AA-S, B, C	0.1	0.02	A H H
	D	0.1	0.02	A H
	SA, SB, SC			A H
	I			A H
	SD			A

Remarks: ND - Not Detectable

## NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

(26)

Date of Revision: July 24, 1985

SUBSTANCE (CAS NO.)	WATER CLASSES	MICROGRAMS/LITER			TYPE	NOTES
		STANDARD	GUIDANCE VALUES			
Chloride (Na)	A, A-S, AA, AA-S	250,000			H A A A A	R S I I
	GA		250,000			
	A, A-S, AA, AA-S, B, C					
	D					
	SA, SB, SC					
	I					
§ Chlorobenzene (108-90-7)	SD					
	A, A-S, AA, AA-S	20	20		H A A A A	C I L I L
	GA					
	A, A-S, AA, AA-S, B, C	5				
	D	50				
	SA, SB, SC		5			
✓ § Chloroform (67-66-3)	I		5			
	SD		50			
	A, A-S, AA, AA-S	0.2	100		H A A A A	A S
	GA					
	A, A-S, AA, AA-S, B, C					
	D					
§ 2-Chloronaphthalene (91-58-7)	SA, SB, SC					
	I					
	SD					
	A, A-S, AA, AA-S	10	10		H A A A A	D D
	GA					
	A, A-S, AA, AA-S, B, C					
	D					
	SA, SB, SC					
	I					
	SD					
§ 5-Chloro-o-toluidine (95-79-4)	A, A-S, AA, AA-S		0.7		H A A A A	A A
	GA		0.7			
	A, A-S, AA, AA-S, B, C					
	D					
	SA, SB, SC					
	I					
Chromium (7440-47-3)	SD				H A A A A	Q H H
	A, A-S, AA, AA-S	50	*			
	GA					
	A, A-S, AA, AA-S, B, C		**			
	D					
	SA, SB, SC					
	I					
	SD					

Remarks: \*  $\exp(0.819 [\ln (\text{ppm hardness})] + 1.561)$   
 \*\*  $\exp(0.819 [\ln (\text{ppm hardness})] + 3.688)$   
 all standards except Human apply to acid-soluble form.

## NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

(26)

Date of Revision: July 24, 1985

SUBSTANCE (CAS NO.)	WATER CLASSES	MICROGRAMS/LITER		TYPE	NOTES
		STANDARD	GUIDANCE VALUES		
§ 1,2-Dichloroethane (107-06-2)	A, A-S, AA, AA-S	0.8	0.8	H	A
	GA			H	A
	A, A-S, AA, AA-S, B, C			A	A
	D			A	A
	SA, SB, SC			A	A
	I			A	A
§ 1,1-Dichloroethylene (75-35-4)	SD			A	A
	A, A-S, AA, AA-S	0.07	0.07	H	A
	GA			H	A
	A, A-S, AA, AA-S, B, C			A	A
	D			A	A
	SA, SB, SC			A	A
✓ § trans-1,2- Dichloroethylene (156-60-5)	I			A	A
	SD			A	A
	A, A-S, AA, AA-S	50	50	H	E
	GA			H	E
	A, A-S, AA, AA-S, B, C			A	A
	D			A	A
§ Dichloro- fluoromethane (75-43-4)	SA, SB, SC			A	A
	I			A	A
	SD			A	A
	A, A-S, AA, AA-S	50	50	H	E
	GA			H	E
	A, A-S, AA, AA-S, B, C			A	A
§ 2,4-Dichlorophenol (120-83-2)	D			A	A
	SA, SB, SC			A	A
	I			A	A
	SD			A	A
	A, A-S, AA, AA-S	0.3	0.3	H	C
	GA			H	C

Remarks: \* Refer to standard for phenols - total chlorinated.

§ Dichloropropanes (78-99-9; 78-87-5; 142-28-9; 26638-19-7)	A, A-S, AA, AA-S	50	H	E
	GA	50	H	E
	A, A-S, AA, AA-S, B, C		A	A
	D		A	A
	SA, SB, SC		A	A
	I		A	A
	SD		A	A

Remarks: Applies to sum of dichloropropane isomers.

## NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

(26)

Date of Revision: July 24, 1985

SUBSTANCE (CAS NO.)	WATER CLASSES	MICROGRAMS/LITER			TYPE	NOTES
		STANDARD	GUIDANCE VALUES			
Sulfides, total (NA)	A, A-S, AA, AA-S		50*	H	C	
	GA		50*	H	C	
	A, A-S, AA, AA-S, B, C	**		A		
	D			A		
	SA, SB, SC	**		A		
	I		**	A		
	SD			A		
Remarks:	*	Expressed as hydrogen sulfide.				
	**	Refer to standards and values for "Hydrogen Sulfide" where applicable.				
Sulfite (NA)	A, A-S, AA, AA-S			H		
	GA			H		
	A, A-S, AA, AA-S, B, C	200		A	J	
	D			A		
	SA, SB, SC			A		
	I			A		
	SD			A		
§ 2,4,5-T (93-76-5)	A, A-S, AA, AA-S			H		
	GA	35		H		
	A, A-S, AA, AA-S, B, C			A	S	
	D			A		
	SA, SB, SC			A		
	I			A		
	SD			A		
§ Tetrachloro- benzenes (95-94-3; 634-66-2; 634-90-2)	A, A-S, AA, AA-S	10		H	C	
	GA		10	H	C	
	A, A-S, AA, AA-S, B, C			A		
	D			A		
	SA, SB, SC			A		
	I			A		
	SD			A		
§ 2,3,7,8-Tetra- chlorodibenzo- p-dioxin (TCDD) (1746-01-6)	A, A-S, AA, AA-S			H		
	GA	0.000035		H		
	A, A-S, AA, AA-S, B, C	0.000001		A	S	
	D	0.000001		A	M	
	SA, SB, SC			A		
	I			A		
	SD			A		
§ 1,1,2,2-Tetra- chloroethane (79-34-5)	A, A-S, AA, AA-S		0.2	H	A	
	GA		0.2	H	A	
	A, A-S, AA, AA-S, B, C			A		
	D			A		
	SA, SB, SC			A		
	I			A		
	SD			A		
✓ § Tetrachloro- ethylene (127-18-4)	A, A-S, AA, AA-S		0.7	H	A	
	GA		0.7	H	A	
	A, A-S, AA, AA-S, B, C			A		
	D			A		
	SA, SB, SC			A		
	I			A		
	SD			A		

## NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

26

Date of Revision: July 24, 1985

SUBSTANCE (CAS NO.)	WATER CLASSES	MICROGRAMS/LITER		TYPE	NOTES
		STANDARD	GUIDANCE VALUES		
§ Tetrahydro-furan (109-99-9)	A, A-S, AA, AA-S	50 50	H	E	
	GA		H	E	
	A, A-S, AA, AA-S, B, C		A		
	D		A		
	SA, SB, SC		A		
	I		A		
	SD		A		
Thallium (7440-28-0)	A, A-S, AA, AA-S	4 4 8 20	H	B	
	GA		H	B	
	A, A-S, AA, AA-S, B, C		A	I	
	D		A	K	
	SA, SB, SC		A		
	I		A		
	SD		A		
Remarks: All standards and values except Human apply to acid-soluble form.					
§ Theophylline (58-55-9)	A, A-S, AA, AA-S	40 40	H	B	
	GA		H	B	
	A, A-S, AA, AA-S, B, C		A		
	D		A		
	SA, SB, SC		A		
	I		A		
	SD		A		
§ Thiram (137-26-8)	A, A-S, AA, AA-S	1.75	H	S	
	GA		H		
	A, A-S, AA, AA-S, B, C		A		
	D		A		
	SA, SB, SC		A		
	I		A		
	SD		A		
✓ § Toluene (108-88-3)	A, A-S, AA, AA-S	50 50	H	E	
	GA		H	E	
	A, A-S, AA, AA-S, B, C		A		
	D		A		
	SA, SB, SC		A		
	I		A		
	SD		A		
§ o-Toluidine (95-53-4)	A, A-S, AA, AA-S	0.6 0.6	H	A	
	GA		H	A	
	A, A-S, AA, AA-S, B, C		A		
	D		A		
	SA, SB, SC		A		
	I		A		
	SD		A		
§ Tolytriazole (29385-43-1)	A, A-S, AA, AA-S	50 50	H	E	
	GA		H	E	
	A, A-S, AA, AA-S, B, C		A		
	D		A		
	SA, SB, SC		A		
	I		A		
	SD		A		

## NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

Date of Revision: July 24, 1985

26

SUBSTANCE (CAS NO.)	WATER CLASSES	MICROGRAMS/LITER			TYPE	NOTES
		STANDARD	GUIDANCE VALUES			
§ Toxaphene (8001-35-2)	A, A-S, AA, AA-S		0.01	H	A	
	GA	ND		H	S	
	A, A-S, AA, AA-S, B, C	0.005		A	H	
	D	1.6		A	H	
	SA, SB, SC	0.005		A	H	
	I		0.005	A	H	
	SD		0.07	A	H	

Remarks: ND - Not Detectable

§ 2,4,5-TP (Silvex) (93-72-1)	A, A-S, AA, AA-S	10		H	Q	
	GA	0.26		H	S	
	A, A-S, AA, AA-S, B, C			A		
	D			A		
	SA, SB, SC			A		
	I			A		
	SD			A		

§ Tributyltin oxide (56-35-9)	A, A-S, AA, AA-S	50		H	E	
	GA	50		H	E	
	A, A-S, AA, AA-S, B, C			A		
	D			A		
	SA, SB, SC			A		
	I			A		
	SD			A		

§ Trichloro- benzenes (87-61-6; 108-70-3; 120-82-1; 12002-4B-1)	A, A-S, AA, AA-S	10		H	C	
	GA	10		H	C	
	A, A-S, AA, AA-S, B, C	5		A	I,N	
	D	50		A	L	
	SA, SB, SC	5		A	I,N	
	I	5		A	I,N	
	SD	50		A	L	

Remarks: Applies to sum of isomers.

✓ § 1,1,1-Trichloro- ethane (71-55-6)	A, A-S, AA, AA-S	50		H	E	
	GA	50		H	E	
	A, A-S, AA, AA-S, B, C			A		
	D			A		
	SA, SB, SC			A		
	I			A		
	SD			A		

§ 1,1,2-Trichloro- ethane (79-00-5)	A, A-S, AA, AA-S	0.6		H	A	
	GA	0.6		H	A	
	A, A-S, AA, AA-S, B, C			A		
	D			A		
	SA, SB, SC			A		
	I			A		
	SD			A		

## NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

Date of Revision: July 24, 1985

SUBSTANCE (CAS NO.)	WATER CLASSES	MICROGRAMS/LITER			TYPE	NOTES
		STANDARD	GUIDANCE VALUES			
§ Trichloro- ethylene (79-01-6)	A, A-S, AA, AA-S	10	3	H	A	
	GA			H	S	
	A, A-S, AA, AA-S, B, C			A		
	D			A		
	SA, SB, SC			A		
	I			A		
	SD			A		
§ Trichloro- fluoromethane (75-69-4)	A, A-S, AA, AA-S	50	50	H	E	
	GA			H		
	A, A-S, AA, AA-S, B, C			A		
	D			A		
	SA, SB, SC			A		
	I			A		
	SD			A		
§ Trichlorotri- fluoroethanes (26523-64-8; 354-58-5; 76-13-1)	A, A-S, AA, AA-S	50*	50*	H	E	
	GA			H		
	A, A-S, AA, AA-S, B, C			A		
	D			A		
	SA, SB, SC			A		
	I			A		
	SD			A		

Remarks: \* Applies to sum of isomers.

