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Spills - SP

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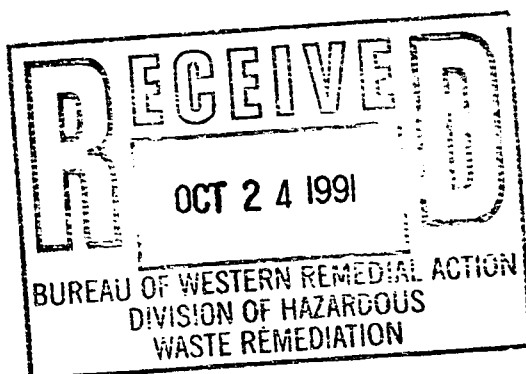
BCP - C



Occidental Chemical Corporation

**WORK PLAN
DATA COLLECTION PROGRAM**

**HENNEPIN AVENUE
NIAGARA FALLS, NEW YORK**



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TO: Distribution
 FROM: Robert W. Schick, Chief, Remedial Action Section A, [Signature]
 SITE NAME: Hennepin Ave
 MUNICIPALITY / COUNTY: Niagra Co., Cayuga Is.
 SITE NO: _____
 DATE: 10/28/91

Attached for your action as indicated please find the following documents related to the above referenced site:

- ☒ Review
- ☐ Information
- ☐ Approval
- ☒ Work Plan
- ☐ Health and Safety Plan
- ☐ QA/QC Plan
- ☐ Public Participation Plan
- ☐ Temporary Use and Occupancy Agreement/Easement
- ☐ Remedial Investigation
- ☐ Feasibility Study
- ☐ Design Documents: _____
- ☐ _____
- ☐ _____

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 ENVIRONMENTAL CONSERVATION
 REGION 9

Please review the attached documents(s) and provide any comments, in writing, to me by November 11, 1991. If no comments are received by this date, it will be assumed you have no comments relative to the attached documents. If you have any questions on any of the above, please contact Jeffrey Mirarchi at (518) 457-4343.

DISTRIBUTION: A. Wakeman, Dett
J. Sciascia, R9

cc: Project File



Occidental Chemical Corporation

**WORK PLAN
DATA COLLECTION PROGRAM**

**HENNEPIN AVENUE
NIAGARA FALLS, NEW YORK**

**OCTOBER 1991
REF. NO. 4229 (1)**

CONESTOGA-ROVERS & ASSOCIATES

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1.0 INTRODUCTION

This Work Plan presents the protocols to conduct a sampling program at 9353 and 9345 Hennepin Avenue and 211 Council Street, Niagara Falls, New York. Figure 1.1 presents a vicinity map showing the location of this area within the City of Niagara Falls.

The investigation detailed herein is being conducted by Occidental Chemical Corporation (OxyChem) to supplement the existing Site data base to further define Site conditions.

2.0 BACKGROUND

Occidental Chemical Corporation (OxyChem) was contacted by Mr. Joseph Oset of 9353 Hennepin Avenue, Niagara Falls, New York regarding potentially contaminated soils he encountered in his yard.

In late December 1990, Mr. Jay Cull of OxyChem and Ms. Carol Dunnigan (Conestoga-Rovers & Associates) met with Mr. Oset at his property. At that time it was learned that Mr. Oset had, in the 1950's, received fill materials for his yard which had originated at the OxyChem plant. Earlier in 1990, while planting trees, Mr. Oset noted a chemical odor in and black coloration of the soils in his yard.

On January 10 and 11, 1991, four boreholes were completed on the Oset property. The purpose of installing these four boreholes was to obtain samples of the soil from the Site for chemical analysis to define the nature of the chemicals present, if any. The locations of the boreholes installed are shown on Figure 2.1.

The samples collected were submitted to the analytical laboratory for analysis of selected volatile and semi-volatile compounds. The compounds analyzed are the approved indicators of materials from the OxyChem Niagara Plant which have been used in several previous sampling programs. The results of these analyses are presented on Table 2.1.

The analytical data and field observations obtained suggest that the fill materials used in Mr. Oset's yard originated at the F-Area of the OxyChem Niagara Plant. OxyChem records do not contain sufficient information to ascertain precisely what excavation activities occurred in the F-Area at the time during which materials were moved to the Hennepin Avenue location (1950/51*).

A preliminary risk assessment was conducted by Dr. Paul O. Nees of Biosurvey, Inc. The evaluation, which has been previously submitted to the Agency shows that the presence of these soils does not represent a health risk.

Since the analytical database is limited to only the four samples collected in January 1991, OxyChem intends to conduct additional sampling to collect the data necessary to verify the risk assessment and define the spatial limits of the chemicals present, including the areas of the existing driveway and deck. At this time it is assumed by OxyChem that the area below the existing carport will be included in the remediation plan.

Details of the proposed sampling program are presented in the following sections of this report.

* City of Niagara Falls property tax records indicate that the property in question was purchased by Mr. Oset June 9, 1950. An aerial photograph dated October 14, 1991 shows that construction of the Oset residence is complete.

3.0 PROPOSED WORK PLAN

A minimum of 58 soil samples and three water samples will be collected from the proposed locations shown on Figure 3.1. Samples displaying obvious visual or olfactory evidence of chemical presence will be discarded. In these cases the sample location will be moved outward until "clean" samples are obtained. "Clean" soil samples and all water samples will be analyzed for the specific parameters listed on Table 3.1. Samples of native soils near previous sample locations 9353-2 and 9353-3 will also be analyzed for the specific parameters. In addition, samples of fill soils near locations 9353-2 and 9353-3 will be collected and analyzed for Target Compound List/Target Analyte List (TCL/TAL) analytes and TCLP.

Collected samples will be split with the NYSDEC if so requested.

3.1 SAMPLE COLLECTION

3.1.1 Soil

Samples will be collected from depths of 0-0.5 foot below ground surface (BGS) and 0.5 foot BGS through the fill materials. Surface (0-0.5 foot) samples will be collected using a hand trowel or shovel. Deeper samples will be collected using split spoons. Samplers will be precleaned (see Section 3.2) and will be driven by hand. The protocol for collection of the analytical samples will be as follows:

- i) Surface samples will be transferred directly into sample containers using hand tools.
- ii) Upon retrieval of the split spoon sampler(s), the sampler(s) will be laid on a surface which has been covered with plastic or aluminum foil and shall be carefully opened to avoid sample disturbance.
- iii) Using a precleaned stainless steel knife, a thin section will be removed from the top and bottom of the sample and discarded as shown on Figure 3.2.
- iv) The remainder of the core(s) will then be cut longitudinally with a clean cutting tool. Using a clean stainless steel spatula, a continuous soil sample will then be taken from the center of the core(s) over the entire sampled depth.
- v) Samples shall be placed directly into precleaned, labelled sample jars provided by the analytical laboratory. Sample homogenization or splitting will be performed in the analytical laboratory.
- vi) The remainder of the core not used for chemical analysis will be replaced into the open corehole before backfilling.
- vii) Following completion of sample collection, the open corehole will be backfilled with clean imported soil to within six inches of ground surface. If augering is required, the borehole will be backfilled to

within six inches of the surface using cement/bentonite grout. In either case, the remaining open depth will be filled with material consistent with the surrounding area (i.e. asphalt, gravel).

Figure 3.2 illustrates the method of split spoon sample collection.

A clean pair of disposable latex gloves and a new piece of plastic or foil will be used to handle each sample.

3.1.2 Water

Water samples will be collected from the basement sumps of each of the residences on the properties being investigated. Immediately prior to sampling the sump will be pumped dry or of sufficient volume to assure fresh water. Samples will be collected by dipping the sample containers directly into the refilled sump.

3.1.3 Sample Handling

Samples will be placed on ice or cooler packs in laboratory supplied coolers immediately after collection and labelling. Samples will be delivered to the laboratory by courier under approved chain of custody procedures in accordance with the Quality Assurance Project Plan (QAPP).

3.2 QUALITY ASSURANCE/QUALITY CONTROL

The sampling and analysis programs will be conducted in accordance with the Quality Assurance Program previously approved for use at similar sites and contained in "Work Plan, T-Area Sampling Program, Buffalo Avenue Plant", April 17, 1989.

QA/QC requirements for the TCLP and TCL/TAL samples are contained in Table 3.2.

3.3 EQUIPMENT CLEANING

Prior to the collection of samples for chemical analysis, all non-dedicated sampling equipment and tools will be contaminated with the following rinse sequence:

- a) scrub with tap water and non-phosphate detergent;
- b) rinse with tap water;
- c) rinse with 10 percent nitric acid;
- d) rinse with tap water;
- e) rinse with methanol or isopropanol;
- f) rinse with acetone;
- g) rinse with methanol or isopropanol;
- h) rinse with deionized water; and
- i) air dry and wrap in aluminum foil.

If metals are not of interest the 10 percent nitric acid rinse can be omitted.

3.4 WASTE MATERIAL HANDLING

All waste materials (i.e. spent solvents) generated from this investigation will be secured and returned to the OxyChem Niagara Plant for storage and disposal. Solid and liquid waste materials will be segregated and stored separately. All waste materials generated during this program will be logged and the containers labelled.

Solvent contaminated decontamination fluids and discarded personal protective equipment will be secured in 55-gallon drums. The final disposition of all stored materials will be carried out in accordance with Federal and State regulations as part of the routine waste handling procedures at the OxyChem Niagara Plant.

3.5 HEALTH AND SAFETY

Health and safety protocols for this investigation will be the same as those used for similar activities during the OxyChem Niagara Plant SDCP. For reference see (SDCP), "Appendix B, Environmental Health and Safety Plan".

4.0 PROJECT SCHEDULE

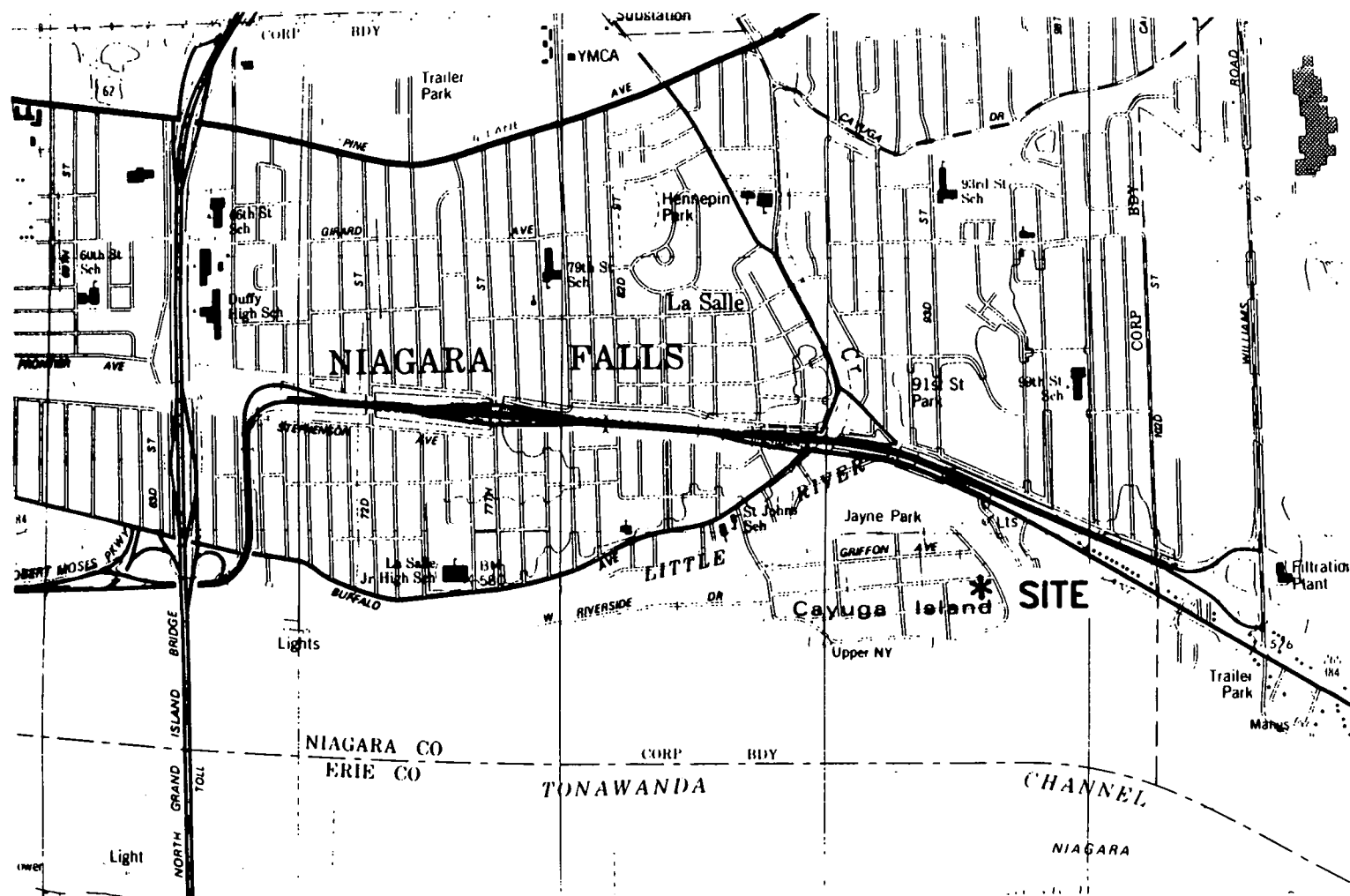
Figure 4.1 presents a proposed project schedule.

Unforeseen site conditions or severe weather could delay the sampling and therefore extend the duration of the project.