§ Trifluralin (1582-09-8)	A, A-S, AA, AA-S	35.0	H	S	
	GA		H		
	A, A-S, AA, AA-S, B, C		A		
	D		A		
	SA, SB, SC		A		
	I		A		
	SD		A		

§ Trimethyl- benzenes (25551-13-7; 526-73-8; 95-63-6; 108-67-8)	A, A-S, AA, AA-S	50*	H	E	
	GA		H		
	A, A-S, AA, AA-S, B, C		A		
	D		A		
	SA, SB, SC		A		
	I		A		
	SD		A		

Remarks: \* Applies to sum of isomers.

§ Trimethyl- pyridine (collidine) (108-75-8; 1462-84-6)	A, A-S, AA, AA-S	50	H	E	
	GA		H		
	A, A-S, AA, AA-S, B, C		A		
	D		A		
	SA, SB, SC		A		
	I		A		
	SD		A		

Please print or type.

P.O. Box 1200, Albany, New York 12212

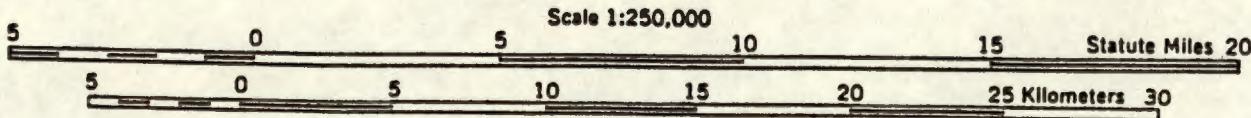
Form Approved. OMB No 2000-0404 E

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA No. <b>NYP000851253</b>	Manifest Document No.	2. Page 1 of _____ Information in the _____ is not required by law
3. Generator's Name and Mailing Address <b>6274 E AVON-LIMA Rd AVON, NY 14414</b>		4. Generator's Phone <b>716 226-2466</b>	A. State Manifest Document No. <b>NY-A 174808</b>	
5. Transporter 1 (Company Name) <b>FRONTIER CHEM WASTE</b>		6. US EPA ID Number <b>WYD043815703</b>	B. State generator's ID <b>UPPER R CLARENCE NY</b>	
7. Transporter 2 (Company Name)		8. US EPA ID Number	C. State Transporter's ID <b>M189</b>	
9. Designated Facility Name and Site Address <b>FRONTIER CHEM WASTE 4626 ROYAL AVE NIAGARA FALLS NY</b>		10. US EPA ID Number <b>NYD043815703</b>	D. Transporter's Phone <b>716 285-820</b>	
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number) <b>a. WASTE SOLVENT N.O.S UN1993</b>		12. Containers No.      Type <b>001 TT</b>	13. Total Quantity <b>1 000 G</b>	
			14. Unit Wt/Vol <b>FC</b>	
J. Additional Descriptions for Materials Listed Above <b>EVAPORATED SOLVENTS</b>		K. Handling Codes for Wastes Listed <b>T</b>		
15. Special Handling Instructions and Additional Information				
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable International and national governmental regulations and state laws and regulations.		DATE <b>12/19</b>		
Printed/Typed Name <b>FRANK F SHATTUCK</b>		Signature <b>Frank F Shattuck</b>	Month Day	
T.R.A.N.S.P.O.R.T.E.R 17. Transporter 1 (Acknowledgement of Receipt of Materials) Printed/Typed Name <b>THOMAS B. LAGER</b>		Signature <b>Thomas Lager</b>	Month Day DATE <b>12/19</b>	
18. Transporter 2 (Acknowledgement of Receipt of Materials) Printed/Typed Name		Signature	Month Day DATE	
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.		DATE		
Printed/Typed Name		Signature	Month Day	

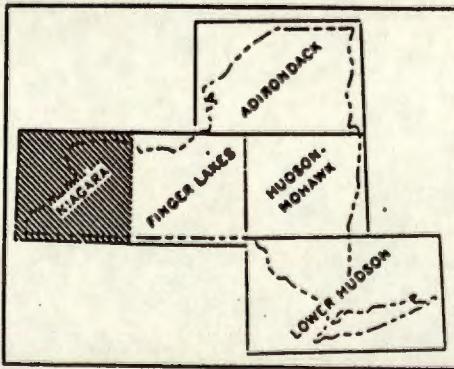
# GEOLOGIC MAP OF NEW YORK

1970

## Niagara Sheet



CONTOUR INTERVAL 100 FEET



Topographic Base from AMS Quadrangles 1:250,000 scale.