FIGURES



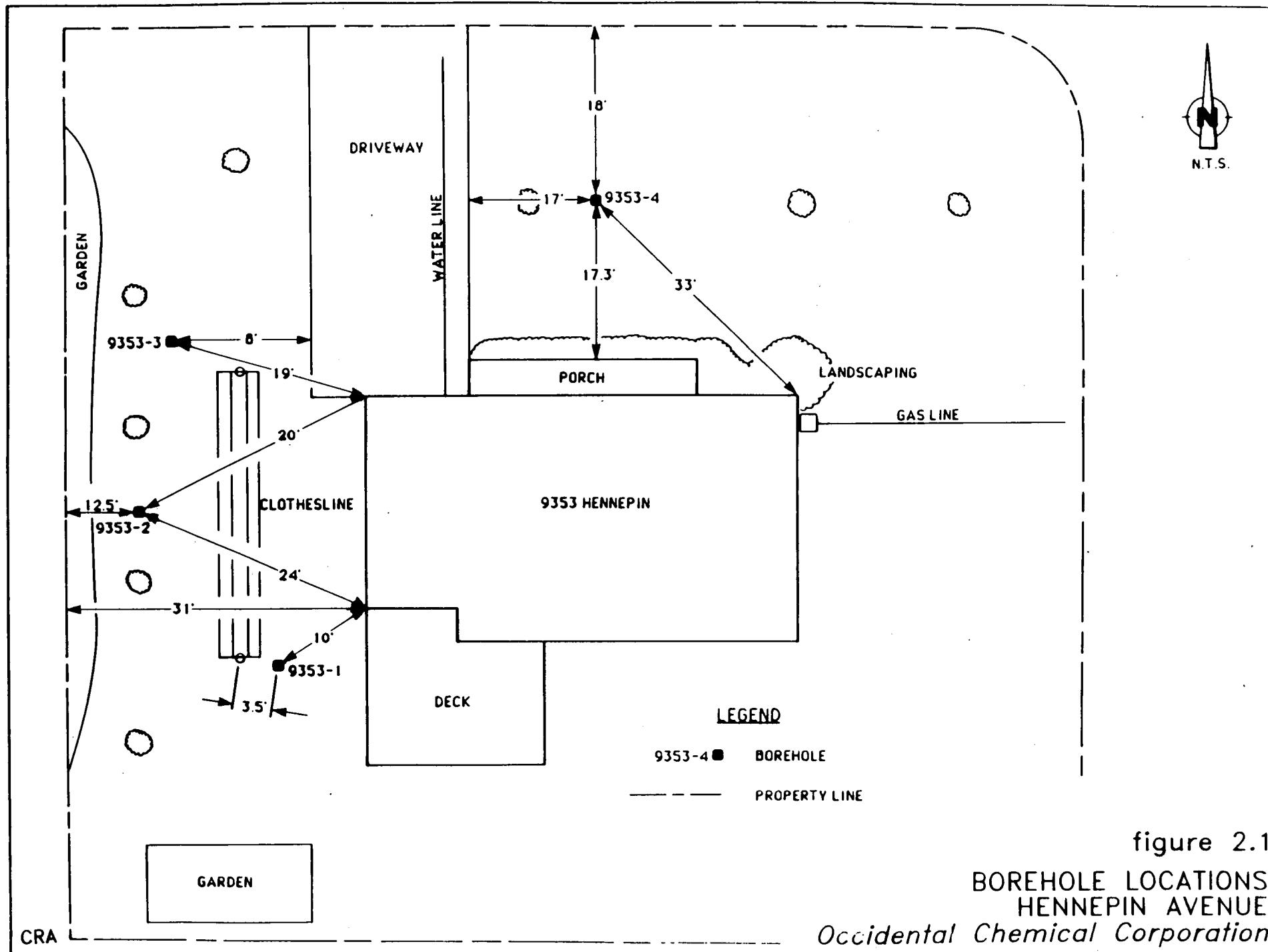
FIGURES

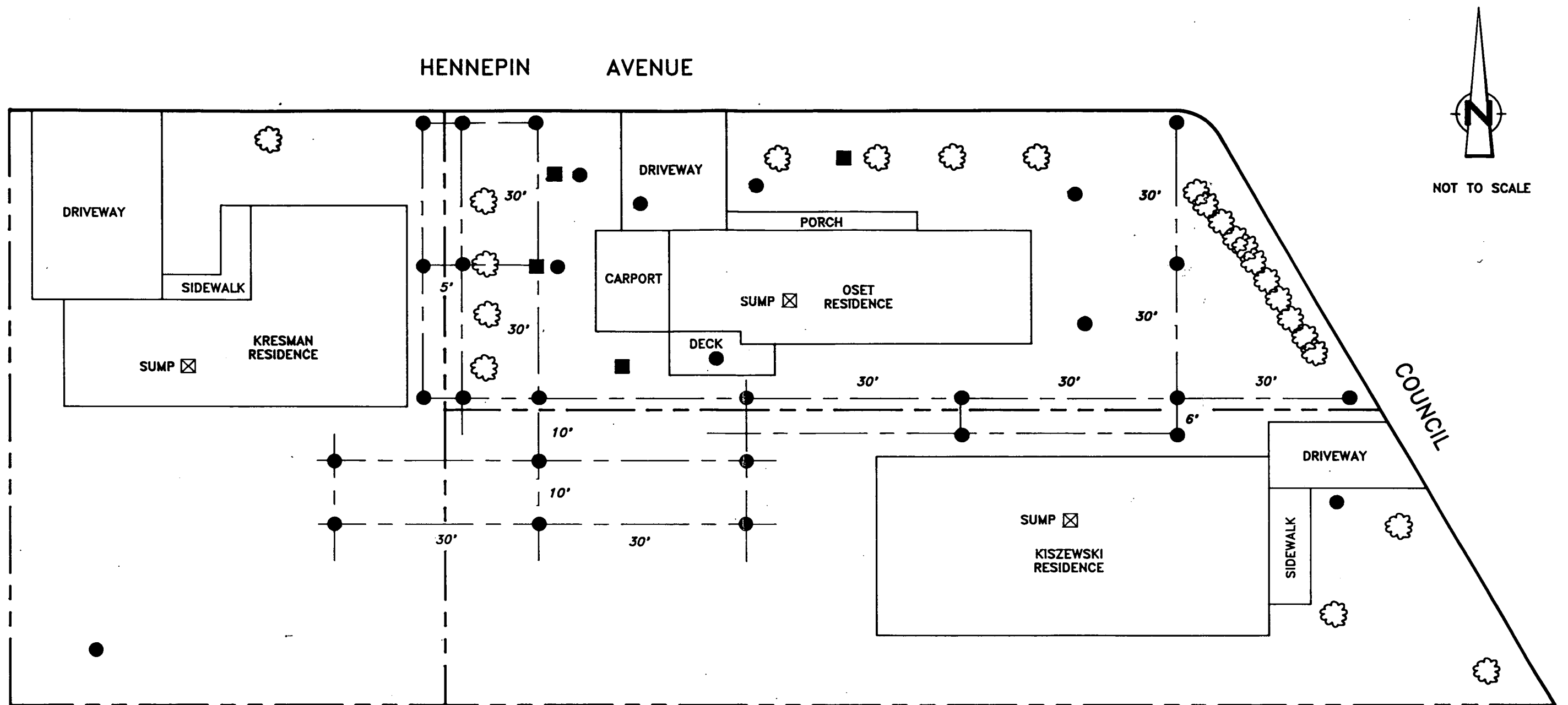


1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

CRA

figure 1.1
SITE LOCATION
HENNEPIN AVENUE
Occidental Chemical Corporation

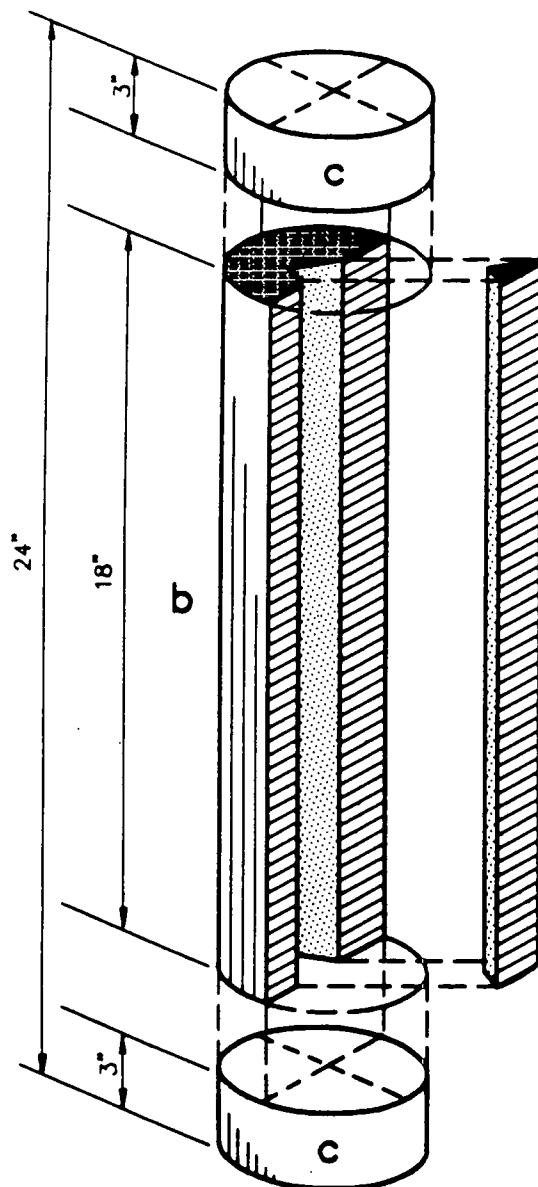




LEGEND

- ☒ PROPOSED WATER SAMPLE LOCATION
- PROPOSED SOIL SAMPLE LOCATION
- EXISTING SOIL SAMPLE LOCATION
- — — — — PROPERTY LINE
- ☼ BUSH/SHRUB

figure 3.1
PROPOSED SAMPLING LOCATIONS
HENNEPIN AVENUE
Occidental Chemical Corporation



TYPICAL SOIL CORE

a

PORTION OF SAMPLE FOR CHEMICAL ANALYSIS

- CONTACT WITH UNSTERILIZED MATERIALS IS NOT ACCEPTABLE
- CONTAINER: PRECLEANED GLASS
- GASKET - TEFLON
- STORAGE - REFRIGERATED (4°C)
- SHIPPING - ON ICE BY COURIER TO DESIGNATED LAB

b

a PORTION OF SAMPLE TO BE RETAINED FOR GEOLOGIC RECORDS

- CONTACT WITH UNSTERILIZED MATERIALS IS NOT A PROBLEM
- CONTAINER: - CLEAN GLASS JAR
- CLEAR GLASS IS SUITABLE
- STORAGE - IN STANDARD SHIPPING CARTON
- NO REFRIGERATION REQUIRED
- GASKET - ANY SUITABLE GASKET

c

PORTION OF SAMPLE TO BE DISCARDED

figure 3.2

BOREHOLE SOIL SAMPLE COLLECTION DETAIL
HENNEPIN AVENUE
Occidental Chemical Corporation

CRA

4229-07/08/91-1-0 (NF)

ACTIVITY	OCTOBER				NOVEMBER				DECEMBER					JANUARY				FEBRUARY			
	9	14	23	28	4	11	18	25	2	9	16	23	30	6	13	20	27	3	10	17	24
RECEIPT OF NYSDEC COMMENTS— DATA COLLECTION WORK PLAN	*																				
SUBMISSION OF REVISED WORK PLAN	*																		
SAMPLE COLLECTION																	
SAMPLE ANALYSIS																
REPORT PREPARATION AND REVIEW										
REPORT SUBMISSION.	*	

figure 4.1
PROPOSED PROJECT SCHEDULE
HENNEPIN AVENUE
Occidental Chemical Corporation

TABLE 1. Summary of the data used in the analysis.

TABLE 2. Summary of the data used in the analysis.

TABLE 3. Summary of the data used in the analysis.

TABLE 4. Summary of the data used in the analysis.

TABLE 5. Summary of the data used in the analysis.

TABLE 6. Summary of the data used in the analysis.

TABLE 7. Summary of the data used in the analysis.

TABLE 8. Summary of the data used in the analysis.

TABLE 9. Summary of the data used in the analysis.

TABLE 10. Summary of the data used in the analysis.

TABLE 11. Summary of the data used in the analysis.

TABLE 12. Summary of the data used in the analysis.

TABLE 13. Summary of the data used in the analysis.

TABLE 14. Summary of the data used in the analysis.

TABLE 15. Summary of the data used in the analysis.

TABLE 16. Summary of the data used in the analysis.

TABLE 17. Summary of the data used in the analysis.

TABLE 18. Summary of the data used in the analysis.

TABLE 19. Summary of the data used in the analysis.

TABLE 20. Summary of the data used in the analysis.

TABLE 21. Summary of the data used in the analysis.

TABLE 22. Summary of the data used in the analysis.

TABLE 23. Summary of the data used in the analysis.

TABLE 24. Summary of the data used in the analysis.

TABLE 25. Summary of the data used in the analysis.

TABLE 26. Summary of the data used in the analysis.

TABLE 27. Summary of the data used in the analysis.