NEW YORK STATE MUSEUM AND SCIENCE SERVICE  
MAP AND CHART SERIES NO. 15

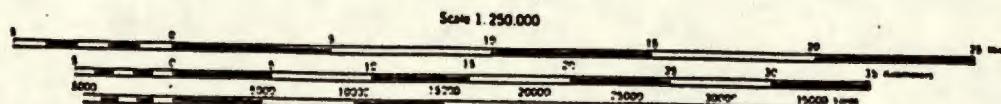
COMPILED AND EDITED BY

Lawrence V. Rickard  
Donald W. Fisher  
March, 1970

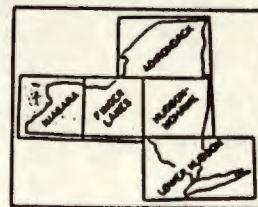
25  
L

# QUATERNARY GEOLOGY OF NEW YORK, NIAGARA SHEET

## by Ernest H. Muller



Muller, Ernest H. (1977)  
New York State Museum and Science Service  
Map and Chart Series Number 28



### MAP DATA SOURCES

1. Bartolomucci, Henry A., 1968, A sedimentological study of the Niagara Falls Moraine. S.U.N.Y. Buffalo, M.A. thesis, 76p.
2. Blackmon, Paul, 1956, Glacial geology of the East Aurora, New York Quadrangle. Univ. of Buffalo, M.S. thesis.
3. Bryant, Jay C., 1955, A refinement of the upland glacial drift border in southern Cattaraugus County, N.Y. Cornell Univ. M.S. thesis, 127p.
4. Calkin, Parker, 1970, Strandlines and chronology of the Glacial Great Lakes in northwestern New York. Ohio Jour. Sci. 70:78-96.
5. Chapman, L.F. and D.F. Putnam, 1966, The physiography of southern Ontario. Univ. of Toronto Press, 386p.
6. D'Agostino, John, 1957, Glacial Lake Tonawanda history and development. Unpub. M.S. thesis, S.U.N.Y. Buffalo.
7. Denny, Charles S., 1956, Surficial geology and geomorphology of Potter County, Pennsylvania. U.S.G.S. Prof. Paper 288, 72p.
8. Feenstra, B.H., 1972, Quaternary geology of the Niagara area, southern Ontario; Ontario Div. Mines, Prelim. Map P.764, 1:50,000.
9. Feenstra, B.H., 1972, Quaternary geology of the Welland area, southern Ontario; Ontario Div. Mines, Prelim. Map P.796, 1:50,000.
10. Karrow, P.F., 1963, Pleistocene geology of the Hamilton-Galt area, Ontario; Ontario Div. Mines, Geol. Rep. 16, 68p. and Map 2033.
11. Kindle, E.M. and F.B. Taylor, 1913, Description of the Niagara quadrangle. U.S.G.S. Geol. Atlas Folio 190, 25p.
12. Leverett, Frank, 1902, Glacial formations and drainage features of the Erie and Ohio Basins. U.S.G.S. Monograph 41, 802p.
13. Muller, E.H., 1963, Geology of Chautauqua County, N.Y. Part II: Pleistocene Geology. N.Y.S.M. Bull. 392, 60p.
14. Muller, E.H., Unpub. field mapping. New York State Museum.
15. Shepp, V.C., G.W. White, J.B. Drosté and R.F. Sitler, 1959, Glacial geology of northwestern Pennsylvania, Penna. Geol. Survey Bull. G-32, 4th ser.
16. Sweeney, J.F., 1969, Glacial geology of the Springville, New York and northern part of the Ashford Hollow, New York quadrangles. S.U.N.Y. Buffalo, M.S. thesis, 51p.
17. Symecko, R.E., 1967, Glacial geology of the Orchard Park, New York, quadrangle. S.U.N.Y. Buffalo, M.A. thesis, 64p.
18. Wilson, Michael, 1973, Gravity studies in the vicinity of Walnut Creek, southwestern New York. Unpub. M.S. thesis, S.U.N.Y. College at Fredonia.