TABLES

TABLE 2.1
COMPOUNDS DETECTED (mg/kg)
9353 HENNEPIN - SOILS
JANUARY 1991

<i>Volatiles</i>	9353-1 0.5-4.0 ft.	9353-2 2.0-3.0 ft.	9353-3 2.0-3.2 ft.	9353-4 2.0-3.0 ft.
Benzene	ND	ND	0.27	ND
Monochlorobenzene	ND	ND	0.33	ND
2-monochlorotoluene	ND	ND	0.27	ND
4-monochlorotoluene	ND	ND	0.22	ND
1,2-dichlorobenzene	ND	ND	2.1	ND
1,4-dichlorobenzene	0.59	ND	1.4	ND
2,4-dichlorotoluene	0.23	6.6	2.1	ND
2,5-dichlorotoluene	0.31	7.4	2.0	ND
3,4-dichlorotoluene	ND	4.4	1.3	ND
 <i>Semi-Volatiles</i>				
1,2,3-trichlorobenzene	ND	0.81	0.54	ND
1,2,4-trichlorobenzene	0.3	5.8	5.5	ND
1,2,3,4-tetrachlorobenzene	0.63	37.0	22.0	ND
1,2,4,5-tetrachlorobenzene	0.44	10.0	3.7	ND
Pentachlorobenzene	0.29	41.0	4.6	ND
Hexachlorobenzene	2.8	30.0	4.9	ND
alpha-hexachlorocyclohexane	0.17	6.9	11.0	ND
beta-hexachlorocyclohexane	0.64	50.0	28.0	0.33
gamma-hexachlorocyclohexane	ND	1.6	ND	ND
delta-hexachlorocyclohexane	0.11	6.5	7.0	ND
2,4-dichlorophenol	ND	0.57	0.37	ND
Hexachlorobutadiene	ND	0.12	ND	ND
Octachlorocyclopentene	ND	1.9	ND	ND

TABLE 3.1
ANALYTICAL PARAMETER LIST - SPECIFIC PARAMETERS

<i>Organics</i>	<i>Survey Level (1)</i> <i>Soil</i> <i>(ppb)</i>	<i>Water</i> <i>(ppb)</i>
VOLATILES		
Benzene	100	1
Toluene	100	1
Trichloroethylene	100	1
Tetrachloroethylene	100	1
Monochlorobenzene	100	1
2-Monochlorotoluene	100	1
4-Monochlorotoluene	100	1
2-Chlorobenzotrifluoride	100	1
4-Chlorobenzotrifluoride	100	1
1,2-Dichlorobenzene	100	1
1,4-Dichlorobenzene	100	1
2,4-Dichlorotoluene	100	1
2,5-Dichlorotoluene	100	1
2,6-Dichlorotoluene	100	1
3,4-Dichlorotoluene	100	1
2,4-Dichlorobenzotrifluoride	100	1
3,4-Dichlorobenzotrifluoride	100	1
SEMI-VOLATILES		
1,2,3-Trichlorobenzene	100	1
1,2,4-Trichlorobenzene	100	1
1,2,3,4-Tetrachlorobenzene	100	1
1,2,4,5-Tetrachlorobenzene	100	1
Pentachlorobenzene	100	NA*
Hexachlorobenzene	100	1
alpha-Hexachlorocyclohexane	100	1
beta-Hexachlorocyclohexane	100	1
gamma-hexachlorocyclohexane	100	1
deta-hexachlorocyclohexane	100	1
2,3-Dichlorophenol	100	NA
2,4-Dichlorophenol	100	NA
2,4,5-Trichlorophenol	100	10
2,4,6-Trichlorophenol	100	NA
Hexachlorobutadiene	100	1
Hexachlorocyclopentadiene	100	1
Octachlorocyclopentene	100	1
Perchlorocyclopentadecane (Mirex)	100	1

(1) Estimated levels for soil, actual levels are sample dependent and can vary significantly with matrix.

NA* Not to be analyzed.

TABLE 3.2
 QUALITY ASSURANCE/QUALITY CONTROL TCLP & TCL/TAL ANALYSES
 HENNEPIN AVENUE
 NIAGARA FALLS, NEW YORK
 OCCIDENTAL CHEMICAL CORPORATION

<i>Sample Matrix</i>	<i>Laboratory Analyses (1)</i>	<i>Method (2)</i>	<i>Preservation</i>	<i>Sample Bottle Requirements</i>	<i>Maximum Holding Times</i>
SOIL	<u>TCLP</u> VOCs	<u>1311 (3)</u> 8240	Cool to 4°C (±2°C)	Note (4)	14 days from collection to TCLP extraction 14 days from TCLP extraction to analysis
	BNAs	8270	Cool to 4°C (±2°C)	Note (4)	14 days from collection to TCLP extraction 14 days from TCLP extraction to preparatory extraction 40 days from preparatory extraction to analysis
	Pesticides	8080	Cool to 4°C (±2°C)	Note (4)	14 days from collection to TCLP extraction 14 days from TCLP extraction to preparatory extraction 40 days from preparatory extraction to analysis
	Herbicides	8150	Cool to 4°C (±2°C)	Note (4)	14 days from collection to TCLP extraction 14 days from TCLP extraction to preparatory extraction 40 days from preparatory extraction to analysis
	Metals	6010/7000 Series	Cool to 4°C (±2°C)	Note (4)	6 months from collection to TCLP extraction 6 months from TCLP extraction to analysis
	Mercury	7471	Cool to 4°C (±2°C)	Note (4)	28 days from collection to TCLP extraction 28 days from TCLP extraction to analysis

TABLE 3.2
 QUALITY ASSURANCE/QUALITY CONTROL TCLP & TCL/TAL ANALYSES
 HENNEPIN AVENUE
 NIAGARA FALLS, NEW YORK
 OCCIDENTAL CHEMICAL CORPORATION

<i>Sample Matrix</i>	<i>Laboratory Analyses (1)</i>	<i>Method (2)</i>	<i>Preservation</i>	<i>Sample Bottle Requirements</i>	<i>Maximum Holding Times</i>
SOIL	<u>TCL/TAL</u> VOCs	8240	Cool to 4 °C (±2 °C)	Note (4)	14 days from collection to analysis
	BNAs	8270	Cool to 4 °C (±2 °C)	Note (4)	14 days from collection to extraction 40 days from extraction to analysis
	Pesticides/PCBs	8080	Cool to 4 °C (±2 °C)	Note (4)	14 days from collection to extraction 40 days from extraction to analysis
	Metals	6010/7000 Series	Cool to 4 °C (±2 °C)	Note (4)	6 months from collection to analysis (mercury 28 days)
	Cyanide	9010/9012	Cool to 4 °C (±2 °C)	Note (4)	14 days from collection to analysis
WATER (Rinsate Blank)	<u>TCL/TAL</u> VOCs	8240	Cool to 4 °C (±2 °C) (HCl to pH<2)	Note (4)	14 days from collection to analysis
	BNAs	8270	Cool to 4 °C (±2 °C)	Note (4)	7 days from collection to extraction 40 days from extraction to analysis
	Pesticides/PCBs	8080	Cool to 4 °C (±2 °C)	Note (4)	7 days from collection to extraction 40 days from extraction to analysis

TABLE 3.2
 QUALITY ASSURANCE/QUALITY CONTROL TCLP & TCL/TAL ANALYSES
 HENNEPIN AVENUE
 NIAGARA FALLS, NEW YORK
 OCCIDENTAL CHEMICAL CORPORATION

<i>Sample Matrix</i>	<i>Laboratory Analyses (1)</i>	<i>Method (2)</i>	<i>Preservation</i>	<i>Sample Bottle Requirements</i>	<i>Maximum Holding Times</i>
WATER (Rinsate Blank)	<u>TCL/TAL</u> Metals	6010/7000 Series	Cool to 4°C (±2°C) (HCl to pH<2)	Note (4)	6 months from collection to analysis (mercury 28 days)
	Cyanide	9010/9012	Cool to 4°C (±2°C) (NaOH to pH>12)	Note (4)	14 days from collection to analysis

Note:

- (1) The TCLP list of parameters consists of those analytes requested by 40 CFR 268.
QA/QC for TCLP analyses will consist of matrix spike for analytical bias correction.
- (2) All methods referenced from USEPA SW-846, 3rd Edition, 1986.
- (3) Method 1311 is the TCLP extraction methodology.
- (4) Sample bottle requirements provided by contract laboratory.

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OCT 30 1991

NEW YORK
ENVIRONMENTAL CONSERVATION
REGION 2

~~Subul Barcomb~~
② File OK FOLL
J. Sciascia

This Letter was Sent to the Attached List

SP:bjw
bcc: E. Barcomb
W. Demick (file)
J. Sciascia
S. Perrigo

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

DEC 03 1991

!address!

!name!

Re: PSA Investigation at Inactive Hazardous
Waste Disposal Sites - New York State
Superfund, Chapter 857, Laws of 1982

The New York State Department of Environmental Conservation (NYSDEC), as required by Chapter 857 of the Laws of 1982 (commonly known as the "New York State Superfund Law"), is conducting field investigations of inactive hazardous waste disposal sites throughout the State.

Our present records indicate that you are the owner of one of several parcels of the following site, which is to be included in this field investigation program:

Site Name: Cayuga Island, I.D. No. 932008
Site Address: River Shore Drive, Niagara Falls, NY
(W. River Shore Dr.)

Mr. Podd of the New York State Department of Environmental Conservation, Region 9 Office, has contacted you in the past in regards to collecting subsurface soil samples from your property. Mr. Podd has indicated that you are interested in our investigation and would like to cooperate with us by allowing the Department to collect soil samples from your property. This letter advises you that NYSDEC staff members will contact you within the next several weeks to schedule dates for sampling at this site.

This letter also serves as notice of intent that the Department will take samples and conduct field investigations at your site. The Environmental Conservation Law (ECL Section 27-1309.4) provides for a minimum of ten day's written notice of such intent. After ten day's notice, any duly designated officer or employee of the Department, or of any State agency, and any agent, consultant, contractor or other person so authorized, may enter any inactive hazardous waste disposal site and areas near such site and inspect and take samples of wastes, soils, air, surface water and groundwater. In order to take such samples, the Department may use or cause to be used such sampling methods as it determines to be necessary including, but not limited to, soil borings and monitoring wells.

If you have any questions in connection with this matter, please
contact Mr. Walter E. Demick, P.E., of my staff, at (518) 457-9538.

Sincerely,

Earl H. Barcomb, P.E.
Director
Bureau of Hazardous Site Control
Division of Hazardous Waste
Remediation

Mr. Robert Culbreth
4445 Miller Road
Niagara Falls, NY 14304

Mr. Thomas Culbreth, Jr.
P.O. Box 144
Niagara University, NY 14109

Mr. Robert Marlin
8911 Rivershore Drive
Niagara Falls, NY 14303

Mr. Joseph Smith
8915 Rivershore Drive
Niagara Falls, NY 14303

Mr. Marian Major
8929 Rivershore Drive
Niagara Falls, NY 14303

Mrs. Esther Blessing
9133 Rivershore Drive
Niagara Falls, NY 14303

Mr. Albert Merry
9323 Rivershore Drive
Niagara Falls, NY 14303

Mr. Robert Merino
9365 Rivershore Drive
Niagara Falls, NY 14303

Mr. Gary J. DiLaura
7605 West Rivershore Drive
Niagara Falls, NY 14303

Mr. Richard Cekalski
7611 West Rivershore Drive
Niagara Falls, NY 14303

Mr. Grover London
7616 West Rivershore Drive
Niagara Falls, NY 14303

Mrs. Beverly Ciccarelli
7630 West Rivershore Drive
Niagara Falls, NY 14303

Mr. Walter Janik
7711 West Rivershore Drive
Niagara Falls, NY 14303

Mr. Stanley Kasper
7714 West Rivershore Drive
Niagara Falls, NY 14303

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N.Y.S. DEPT. OF
ENVIRONMENTAL CONSERVATION
DEC 19

1 - Abdul
2 - Mr. [redacted] + [redacted] J. Sciascia
File

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

SP:bjw
bcc: W. Demick (file)
J. Sciascia
S. Perrigo

NOV 11 1991

Mr. John O'Rourke
4500 Harlem Road
Amherst, NY 14226

Dear Mr. Rourke:

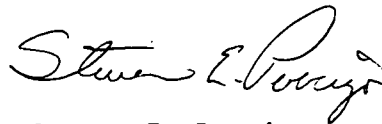
Re: Proposed Well Locations for the
SUNY Buffalo (Ridge Lea Campus) Site

Enclosed is a map which identifies the proposed monitoring well locations. These locations are tentative and may change because of the potential interference of underground utilities. As discussed in our telephone conversation, if you have access to the utility maps for the Amherst Commerce Park, I would appreciate it if you would send me a copy of these maps.

During our investigation, we will be collecting all auger cuttings, decontamination water, and well development water and storing the material in drums. These drums will need to be securely stored on-site until the analytical results from the samples are obtained. Our proposal is to use a trailer for storage. The trailer would be placed in an area of the parking lot that is used the least. The drillers will also need to set up a temporary decontamination station to clean equipment. If there is a location in the parking lot which you would prefer these tasks to be performed, please inform me by placing the location on the map and returning to me a copy of the map.

If you have any questions, please contact me at (518) 457-9538.

Sincerely,



Steven E. Perrigo
Environmental Engineer I
Western Investigation Section
Bureau of Hazardous Site Control
Division of Hazardous Waste
Remediation

Enclosure

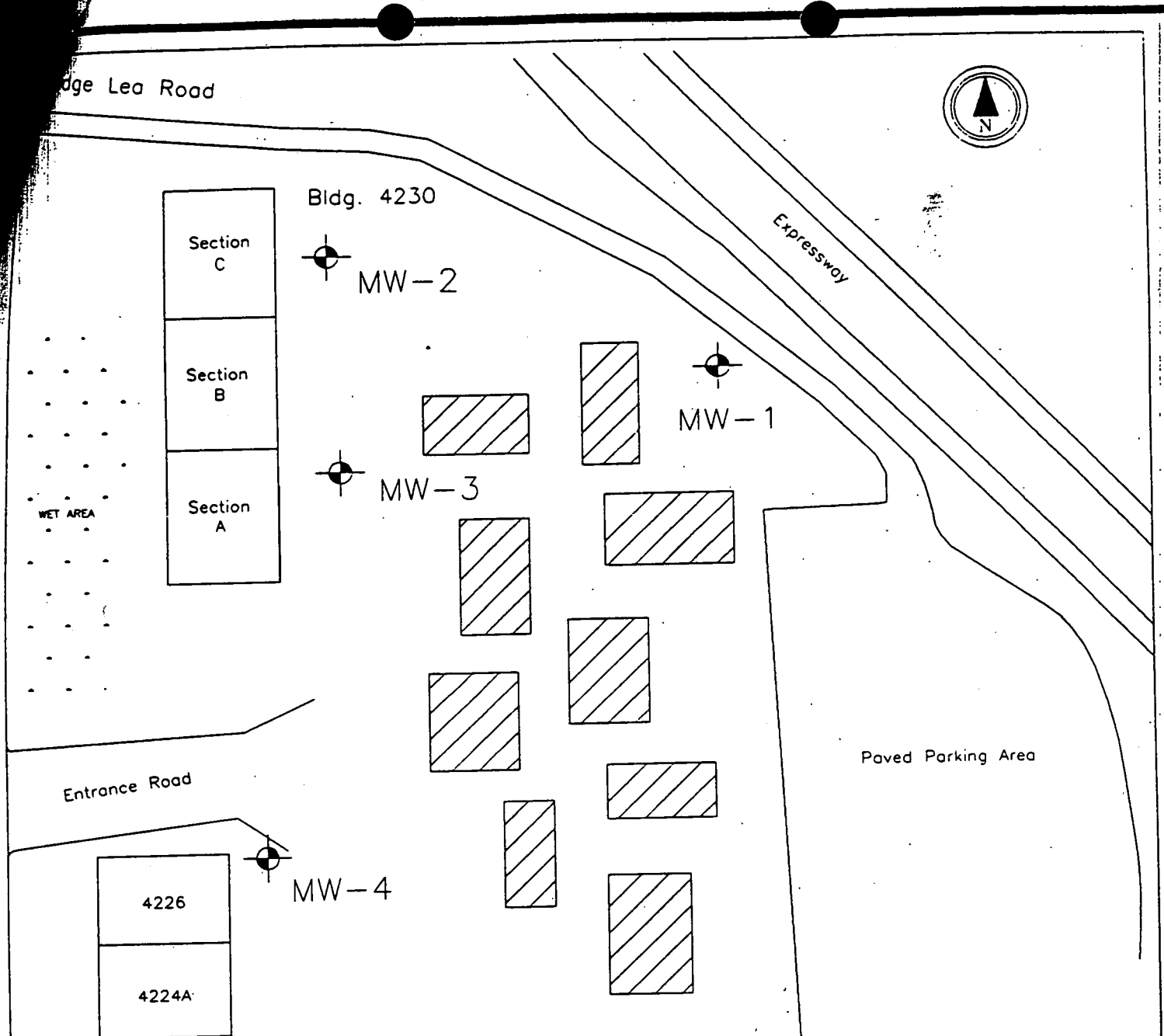


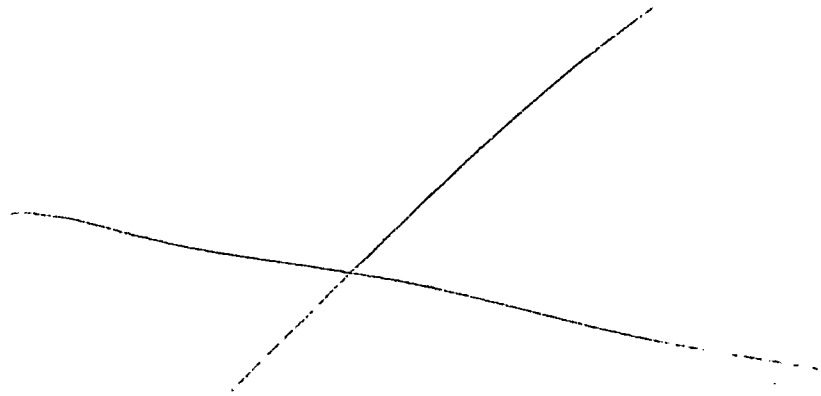
FIGURE 2

AMHERST COMMERCE PARK

SUGGESTED OVERBURDEN MONITORING WELL LOCATIONS

NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
BUREAU OF HAZARDOUS SITE CONTROL

 SUGGESTED
MONITORING
WELL LOCATION



RECEIVED
NOV 15 1991
NYS DEPT OF
ENVIRONMENTAL CONSERVATION
REGION 9

bcc: w/enc. -

S. Perrigo
S. Gupta
M. Dester - Reg. 97
J. Printup - BMWBC
E. Califano (3)
R. Burger
W. Demick
D. Norvik
D. Weigel
N. Colangelo
M. O'Toole (2)
C. Goddard
J. McKeon
E. Barcomb
J. Sciascia - Reg. 9
P. Buechi - Reg. 9
~~Dayfile~~

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

w/o enc. -

Mr. Thomas F. Maher, P.E.
Dvirka & Bartilucci
6800 Jericho Turnpike
Syosset, NY 11791

MAR 13 1992

Dear Mr. Maher:

RE: State Superfund Standby Contract
Work Plan Approval
Work Assignment #D002704-8
Cayuga Island/Ridge Lea, Site #9-32-008

This is to acknowledge receipt of the work plan dated February 1992 for the above-referenced project. The subject work plan is for Preliminary Site Assessment at Cayuga Island/Ridge Lea site. The Department hereby approves the work plan and authorizes Dvirka & Bartilucci to proceed with the project.

The following constitutes the budget for this work assignment:

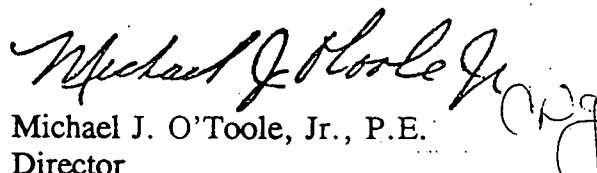
Prior approved work plan budget	\$0
Approved increase in budget for this work plan	\$140,225
Total approved work plan budget	\$140,225
Unapproved budget items	
< Subcontracts >	\$0
< Other Items >	\$0
Total work assignment budget	\$140,225

You are authorized to expend only approved budget funds. These funds may not be available for payment until up to four weeks after the date of this letter. Unapproved budget items must be included in a revised work plan budget and receive written Department approval before expenditure.

Dvirka & Bartilucci is hereby given notice to proceed with the work described in this work assignment. All work described shall be completed according to the schedule in the approved work plan.

If you have any questions or comments, please contact Mr. Steven Perrigo, Project Manager at (518)457-9538.

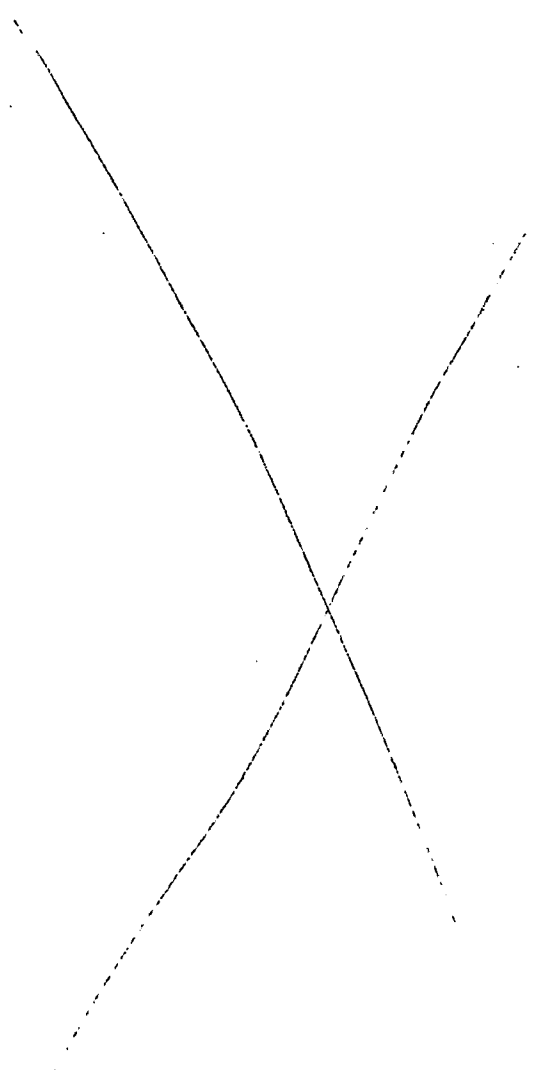
Sincerely,


Michael J. O'Toole, Jr., P.E.
Director
Div. of Hazardous Waste Remediation

RECEIVED

MAR 18 1992

U.S. DEPT. OF
ENVIRONMENTAL CONSERVATION
REGION 9



RIDGE LEA CAMPUS SITE

MARCH 23, 1992

DVIRKA & BARTILUCCI - ENGINEER

SITE REPRESENTATIVE - GERRY GOULD, GEOLOGIST

BURRAW DRILLING CO. - CONTRACT DRILLER

PROJECT SCOPE - DRILL FOUR TEST BORINGS

AND INSTALL MONITORING WELLS AT ALL

FOUR DRILLING LOCATIONS.

1ST 14 FEET OF MW-1 WERE

COMPLETED FRIDAY, MARCH 20

FIRST ARRIVED ON SITE AT

10:30 AM, MARCH 23

DRILLING CREW SET UP @

LOCATION MW-1, DOING STP

FROM 14 TO 16 FEET

REFUSAL ENCOUNTERED AT 16 FEET -
GLACIAL TILL

BOTTOM ONE FOOT TO BE SEALED

WITH BENTONITE; WELL SCREEN

INSTALLED FROM 5 TO 15 FEET

WELL COMPLETED 12:30

RESUMED WORK AFTER LUNCH, ABOUT 1:15,

SET UP @ LOCATION MW-2

RADIATOR FOR RIG MOTOR HAS

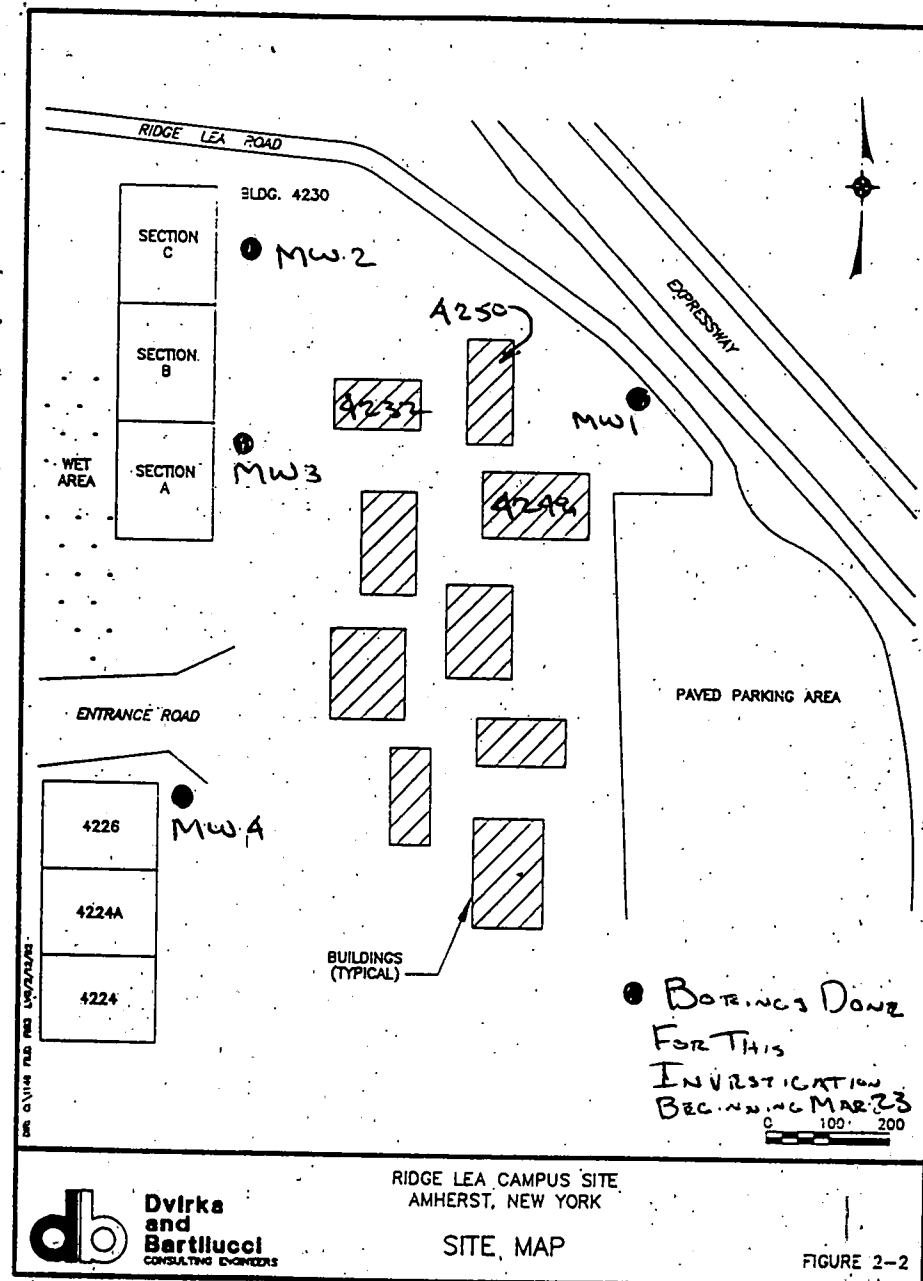
LEAK; WORK SUSPENDED FOR THURSDAY

EXPECT TO REPAIR RIG THIS AFTERNOON,

AND RESUME WORK @ 10:30 AM

TOMORROW

LEFT SITE 2:15 PM



ZIDOR LXA - MARCH 24, 1992

ARRIVED AT SITE 1:15 PM -

WORK HAD BEEN RESCHEDULED FROM
10:30 AM TO APPROX. 1:00 PM.

MW-2 WAS DRILLED ~~TH~~ DEPTH

OF 19.5 FEET. DRILLING HAD TAKEN

PLACE FROM 11:30 AM TO 12:45 PM

ENTIRE STRATIGRAPHY WAS CLAY

TO SILTY SANDY CLAY. GERRY GOULD

CALLED GERRY McDONALD, ALBANY DOH.

FOR DECISION ON INSTALLING

WELL AT THIS LOCATION. DECISION

MADE TO INSTALL WELL. SAND

PACK TO BE PLACED AT 19.0 TO

19.5 DEPTH, SO SCREEN IS SET FROM

9 FOOT TO 19 FOOT DEPTH - WELL COMPLETED

NO WATER IN MW-1 TODAY 2:30 PM

FLUSH MONITORING WELL BOXES INSTALLED

AT MW-1 & MW-2 - COMPLETED 3:30 PM

SET UP @ MW-3. 3:30 PM, TO

BEGIN DRILLING 8:00 AM TOMORROW

MARCH 25 -

8:00 AM. BEGAN DRILLING MW-3

STRATIGRAPHY IS CLAYEY SILT WITH

COBBLES FROM 15 TO 20 FOOT DEPTH

NO GROUNDWATER ENCOUNTERED, SO

NO WELL INSTALLED AT THIS LOCATION

HOLE GROUTED

TRACE OF GROUNDWATER FOUND AT MW-1

MARCH 25 (CONT)

AUGERS TO BE STREAM CLEANED AT

LOVE CANAL FACILITY; GERRY GOULD TO

CALL DEC WHEN CREW IS READY TO

DRILL MW-4. LEFT SITE 10:00 AM

RETURNED TO SITE 2:00 PM

DRILLING OF MW-4 IN PROGRESS;

STP AT 10 TO 12 FOOT DEPTH

STRATIGRAPHY IS CLAYEY SILT WITH

COBBLES. REFUSAL (APPARENT BEDROCK)

AT 15.5 FOOT DEPTH

NO GROUNDWATER ENCOUNTERED; NO

WELL INSTALLED.