25  
ni  
BB

Plain Blue

**APPENDIX B**  
**PROPOSED UPDATED NYS REGISTRY SHEET**

(47-15-11 (10/83)

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

PRIORITY CODE: 2a SITE CODE: 837006  
NAME OF SITE: Haight Farm REGION: 8  
STREET ADDRESS: 4879 Upper Holly Road  
TOWN/CITY: Claredon COUNTY: Orleans  
NAME OF CURRENT OWNER OF SITE: Earl Haight  
ADDRESS OF CURRENT OWNER OF SITE: 4879 Upper Holly Rd., Claredon, NY  
TYPE OF SITE: OPEN DUMP  STRUCTURE  LAGOON   
LANDFILL  TREATMENT POND   
ESTIMATED SIZE:          ACRES

SITE DESCRIPTION:

The site was a drum disposal area, in which drums may have come from an unknown chemical company in Rochester, NY, 14 to 15 years ago. On December 15, 1984, approximately 30 drums of suspected trichloroethylene was loaded on a truck, ultimate disposal unknown, approximately 200 gallons may have been spilled during loading.

Frontier Chemical, contracted through the NYS Superfund Drum Removal Program, have properly disposed of the drummed wastes. However, private groundwater wells tested in the area, have shown contamination of trichloroethylene and other solvents.

HAZARDOUS WASTE DISPOSED: CONFIRMED   
TYPE AND QUANTITY OF HAZARDOUS WASTES DISPOSED:

<u>TYPE</u>	<u>QUANTITY</u> (POUNDS, DRUMS, TONS, GALLONS)
<u>Trichloroethylene</u>	<u>unknown</u>

TIME PERIOD SITE WAS USED FOR HAZARDOUS WASTE DISPOSAL:

, 19 69

TO

, 19 84

OWNER(S) DURING PERIOD OF USE: Earl Haight

SITE OPERATOR DURING PERIOD OF USE: Earl Haight

ADDRESS OF SITE OPERATOR: 4879 Upper Holly Road, Clarendon, NY

ANALYTICAL DATA AVAILABLE: AIR  SURFACE WATER  GROUNDWATER   
SOIL  SEDIMENT  NONE

CONTRAVIENCTION OF STANDARDS: GROUNDWATER  DRINKING WATER   
SURFACE WATER  AIR

SOIL TYPE: unknown

DEPTH TO GROUNDWATER TABLE: unknown

LEGAL ACTION: TYPE: STATE  FEDERAL

STATUS: IN PROGRESS  COMPLETED

REMEDIATION ACTION: PROPOSED  UNDER DESIGN

IN PROGRESS  COMPLETED

NATURE OF ACTION: \_\_\_\_\_

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

Additional information/sampling is necessary to adequately evaluate this site.

ASSESSMENT OF HEALTH PROBLEMS:

Insufficient information.

PERSON(S) COMPLETING THIS FORM:

NEW YORK STATE DEPARTMENT OF  
ENVIRONMENTAL CONSERVATION

NAME \_\_\_\_\_

TITLE \_\_\_\_\_

NAME \_\_\_\_\_

TITLE \_\_\_\_\_

DATE: \_\_\_\_\_

NEW YORK STATE DEPARTMENT OF HEALTH

NAME \_\_\_\_\_

TITLE \_\_\_\_\_

NAME \_\_\_\_\_

TITLE \_\_\_\_\_

DATE: \_\_\_\_\_