DRILL CUTTINGS PUT IN 55 GALLON

METAL DRUMS, WHICH WERE STORED

IN BLDG 4230C, PENDING RESULTS

OF DOH SAMPLE ANALYSES. THESE

ANALYSES TO DETERMINE ULTIMATE

DISPOSAL OF CUTTINGS

GERRY GOULD TO TAKE COMPOSITE SAMPLES

OR DRILL CUTTINGS FROM EACH OF THE

DRUMS; FOUR INCH SAMPLES EVERY

TWO FEET (E.G. 22 TO 26 INCH DEPTH

FOR THE TWO FOOT DEPTH SAMPLE)

HAVE ALSO BEEN OBTAINED FROM

THE BORE HOLES. ALL THESE SAMPLES

TO BE SUBMITTED TO DOH

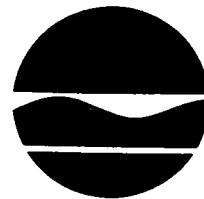
GERRY GOULD ALSO TO MEASURE DEPTH

OF GROUNDWATER IN EACH OF THE

TWO MONITORING WELLS TOMORROW

LEFT SITE 3:30 PM

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



Thomas C. Jorling
Commissioner

NOV 07 1991

Mr. Jay Cull
Occidental Chemical Corporation
P.O. Box 728
360 Rainbow Blvd. South
Niagara Falls, New York 14302

Dear Mr. Cull:

The New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH) have reviewed the Work Plan Data Collection Program for Hennepin Avenue dated October 21, 1991. This plan is acceptable with the following modifications:

1. The second paragraph on page 3 should be revised to indicate "the presence of these soils below the ground surface does not represent a significant health concern."
2. On page 4, it is indicated that 58 soil samples are to be collected. However, 31 sample locations are indicated in Figure 3.1. Please clarify.
3. In the first paragraph on page 4, "Clean" should be clearly defined (possibly by footnote) to mean the absence of visual or olfactory evidence of contamination.

Please contact me at 518/457-4343 at the earliest possible date and inform me of the dates for the field work. Please provide four copies of the plan revised as requested.

Sincerely,

Robert W. Schick, P.E.
Chief, Remedial Section A
Bureau of Western Remedial Action
Division of Hazardous Waste Remediation

cc: A. Wakeman, NYSDOH
M. VanValkenburg, NYSDOH

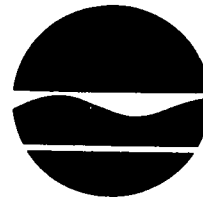
AJM/td

bcc: J. Sciascia, Reg. 9

→ A. Barkat, Reg. 9

J. Mirarchi

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



Thomas C. Jorling
Commissioner

NOV 07 1991

Mr. Jay Cull
Occidental Chemical Corporation
P.O. Box 728
360 Rainbow Blvd. South
Niagara Falls, New York 14302

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Sincerely,

Robert W. Schick, P.E.
Chief, Remedial Section A
Bureau of Western Remedial Action
Division of Hazardous Waste Remediation

cc: A. Wakeman, NYSDOH
M. VanValkenburg, NYSDOH

AJM/td
bcc: J. Sciascia, Reg. 9
A. Barkat, Reg. 9
J. Mirarchi

18 1 10 14

RECEIVED
NOV 8 1991

N.Y.S. DEPT. OF
ENVIRONMENTAL CONSERVATION
REGION 9

4/26/91

→ Abdul

Looks like \$7,400 is more than
the residents are willing to pay.

LAW OFFICE OF
FRANCIS W. SHEDD
724 DIVISION AVENUE
NIAGARA FALLS, N. Y. 14305
TELEPHONE 285-3461
AREA CODE 716

April 24th, 1991

New York State Department of
Environmental Conservation
600 Delaware Avenue
Buffalo, New York 14202-1073

Attention: Abul Barkat, P.E.
Senior Sanitary Engineer.
E. Joseph Sciascia, P.E.
Associate Sanitary Engineer.

Re: Site No. 932008 Page No. 9-313
Cayuga Island, Niagara Falls, New York.

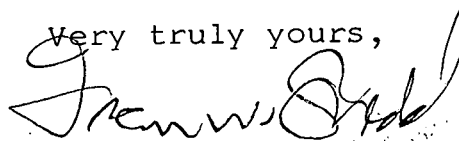
Gentlemen:

I received a proposal for the testing of Cayuga Island from Empire Soils Investigations, Inc. and with their permission, I enclose a copy of same to you.

I have talked to both Mr. Genovese and Mr. Harty and indicated I thought, after my conversation with Mr. Barkat, that this was much more extensive than what was originally contemplated pursuant to Mr. Barkat's letter to me of February 7th. Subject to certain preliminaries, I was under the impression that we could basically start with Part 2, Item 1, and along with a representative from your organization, could turn over the tested samples for future evaluation. I would appreciate your advising what portion of the total proposal is essential in order for us to go forward.

Thanking you in advance for your courtesies, I am,

Very truly yours,


Francis W. Shedd

FWS/jb
Encl.

April 1, 1991

Francis W. Shedd
724 Division Avenue
Niagara Falls, New York 14305

Attention: Mr. Francis W. Shedd

Reference: Proposal for Field Work and Preparation
Of Work Plan and Health and Safety Plan
For Sampling of Fill Material Along
Riverside Drive Properties
Proposal No. PTA-91-0069

Mr. Shedd:

In accordance with your verbal request, Empire Soils Investigations, Inc. (ESI) is pleased to present our proposal to prepare a Work Plan, and Health and Safety Plan for the above mentioned sampling project to be undertaken in conjunction with the New York State Department of Environmental Conservation (NYSDEC). Our proposal is based on the information you have presented to us regarding the site together with a site visit conducted by the Drilling Manager of ESI, Mr. Joseph Genovese.

For Part 1 of this project, ESI proposes to prepare a Work Plan which would design the sampling program required by the NYSDEC for sampling the fill material along Rivershore Drive on Cayuga Island. The Work Plan will describe the sampling protocols ESI intends to use specific to the site including provisions for unexpected complications resulting from the suspected presence of heterogeneous fill materials. A Health and Safety Plan will also be prepared to focus on the Health and Safety procedures typically implemented arise during completion of the field activities.

For Part 2 of this project, ESI intends to work with the NYSDEC personnel to obtain soil samples in six locations specified by your office. Sampling of the subsurface soils would be facilitated through the use of an AG Penetrometer, a motorized Tripod Apparatus, and other associated hand equipment operated by ESI personnel. The selection of this portable equipment will minimize disturbance to the property after completion of the field portion of the project. The anticipated time required to complete the field work is one eight-hour day. However, due to the reported nature of fill material, ESI may required a second day to successfully obtain the necessary samples. If additional work is required, the costs for these additional services will be billed in accordance with the unit rates presented in this proposal.



Francis W. Schedd
April 1, 1991
Page Two

The NYSDEC has recommended continuous sampling from zero to six feet below the ground surface. It is our understanding that NYSDEC personnel will be responsible for the actual sample collection and analytical testing of the subsurface soils. An environmental geologist will be on-site during the field activities to implement the Health and Safety Plan including organic vapor monitoring with a Photoionization Detector. A letter report summarizing the project including sampling procedures, subsurface soil classification, and any subsurface anomalies will be issued by ESI after completion of the field work.

Empire Soils Investigations, Inc. (ESI) estimates the fees to conduct these two tasks is \$7,400.00 (\$4,300.00 for Part 1 and \$3,100.00 for Part 2). A detailed breakdown of the estimated cost is attached to this letter. This price will remain valid for a period of 120 days from the date of this proposal. The Work Plan and Health and Safety Plan will be issued within four (4) weeks after authorization to proceed is received.

The client agrees to limit Empire Soils Investigations, Inc. liability to Francis W. Shedd, representing the property owners along Rivershore Drive, arising from Empire Soils Investigations, Inc. professional acts, errors, or emissions such that the total aggregate liability of Empire Soils Investigations, Inc. to all those named shall not exceed Empire Soils Investigations, Inc. total fees for the services rendered on this project.

The "General Conditions" governing our services are attached to and form part of this proposal.

If this proposal meets your approval, please sign the acceptance copy of this proposal and return it to our office as formal authorization to proceed with this project.

We appreciate the opportunity to submit our proposal and we look forward to working with you on this project. If you should have any questions or wish to discuss our proposal further, please do not hesitate to contact our office.



Francis W. Shedd
April 1, 1991
Page Three

Sincerely,
Empire Soils Investigations, Inc.

A handwritten signature in cursive script, appearing to read "David M. Harty".

David M. Harty, P.E.
Senior Environmental Engineer

A handwritten signature in cursive script, appearing to read "Stanley J. Blas, Jr." with a small flourish at the end.

Stanley J. Blas, Jr.
Regional Vice President

ACCEPTED BY: _____ DATE: _____

TITLE: _____ FOR: _____



PART 1

SUMMARY OF ESTIMATED COSTS
FOR PREPARATION OF WORK PLAN
AND HEALTH AND SAFETY PLAN FOR
SUBSURFACE SAMPLING PROGRAM

Item No.	Description	Unit Rate	Estimated Quantity	Amount
1.	Environmental Engineer			
X o	Review Available Information Pertaining to the Rivershore Drive Site	\$55/hr	8 hours	\$ 440.00
o	Preparation of Work Plan and Schedule for Sampling Program	\$55/hr	30 hours	\$1,650.00
o	Preparation of Health and Safety Plan for Field Activities at the Rivershore Drive Site	\$55/hr	30 hours	\$1,650.00
2.	Senior Environmental Engineer, P.E.			
o	Review of Health and Safety and Sampling Plans Project Management	\$70/hr	8 hours	\$ 560.00

TOTAL ESTIMATED COST FOR PART 1

~~\$4,300.00~~

1650.00

According to
DEC field
direct,



PART 2

SUMMARY OF ESTIMATED COSTS
FOR FIELD ACTIVITIES ASSOCIATED
WITH THE SUBSURFACE SAMPLING

<u>Item No.</u>	<u>Description</u>	<u>Unit Rate</u>	<u>Estimated Quantity</u>	<u>Amount</u>
1.	Drilling Crew			
o	Operation of Penetrometer and Related Equipment	\$1,000/day	1 day	\$1,000.00 ✓
2.	Environmental Geologist/Engineer			
o	Implementation of Health and Safety Plan Including Air Monitoring	\$55/hr	8 hours	\$ 440.00 ✓
o	Preparation of Letter Report Summarizing ESI Involvement in Project	\$55/hr	20 hours	\$1,100.00
3.	Senior Environmental Engineer, P.E.			
o	Report Review and Project Management	\$70/hr	8 hours	\$ 560.00

TOTAL ESTIMATED COSTS FOR PART 2

\$3,100.00

TOTAL PART 1

\$4,300.00

TOTAL PART 2

\$3,100.00

TOTAL PROJECT COST

\$7,400.00

Total 1650
1440
3090

\$1 440.00



GENERAL CONDITIONS FOR CONSULTING GEOTECHNICAL ENGINEERING SERVICES

Section 1: SERVICES

Empire Soils Investigations, Inc. ("Empire") shall provide for the client, in accordance with these General Conditions, services in connection with the site which is the subject of this agreement, including engineering services, exploratory drilling, laboratory testing, and construction monitoring services.

Section 2: RIGHT OF ENTRY

The client will provide for right of entry of the employees, agents or subcontractors of Empire and all necessary equipment, in order to perform and complete the work which is the subject of this agreement.

While Empire will take all reasonable precautions to minimize any damage to the property, the client understands and agrees that in the normal course of work some damage may occur, the correction of which is not part of this agreement.

Section 3: UTILITIES

The client will provide to Empire documentation setting forth the location and depth of all underground utilities or structures.

In the prosecution of its work, Empire will take all reasonable precautions to avoid damage or injury to underground structures or utilities.

The client agrees to hold Empire harmless and pay for any damages to underground utilities or structures which are not called to Empire's attention and correctly shown on the plans furnished.

Section 4: SAMPLES

Empire will retain all soil and rock samples for 30 days after submission of test reports to the client. Further storage or transfer of samples will be made upon written request at the client's expense.

Section 5: INVOICES

Empire will submit invoices to the client monthly and a final bill upon completion of services.

Payment is due upon presentation of invoice and is past due thirty (30) days from invoice date. The client agrees to pay a finance charge of one and one-half percent (1½%) per month, or the maximum rate allowed by law, on past due accounts. The client will be liable for all court costs, disbursements, and reasonable attorneys' fees incurred by Empire in the collection of any outstanding invoices.

Section 6: OWNERSHIP AND REUSE OF DOCUMENTS

All reports, boring logs, field data, field notes, laboratory test data, calculations, and other documents prepared by Empire as instruments of service shall remain the property of Empire.

The client agrees that all reports and other work furnished to the client or its agents, which is not paid for, will be returned to Empire upon demand and will not be used by the client for any purpose whatsoever.

Empire will retain all pertinent records relating to the services performed for a period of six years following submission of the report, during which period the records will be made available to the client at all reasonable times upon request and for the cost of reproduction.

The client and Empire agree that reuse of documents on extensions of the project or any other project by either party is prohibited without permission.

Section 7: DISPUTES

If a dispute arising out of or relating to the performance of the services to be provided under this agreement results in legal action the parties agree that the prevailing party shall be entitled to recover all reasonable costs incurred with respect to the claim, including staff time, court costs, attorneys' fees, and other claim-related expenses.

Section 8: STANDARD OF CARE; WARRANTIES

Services provided by Empire under this agreement will be performed in accordance with the scope of services agreed to and in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. Empire makes no other warranty, express or implied.

In accepting reports of observations and tests and opinions expressed thereon performed pursuant to this agreement, the client agrees that the extent of Empire's obligation with respect thereto is limited to the furnishing of such data and opinions, which shall not be solely relied

upon by others as acceptance of the construction work, nor shall it relieve the contractor in any way from his obligations and responsibilities under the construction contract to conduct the work in conformance with the plans and specifications.

Empire will perform testing and observation services in accordance with custom and practice in the locality in which the site is located. In no event shall Empire be responsible for methods of construction, superintendence, sequencing or coordination of construction, or safety in, on or about the jobsite.

The client recognizes that subsurface conditions may vary from those encountered at the location where borings, surveys, or explorations are made by Empire and that the data, interpretations and recommendations of Empire are based solely on the information available to it. Empire will be responsible for those data, interpretations, and recommendations, but shall not be responsible for the interpretation by others of the information developed.

Client agrees to indemnify and hold Empire harmless from and against all claims, damages, losses and expenses arising from the interpretation by others of data provided by Empire.

Section 9: INSURANCE

Except as set forth below, Empire represents and warrants that it and its agents, staff and consultants employed by it are protected by worker's compensation insurance and that Empire has such coverage under public liability, professional liability, and property damage insurance policies which the Empire deems to be adequate. Certificates for all such policies of insurance shall be provided to the client upon written request. Within the limits and conditions of such insurance, Empire agrees to indemnify and save client harmless from and against any loss, damage, or liability arising from any negligent acts by Empire, its agents, staff, and consultants employed by it. Empire shall not be responsible for any loss, damage or liability beyond the amounts, limits, and conditions of such insurance. Empire shall not be responsible for any loss, damage, or liability arising from any acts by client, its contractors, agents, staff, and other consultants employed by it.

The client recognizes that Empire's insurance policies contain certain exclusions, including exclusions for certain claims arising from the discharge, dispersal, release or escape of pollutants. The client agrees to defend, indemnify, and hold Empire and its employees or agents harmless from and against all claims, causes of action, suits, proceedings, damages, losses and expenses, including third party claims or actions, arising from Empire's work for client under this agreement which falls within the scope of any exclusion from Empire's public liability or property damage insurance policies.

Section 10: HAZARDOUS WASTES

The client shall advise Empire of any hazardous wastes existing at or near the site at which Empire is to perform work. If Empire discovers hazardous wastes after it undertakes a project, or if Empire discovers the nature or extent of hazardous wastes differs materially from what client advised Empire, the client and Empire agree that the scope of services, schedule and estimated fee budget shall be adjusted as needed to complete the work without injury or damage.

Section 11: TERMINATION

This agreement may be terminated by either party upon seven (7) days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof. Such termination shall not be effective if that substantial failure has been remedied before expiration of the period specified in the written notice. In the event of termination, Empire shall be paid for services performed to the termination notice date plus reasonable termination expenses.

In the event of termination, or suspension for more than three (3) months, prior to completion of all reports contemplated by this agreement, Empire may complete such analyses and records as are necessary to complete its files and may also complete a report on the services performed to the date of notice of termination or suspension. The expenses of termination or suspension shall include all direct costs of Empire in completing such analyses, records and reports.

Section 12: ASSIGNS

Neither the client nor Empire may delegate, assign, sublet or transfer its duties or interest in this agreement without the written consent of the other party. Any assignee, successor or legal representative of any of the parties to this agreement shall be bound by the terms of this agreement.



EMPIRE SOILS INVESTIGATIONS, INC.

GENERAL CONDITIONS FOR HAZARDOUS WASTE SITE SERVICES

Section 1: SERVICES

Empire Soils Investigations, Inc. ("Empire") shall provide for the client, in accordance with these General Conditions, services in connection with the hazardous waste site which is the subject of this agreement, including exploratory drilling, installation of monitoring wells, soils laboratory testing, and construction quality assurance services.

The client will advise Empire of the nature and extent of the hazardous waste at the site. If Empire discovers after it undertakes the services that the hazardous waste site is of a different nature or extent than as advised by the client, the client and Empire agree that the scope of services, schedule and estimated fee budget shall be adjusted as needed to complete the work without injury or damage.

Section 2: RIGHT OF ENTRY

The client will provide for right of entry of the employees, agents or subcontractors of Empire and all necessary equipment, in order to perform and complete the work which is the subject of this agreement.

While Empire will take all reasonable precautions to minimize any damage to the property, the client understands and agrees that in the normal course of work some damage may occur, the correction of which is not part of this agreement.

Section 3: JOBSITE HEALTH AND SAFETY

The client will provide a site specific health and safety plan addressing the dispersal, discharge, escape, release or saturation of pollutants in or into the atmosphere or on, onto, upon, in or into surface or subsurface soil, waters, or watercourses, objects or any tangible or intangible matter.

The client will provide health and safety supervision, monitoring and direction to the extent required to ascertain the safety of Empire's staff and agents while performing the work which is the subject of this agreement.

Section 4: UTILITIES

The client will provide to Empire documentation setting forth the location and depth of all underground utilities or structures.

In the prosecution of its work, Empire will take all reasonable precautions to avoid damage or injury to underground structures or utilities.

The client agrees to hold Empire harmless and pay for any damages to underground utilities or structures which are not called to Empire's attention and correctly shown on the plans furnished to the extent such damages are not covered by Empire's property damage and public liability insurance policies.

Section 5: BORINGS AND MONITORING WELLS

The client will provide to Empire plans, specifications and instructions delineating the location, diameter, type and depth of each boring and monitoring well to be performed by Empire. The client shall be solely responsible to select the location, diameter, type and depth of each boring and monitoring well.

Section 6: JOBSITE TESTING AND OBSERVATION

In no event shall Empire be responsible for methods of construction, superintendence, sequencing or coordination of construction, or safety in, on or about the jobsite.

In accepting reports of observations and tests performed pursuant to this agreement, the client agrees that the extent of Empire's obligation with respect thereto is limited to the furnishing of such data, which shall not be solely relied upon by others as acceptance of the construction work, nor shall it relieve the contractor in any way from his obligations and responsibilities under the construction contract to conduct the work in conformance with the plans and specifications.

Section 7: INVOICES

Empire will submit invoices to the client monthly and a final bill upon completion of services.

Payment is due upon presentation of invoice and is past due thirty (30) days from invoice date. The client agrees to pay a finance charge of one and one-half percent (1½%) per month, or the maximum rate allowed by law, on past due accounts. The client will be liable for all court costs, disbursements, and reasonable attorneys' fees incurred by Empire in the collection of any outstanding invoices.

Section 8: OWNERSHIP OF DOCUMENTS; CONFIDENTIALITY

All reports, boring logs, field data, field notes, laboratory test data, calculations, and other documents prepared by Empire as instruments of service shall remain the property of Empire.

The client agrees that all reports and other work furnished to the client or its agents, which is not paid for, will be returned to Empire upon demand and will not be used by the client for any purpose whatsoever.

Empire will retain all pertinent records relating to the services performed for a period of six years following submission of the report, during which period the records will be made available to the client at all reasonable times upon request and for the cost of reproduction.

Empire agrees that all information prepared or furnished by Empire shall be and remain confidential and Empire will not release, publish or disclose any information prepared or furnished by Empire without the client's written consent except as:

- Empire deems reasonably necessary for the performance of work on the project, including but not limited to informing its staff, agents, and subcontractors;

- is necessary for the preservation of public safety and welfare;
- required by government directives or compliance orders; or
- required for protection against or defense of claims against Empire or claims of the client arising from or relating to the project which is the subject of this agreement.

Empire agrees only to disclose such information as is reasonably necessary to achieve the purposes set forth in subparagraph (a) - (d), as applicable.

Section 9: STANDARD OF CARE; WARRANTIES

Services provided by Empire under this agreement will be performed in accordance with specifications and instructions provided by the client and in a manner consistent with that level of care and skill ordinarily exercised by members of the industry currently practicing under similar conditions. Empire makes no other warranty, express or implied.

The client recognizes that subsurface conditions may vary from those encountered at the location where, and at the time when, borings, sampling, or testing are performed by Empire and that the data provided by Empire are based solely on the information available to it. Empire will be responsible for those data, but shall not be responsible for the interpretation by others of the information developed.

The client agrees to indemnify and hold Empire harmless from and against all claims, damages, losses and expenses arising from the interpretation by others of data provided by Empire.

Section 10: INSURANCE

Except as set forth below, Empire represents and warrants that it and its agents, staff and consultants employed by it are protected by worker's compensation insurance and that Empire has such coverage under public liability and property damage insurance policies which the Empire deems to be adequate. Certificates for all such policies of insurance shall be provided to the client upon written request. Empire shall not be responsible for any loss, damage or liability beyond the amounts, limits, and conditions of such insurance. Empire shall not be responsible for any loss, damage, or liability arising from any acts by client, its agents, staff, and other consultants employed by it.

The client recognizes that Empire's insurance policies contain certain exclusions, including exclusions for certain claims arising from the discharge, dispersal, release or escape of pollutants. The client agrees to defend, indemnify, and hold Empire and its employees or agents harmless from and against all claims, causes of action, suits, proceedings, damages, losses and expenses, including third party claims or actions, arising from Empire's work for client under this agreement which falls within the scope of any exclusion from Empire's public liability or property damage insurance policies.

Section 11: HAZARDOUS WASTES

The client agrees to purchase from Empire and take possession of all laboratory and field equipment used to perform work involving hazardous wastes for the client that Empire determines cannot be decontaminated.

The client agrees that all samples of contaminated materials, including material samples not consumed in Empire's laboratory work and contaminated wastes generated by drilling or testing at contaminated sites shall be owned by the client and the client shall take possession of contaminated samples upon Empire's request.

The client shall defend, indemnify and hold Empire and its employees or agents harmless from and against all claims, damages, losses and expenses, including third party claims, arising out of or in any manner connected with or related to the performance of this agreement, to the extent the same are not covered by the insurance maintained by Empire.

Section 12: TERMINATION

This agreement may be terminated by either party upon seven (7) days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof. Such termination shall not be effective if that substantial failure has been remedied before expiration of the period specified in the written notice. In the event of termination, Empire shall be paid for services performed to the termination notice date plus reasonable termination expenses.

In the event of termination, or suspension for more than three (3) months, prior to completion of all reports contemplated by this agreement, Empire may complete such analyses and records as are necessary to complete its files and may also complete a report on the services performed to the date of notice of termination or suspension. The expenses of termination or suspension shall include all direct costs of Empire in completing such analyses, records and reports.

Section 13: ASSIGNS

Neither the client nor Empire may delegate, assign, sublet or transfer its duties or interest in this agreement without the written consent of the other party. Any assignee, successor or legal representative of any of the parties to this agreement shall be bound by the terms of this agreement.

Section 14: DISPUTES

If a dispute arising out of or relating to the performance of the services to be provided under this agreement result in legal action the parties agree that the prevailing party shall be entitled to recover all reasonable costs incurred with respect to the claim, including staff time, court costs, attorneys' fees, and other claim-related expenses.

RECEIVED

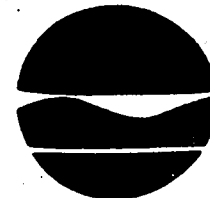
APR 25 1991

N.Y.S. DEPT. OF
ENVIRONMENTAL CONSERVATION
REGION 9

FILE

Cayuga Island

New York State Department of Environmental Conservation
600 Delaware Ave., Buffalo, NY 14202-1073



Thomas C. Jorling
Commissioner

October 31, 1991

Mr. Steven E. Palka
8907 Hennepin Avenue
Niagara Falls, New York 14304

Dear Mr. Palka:

This is in response to your October 25, 1991 letter to Mr. Peter Buechi of this Office. Mr. Buechi asked me to respond on his behalf.

You requested written verification that your residence located at 8907 Hennepin Avenue is not listed on the New York State Department of Environmental Conservation Hazardous Waste Site list. I have enclosed a copy of the registry information for the site named Cayuga Island, Site #932008. Your property does not fall within the two areas identified in the site's description as receiving various types of fill material and, therefore, would not be considered to be a hazardous waste site or located within a hazardous waste site.

For your information, the Department is planning a soil boring program in the two areas in question to determine whether any hazardous wastes are present. If those results turn up negative, the site would be delisted from the registry.

Please feel free to contact Mr. Barkat, the Project Engineer, or myself if you have any additional questions.

Sincerely,

E. Joseph Sciascia

E. Joseph Sciascia, P.E.
Regional Hazardous Waste
Remediation Engineer

EJS:jps

cc: Peter Buechi
Abul Barkat

*J. SCARSA,
PLEASE RESPOND TO THIS LETTER JPD*

Mr. Peter Buechi
New York State Department of Environmental
Conservation
600 Delaware Avenue
Buffalo, N.Y. 14202

October 25, 1991

Dear Mr. Buechi,

I recently spoke to Abdul Barkat who referred me to you. The purpose of this letter is to receive from you written verification that my residence is not listed on the N.Y.S. D.E.C. hazardous waste site list. I recently applied for a refinance with a local bank. The bank turned down the application because they said it was located on this list.

My residence is located at 8907 Hennepin Avenue Niagara Falls, N.Y. 14304. I feel the bank is in error and this written response from you will clarify the matter. Your prompt response is appreciated.

Sincerely,

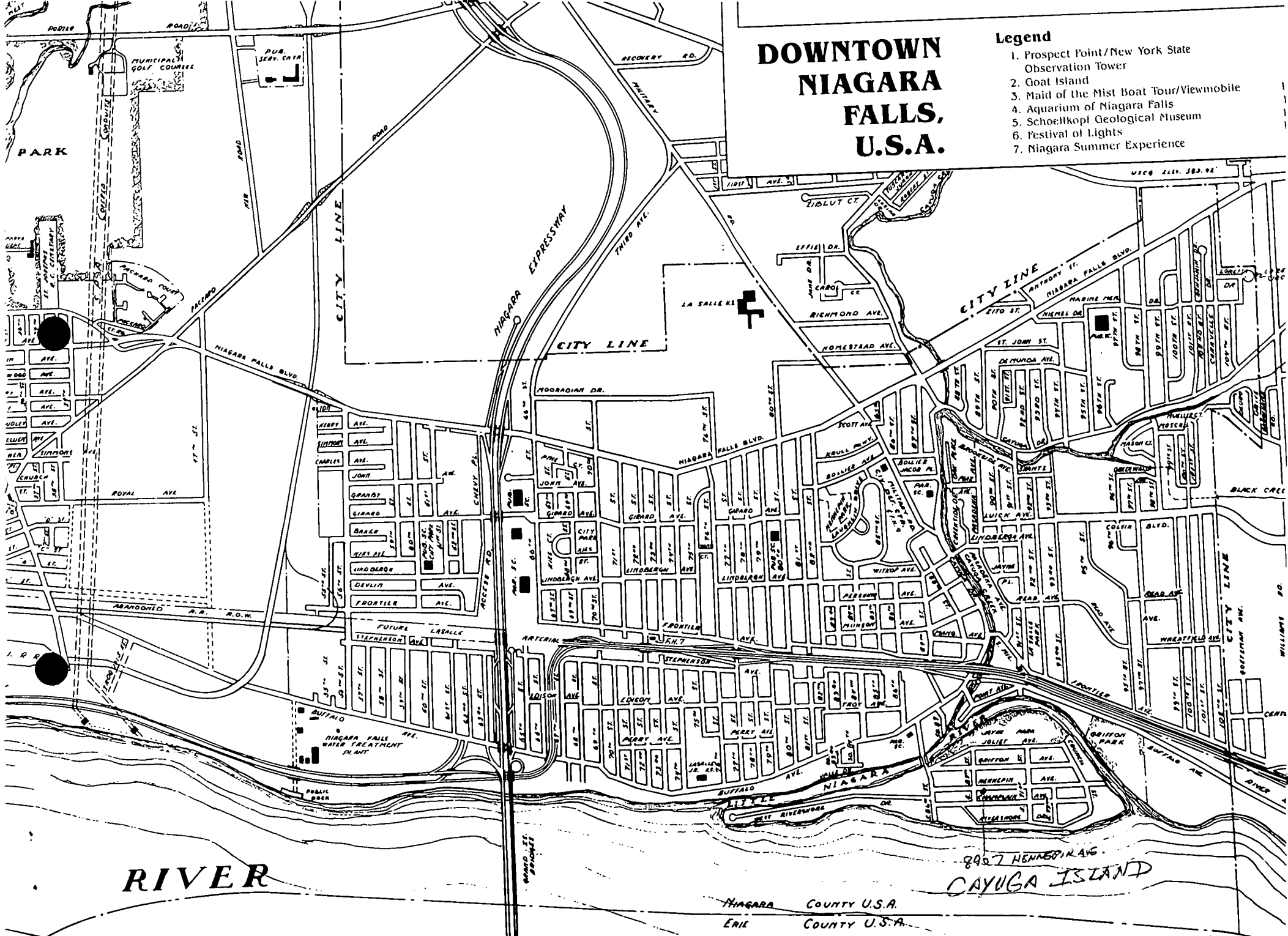


Steven E. Palka

**DOWNTOWN
NIAGARA
FALLS,
U.S.A.**

Legend

1. Prospect Point/New York State Observation Tower
2. Goat Island
3. Maid of the Mist Boat Tour/Viewmobile
4. Aquarium of Niagara Falls
5. Schoellkopf Geological Museum
6. Festival of Lights
7. Niagara Summer Experience



City of Niagara Falls, NY

RECEIVED

OCT 28 1991

N.Y.S. DEPT. OF
ENVIRONMENTAL CONSERVATION
REGION 9

New York State Department of Environmental Conservation

MEMORANDUM

TO: Carl Hoffman, Western Investigations Section
FROM: Michael Podd, Citizen Participation Specialist at Love Canal
SUBJECT: Cayuga Island Residents Agreeing to Sampling

DATE: October 23, 1991

Attached is a list of the residents that have voluntarily agreed to have samples taken from along their shoreline. The curb-side sampling will require permission from the City of Niagara Falls. It would be best to pursue this permission through your office.

The next logical step is to review these properties to ensure that there is sufficient access for the type of equipment that will be used. I have attempted to focus on addresses that will give a good sampling distribution, with special attention to the vacant lots (7650 and 7660) on West Rivershore Drive. If samples are taken in the opposite corners of these lots it might negate the need to sample 7630 West Rivershore Drive.

It is important to note that although Mr. Gary DiLaura, of 7605 west Rivershore Drive, has agreed to having a sample taken on his property, he will only permit it on the unfinished portion (extreme west end of island). He stresses that if the Department insists on sampling elsewhere on his property, the state will first have to show evidence, in court, of dumping on his property. Mr. DiLaura is a law enforcement officer with a legal background and is willing to pursue his legal options as to sampling locations.

After the actual sampling locations are determined, I would suggest the standard ten day notice be sent to the owners. This notice should include a friendly cover letter informing the property owner that the Department is mailing the attached notice to them in order to relieve them of any responsibility or liability for the work. As many of these people are not familiar with how the state proceeds in these matters, the letter should also mention when the work is expected to begin, that the state will be responsible for restoring the property and will remove any spoils from the sampling.

Attachment

cc: J. Sciascia ✓
A. Barkat
R. Schick,
A. Wakeman (DOH)

CAYUGA ISLAND INVESTIGATION
Niagara Falls, N.Y. 14304
Owners Agreeing To Sampling
Along Shoreline

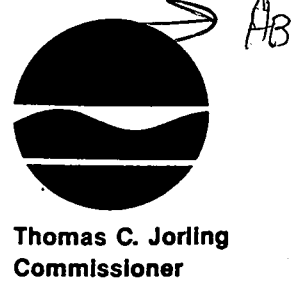
NAME	ADDRESS	PHONE	COMMENTS
Mr. Robert Culbreth	4445 Miller Road	297 4568	7650 W.River, vacant
Mr. Thomas Culbreth, Jr.	P.O. Box 144	284 9293	7660 W.River, vacant
Mr. Robert Marlin	8911 Rivershore Drive	283 0715	
Mr. Joseph Smith	8915 Rivershore Drive	283 8915	
Mr. Marian Major	8929 Rivershore Drive	283 2049	
Mrs. Esther Blessing	9133 Rivershore Drive	283 9205	
Mr. Albert Merry	9323 Rivershore Drive	283 2145	
Mr. Robert Merino	9365 Rivershore Drive	282 2400	
Mr. Gary J. DiLaura	7605 West Rivershore Dr.	283 4141	unfinished area only
Mr. Richard Cekalski	7611 West Rivershore Dr.	283 7848	
Mr. Grover London	7616 West Rivershore Dr.	283 3308	
Mrs. Beverly Ciccarelli	7630 West Rivershore Dr.	283 2721	
Mr. Walter Janik	7711 West Rivershore Dr.	283 3138	
Mr. Stanley Kasper	7714 West Rivershore Dr.	283 5453	

RECEIVED

OCT 25 1991

N.Y.S. DEPT. OF
ENVIRONMENTAL CONSERVATION
REGION 9

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



OCT 08 1991

TELEX

Mr. Jay Cull
Occidental Chemical Corporation
360 Rainbow Blvd. South
P.O. Box 278
Niagara Falls, New York 14302

Dear Mr. Cull:

The New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health have reviewed the Work Plan Data Collection Program for the Hennepin Avenue site. Enclosed with this letter are the agencies comments on the work plan. Please revise the work plan in accordance with these comments and submit a revised plan within two weeks of your receipt of this letter.

The major aspect of this plan which requires clarification by OCC pertains to the preliminary plans for remediation. It is difficult to comment on the adequacy of the sampling efforts without any knowledge of OCC's anticipated approach to the remediation efforts. Based upon the observation that OCC is attempting to establish a "clean-line", the NYSDEC assumes that all fill material between the clean-line and the house foundation will be removed. If this assumption is not correct, additional sampling within the property will be necessary to define the extent of contamination. Suggested sampling areas are depicted on the enclosed figure.

Please provide this clarification and address the enclosed comments in a revised work plan. Please contact me or Mr. Jeffrey Mirarchi at 518/457-4343 if you have any questions.

Sincerely,

Robert W. Schick, P.E.
Chief, Remedial Section A
Bureau of Western Remedial Action
Division of Hazardous Waste Remediation

Enclosure

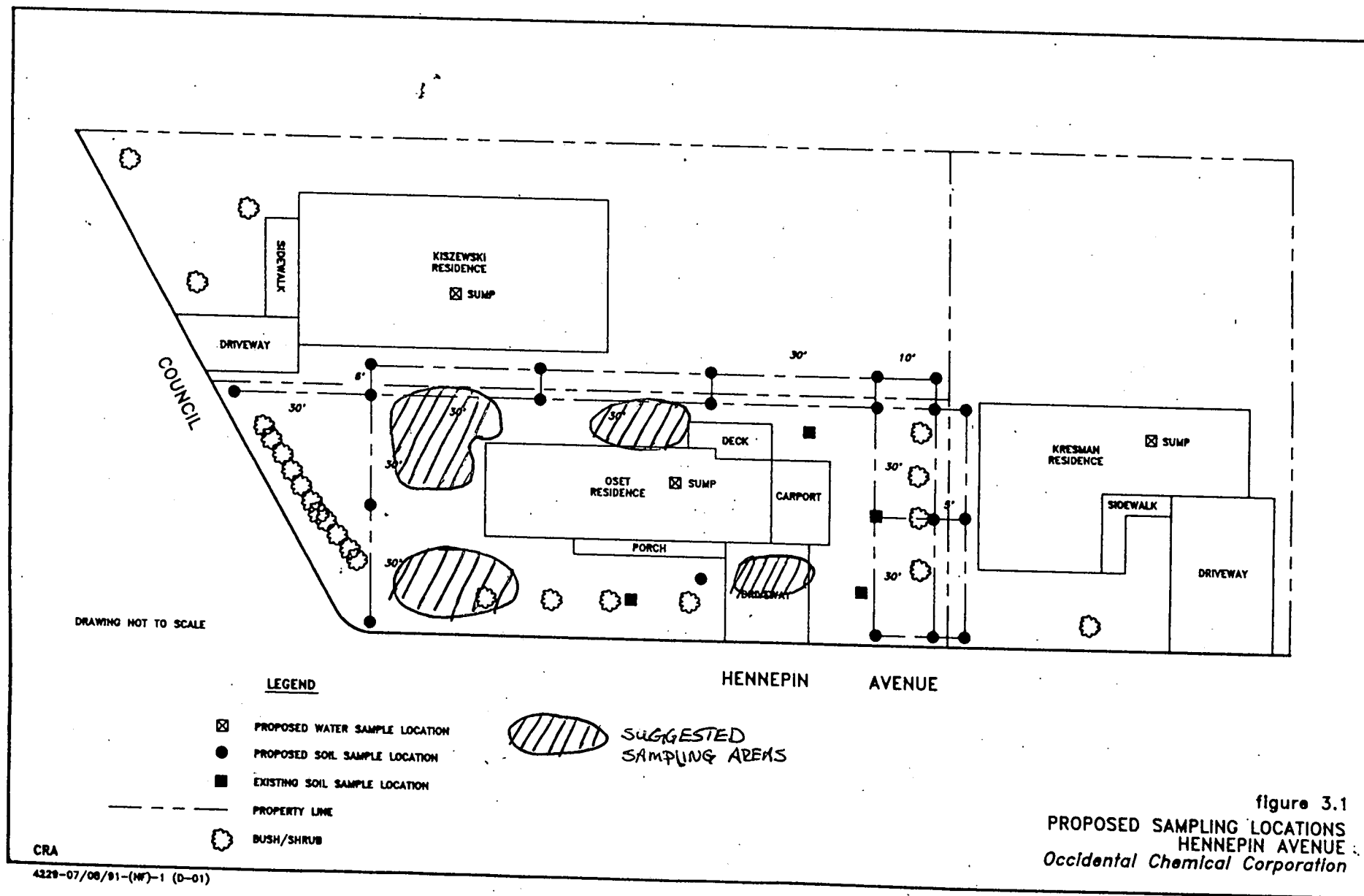
cc: A. Wakeman, NYSDOH
M. VanValkenburg, NYSDOH

AJM/td

bcc: J. Sciascia, Reg.9
A. Barkat, Reg.9 ✓
R. Schick

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Comment On
OCCIDENTAL CHEMICAL CORPORATION
HENNIPEN AVENUE SITE

1. The plans should indicate that if odor/visual contamination is observed, the sample location will be moved outward.
2. How will possible contamination beneath the carport, deck and driveway be evaluated? Does OCC accept that these areas will be excavated without any additional sampling? If this is not the case, sampling points must be included.
3. The analytical parameter list should be expanded to more completely characterize the nature of the contamination. Full TCL analysis should be performed on at least two selected samples of the more highly contaminated soils. Also, at least two samples for TCLP analyses should be obtained.
4. The vertical extent of contaminant migration should also be evaluated in the plan. In selected areas, the native soils beneath the contaminated fill should also be sampled and analyzed to confirm that leaching of contaminants has not occurred.
5. OCC shall provide information in the plan regarding the source of the contaminated fill. Any information OCC has on the nature of the contamination should be provided to support the analytical parameter list.
6. A more detailed and updated schedule shall be provided.
7. The plan should include a vicinity map, and the site map (Figure 3.1) should include a north arrow.



→ @backst
Abel. this is for both projects. The entire contract is here. JH.
New York State Department of Environmental Conservation

50 Wolf Road, Albany, New York 12233

7010 *I have a copy*

bcc: w/enc. - S. Perrigo
S. Gupta
M. Doster - Reg. 9
J. Printup - BMWBC
R. Burger
M. Serafini
E. Califano (3)
w/o enc. - W. Demick
D. Norvik
D. Weigel
C. Goddard
M. O'Toole
N. Colangelo
J. McKeon
E. Barcomb
P. Buechi
J. Sciascia

SG/clf

OCT 18 1991

Mr. Thomas F. Maher, P.E.
Dvirka & Bartilucci
6800 Jericho Turnpike
Syosset, NY 11791

Dear Mr. Maher:

RE: State Superfund Standby Contract
Work Assignment #D002708-4
Cayuga Island, Site #9-32-008/9-15-092

*Murphy + Remai
Site*

Enclosed is a copy of the State Superfund Work Assignment (W.A.) No: D002708-4 for the above-referenced contract. Please acknowledge receipt by returning a signed copy of this letter to our office within one week of receipt.

This work assignment has been identified by an alpha-numeric designation containing the Dvirka & Bartilucci contract identification number and the sequential number of the W.A. This letter authorizes the expenditure of Work Plan Development Cost funds. These funds may not be available for payment until up to four weeks after the date of this letter. The following work assignment is being forwarded to you:

Project Name: Cayuga Island Site #9-32-008
Operable Unit # N/A
Program Element: PSA

W.A. No: D002708-4; NYSDEC Project Manager: Mr. Steven Perrigo
Phone: (518)457-9538
Work Plan Development Cost Authorization (Task 2): \$6,350

Estimated Work Assignment Budget for Tasks 3-6: \$95,450
Total Estimated Work Assignment Budget: \$101,800

When preparing a work plan for the above-referenced work assignment, please include the following items:

- 1) Description of major tasks and subtasks;
- 2) Detailed work assignment progress schedule with milestones;
- 3) Identification of areas of work requiring subcontracting;
- 4) A detailed work assignment budget broken down by tasks and subtasks in accordance with the contract's budget reporting requirements. (Utilize the 2.11 series of Schedules in the contract.) The work assignment budget must be prepared utilizing cost rates and factors contained in the base contract (See Article 4 of contract), applied to the approved level of effort contained in the work plan;

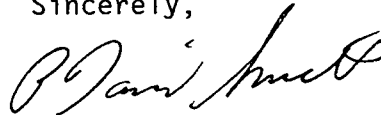
Mr. T. Maher

Page 2

- 5) A staffing plan identifying management and technical staff to be assigned, their areas of responsibility and copies of their resumes if these have not been submitted previously; and
- 6) A final M/WBE Utilization Plan identifying subcontracts most likely to result in M/WBE utilization must be submitted to this office within two weeks.

If you have any questions concerning contractual procedures, please contact me or Mr. Swapan Gupta, P.E., Contract Manager, at (518)457-9279. If you have any questions concerning technical issues associated with the work, please contact the NYSDEC Project Manager. Please submit six (6) copies of the Work Plan and all responses on this work assignment to me.

Sincerely,



P. David Smith, P.E.
Chief, Contract Development Section
Bureau of Program Management
Div. of Hazardous Waste Remediation

Enc.

Received:

Date: _____

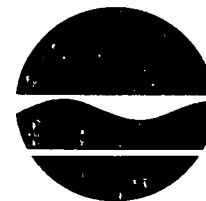
Signature of

Consultant: _____

RECEIVED
OCT 22 1991

N.Y.S. DEPT. OF
ENVIRONMENTAL CONSERVATION
REGION 9

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



Thomas C. Jorling
Commissioner

FAX

October 18, 1991

Donald Poarch
Tricil Environmental Response, Inc.
1123 Lumpkin Road
Houston, Texas 77043

Dear Mr. Poarch:

RE: Site No. 9-32-078
93rd Street School Site
Niagara Falls, New York

The revised project plans (Project Operation Plan, Health and Safety Plan) submitted by Tricil Environmental Response, Inc. (Tricil) have been reviewed. The enclosed are our review comments. Please incorporate these comments and resubmit the revised plan by October 25, 1991.

Please call Mr. Amarinderjit Nagi at (518) 457-9285 if you have any questions.

Sincerely,

James Van Hoesen

James G. Van Hoesen, P.E.
Chief, Western Field Services Section
Bureau of Construction Services
Division of Hazardous Waste Remediation

cc: N. Lester - Tricil (FAX)
B. Armet - LEA
J. Loureiro - LEA
M. Van Valkenburg - DOH

AN/mj

bcc: J. Sciascia - NYSDEC Region 9
W. Roblee - NYSDEC Region 9
A. Nagi
J. Van Hoesen
Dayfile



New York State Department of Environmental Conservation

MEMORANDUM

TO: Carl Hoffman, Western Investigations Section
FROM: Michael Podd, Citizen Participation Specialist at Love Canal *MPP*
SUBJECT: Cayuga Island Residents Agreeing to Sampling

DATE: October 23, 1991

Attached is a list of the residents that have voluntarily agreed to have samples taken from along their shoreline. The curb-side sampling will require permission from the City of Niagara Falls. It would be best to pursue this permission through your office.

The next logical step is to review these properties to ensure that there is sufficient access for the type of equipment that will be used. I have attempted to focus on addresses that will give a good sampling distribution, with special attention to the vacant lots (7650 and 7660) on West Rivershore Drive. If samples are taken in the opposite corners of these lots it might negate the need to sample 7630 West Rivershore Drive.

It is important to note that although Mr. Gary DiLaura, of 7605 west Rivershore Drive, has agreed to having a sample taken on his property, he will only permit it on the unfinished portion (extreme west end of island). He stresses that if the Department insists on sampling elsewhere on his property, the state will first have to show evidence, in court, of dumping on his property. Mr. DiLaura is a law enforcement officer with a legal background and is willing to pursue his legal options as to sampling locations.

After the actual sampling locations are determined, I would suggest the standard ten day notice be sent to the owners. This notice should include a friendly cover letter informing the property owner that the Department is mailing the attached notice to them in order to relieve them of any responsibility or liability for the work. As many of these people are not familiar with how the state proceeds in these matters, the letter should also mention when the work is expected to begin, that the state will be responsible for restoring the property and will remove any spoils from the sampling.

Attachment

cc: J. Sciascia
A. Barkat
R. Schick,
A. Wakeman (DOH)

CAYUGA ISLAND INVESTIGATION
Niagara Falls, N.Y. 14304
Owners Agreeing To Sampling
Along Shoreline

NAME	ADDRESS	PHONE	COMMENTS
Mr. Robert Culbreth	4445 Miller Road	297 4568	7650 W.River, vacant
Mr. Thomas Culbreth, Jr.	P.O. Box 144	284 9293	7660 W.River, vacant
Mr. Robert Marlin	8911 Rivershore Drive	283 0715	
Mr. Joseph Smith	8915 Rivershore Drive	283 8915	
Mr. Marian Major	8929 Rivershore Drive	283 2049	
Mrs. Esther Blessing	9133 Rivershore Drive	283 9205	
Mr. Albert Merry	9323 Rivershore Drive	283 2145	
Mr. Robert Merino	9365 Rivershore Drive	282 2400	
Mr. Gary J. DiLaura	7605 West Rivershore Dr.	283 4141	unfinished area only
Mr. Richard Cekalski	7611 West Rivershore Dr.	283 7848	
Mr. Grover London	7616 West Rivershore Dr.	283 3308	
Mrs. Beverly Ciccarella	7630 West Rivershore Dr.	283 2721	
Mr. Walter Janik	7711 West Rivershore Dr.	283 3138	
Mr. Stanley Kasper	7714 West Rivershore Dr.	283 5453	

RECEIVED
OCT 25 1991
N.Y.S. DEPT. OF
ENVIRONMENTAL CONSERVATION
REGION 9

pb

Thomas C. Jorling
Commissioner

Dear Resident:

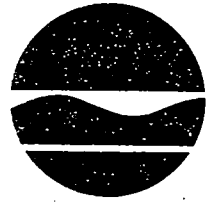
Michael R. Podd
Citizen Participation Specialist

RECEIVED

OCT 10 1991

N.Y.S. DEPT. OF
ENVIRONMENTAL CONSERVATION
REGION 9

New York State Department of Environmental Conservation
9820 Colvin Boulevard, Niagara Falls, N.Y. 14304



Thomas C. Jorling
Commissioner

September 16, 1991

RE: CAYUGA ISLAND INVESTIGATION

Mr. Abul Barkat
N.Y.S.D.E.C., Region 9
600 Delaware Avenue
Buffalo, NY 14202

Dear Resident:

The New York State Department of Environmental Conservation (NYSDEC) would like to inform you of upcoming activities on Cayuga Island. Some of these activities are in response to residents requests and will involve efforts by the Department to determine if two areas of the island should continue to be listed on the Registry of Inactive Hazardous Waste Disposal Sites. In addition, the Department will be overseeing the investigation of contaminated soils at 9353 Hennepin Avenue, where the owner, during construction of his home in the 1950's, obtained industrial fill materials from a local chemical plant. It is anticipated these investigative activities will start this fall.

Attached, you will find a Fact Sheet that summarizes the site's history, past investigations and the upcoming activities. In order to better inform you about the site, a Document Repository, which will contain documents related to these investigations and, if necessary, plans for remediation, has been established. The local Document Repository for the Cayuga Island site is located at the Love Canal Public Information Office, 9820 Colvin Boulevard, Niagara Falls, N.Y. or, by appointment only, at NYSDEC's Region 9 Office, 584 Delaware Avenue, Buffalo, NY (716) 847-4585.

The New York State Department of Environmental Conservation will continue to contact you by mail at various points in the remedial process, however, if you currently have any questions, please feel free to contact me at (716) 297-9637.

Sincerely yours,

Michael R. Podd

Michael R. Podd
Citizen Participation Specialist

Attachment

RECEIVED
SEP 13 1991
N.Y.S. DEPT. OF ENVIRONMENTAL CONSERVATION

THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
LOVE CANAL PUBLIC INFORMATION OFFICE
9820 COLVIN BOULEVARD, NIAGARA FALLS, N.Y. 14304

* * * * FACT SHEET * * * *

CAYUGA ISLAND
NIAGARA FALLS, N.Y.

INTRODUCTION

There are two separate matters that the New York State Department of Environmental Conservation (NYSDEC) will be addressing in this Fact Sheet. The first involves two areas identified in the Registry of Inactive Hazardous Waste Disposal Sites as Cayuga Island Site # 9-32-008. The second is the matter of contaminated soils recently identified at 9353 Hennepin Avenue (See Map). Future reports and related documents on both these areas will be available for your review at the Document Repository, located at the Love Canal Public Information Office, 9820 Colvin Boulevard, Niagara Falls, N.Y. or, by appointment only, at NYSDEC's Region 9 Office, 584 Delaware Avenue, Buffalo, NY (716) 847-4585. In addition, information may be obtained by calling 1-800-342-9296 and leaving your name, complete address and your request.

CAYUGA ISLAND, SITE CODE 9-32-008

The Cayuga Island Site occupies the western tip and portions of the southern shore of Cayuga Island and consists of man-made island extensions. The areas are completely residential, with homes placed on 50 to 100 foot wide lots.

The site is currently listed as a Class 3 site in the Registry, which means the site does not present a significant threat to public health or the environment, and that action may be deferred. However, in response to resident concerns, the NYSDEC is initiating an investigation of the nature of the fill in order to determine if the site should continue to be listed in the Registry.

SITE HISTORY

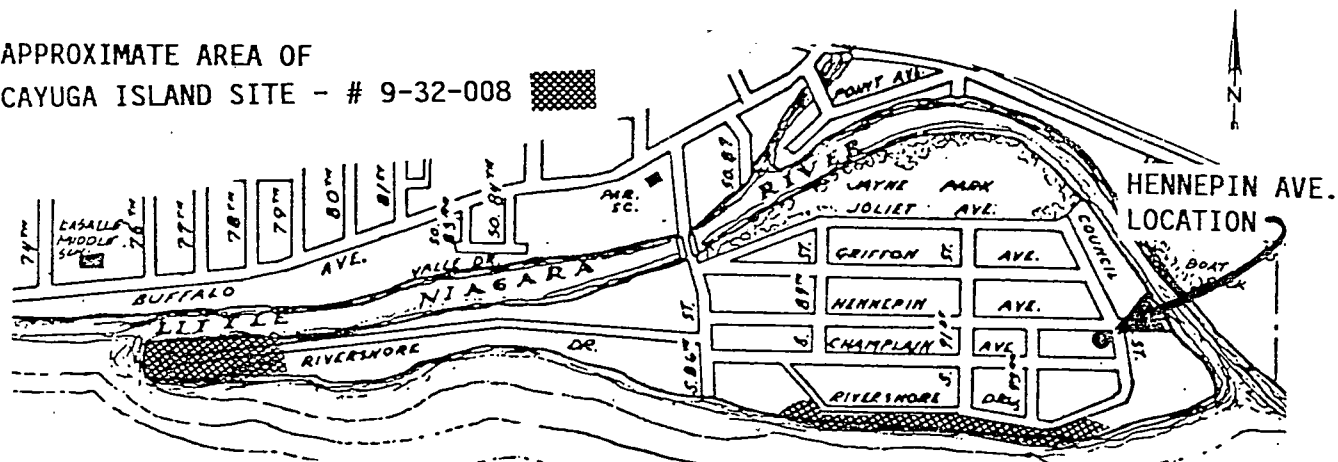
The first part of the site is the western tip which, prior to 1930, was extended 250 yards and was widened, between 1958 and 1962. The second part of the site is the filled area along the south shore of the island. A comparison of 1927 and 1980 Niagara Falls maps indicate that the south shoreline was extended over time by up to 100 feet. It is suspected that a number of chemical and other companies may have supplied fill in these areas.

In the early 1980's, as part of the United States Geological Survey, two test borings were conducted on the western tip of the island. Analytical results from a limited number of samples are available. The results indicated high levels of iron, zinc and traces of organic compounds in both the water and soil samples.

FUTURE SITE INVESTIGATION

To determine the exact nature of the fill material used to extend the island, the NYSDEC has developed a plan to investigate the site which includes approximately 19 bore holes, eleven on the western tip and eight along the south shore. The exact location of these bore holes has yet to be determined and the Department will be contacting home owners in the near future to obtain permission to perform this work on their properties. The proposed bore holes will be about eight feet deep with soil samples collected at two foot intervals. A minimum of one sample from each bore hole will be analyzed for targeted compounds. All investigative work will be done according to a strict health and safety plan approved by the Department.

APPROXIMATE AREA OF
CAYUGA ISLAND SITE - # 9-32-008



9353 Hennepin Avenue

The owner of 9353 Hennepin Avenue, during construction of his home in the 1950's, used fill materials which came from Occidental Chemical Corporation's (O.C.C.) Niagara Falls plant. Last year, while digging holes in his yard to plant trees, the owner noted a chemical odor from, and black coloration of, the soils below the surface which he associated with the O.C.C. fill material.

In late December, 1990, he contacted O.C.C. regarding the potentially contaminated soils he had encountered in his yard. As a result, on January 10 and 11, 1991, four bore holes were completed on the property by O.C.C. The purpose of these holes was to obtain samples of the soil for chemical analysis to define the nature of the chemicals present. Results of this bore hole investigation indicate that the subsurface of this property is contaminated with materials typically associated with the O.C.C. plant. The contaminated soils were generally found 1.6 feet below the surface, with native soil being encountered about three feet below the surface.

O.C.C. notified the N.Y.S.D.E.C. of these findings in late July 1991 and is currently developing a sampling plan to further investigate the nature and extent of the contamination found on the property. It is anticipated that O.C.C. will perform the additional sampling this fall with oversight from the Department. The next step, after the investigation is completed, will be the negotiation of an Order on Consent which will address the removal of contaminated soils found.