The electronic version of this file/report should have the file name:

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letter._____ ._____-___.CorrespondenceFile_____.pdf

example: *letter . Site Number . Year-Month . CorrespondanceFileYear-Year . pdf*

report. HW932057 . 1991 - 02 . Preliminary Site Assessment .pdf

example: *report . Site Number . Year-Month . ReportName . pdf*

if a non-foilable site: add ".nf.pdf" at end of file name

Project Site numbers will be proceeded by the following:

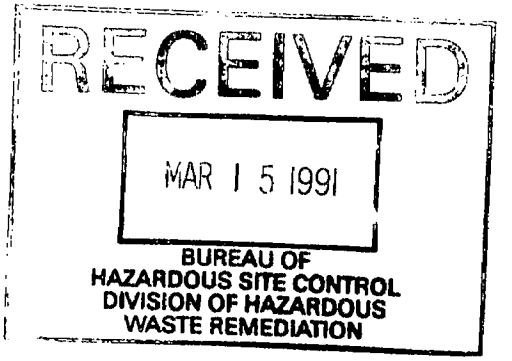
Municipal Brownfields - B
Superfund - HW
Spills - SP
ERP - E
VCP - V
BCP - C

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES

PRELIMINARY SITE ASSESSMENT

Robert Moses Parkway
City of Niagara Falls

Site No. 932057
Niagara 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, Jr., *Director*

By:
E.C. JORDAN CO.
Portland, Maine

February 1991

NYSDEC CONTRACT NO. D002472

NYSDEC WORK ASSIGNMENT NO. D002472-6

E.C. JORDAN CO.

FINAL REPORT

TASK 1: DATA RECORDS SEARCH AND ASSESSMENT
PRELIMINARY SITE ASSESSMENT

ROBERT MOSES PARKWAY
SITE NO. 932057
NIAGARA COUNTY

FEBRUARY 1991

Submitted by:

Elizabeth A. Ryan
Project Manager
E.C. Jordan Co.

Approved by:

William J. Weber
NSSC Program Manager
E.C. Jordan Co.

NOTICE

This Preliminary Site Assessment report about the Robert Moses Parkway Site (Site No. 932057), located in the City of Niagara Falls, Niagara County, New York, was prepared expressly for the New York State Department of Environmental Conservation (NYSDEC) under the Superfund Standby Contract (No. D002472, Work Assignment No. D002472-6). The purpose of this report is to provide information necessary for NYSDEC to reclassify the site according to the Classes 2, 3, and Delist categories described in Section 2.0 of this report. The conclusions and recommendations in this report represent Jordan's professional judgment and opinion based on present, generally accepted engineering practices for conducting preliminary site characterizations and assessments. Conclusions in this report are based on records reviews, interviews, and site walkover performed by Jordan personnel. The health-based regulatory standards discussed in this report may change in the future. Levels of environmental contamination that are "acceptable" by current standards may not be so in the future.

Information contained in this report may not be suitable for any other use without adaptation for the specific purpose intended. Any such reuse of or reliance on the information, assessments, or conclusions in this report without adaptation will be at the sole risk and liability of the party undertaking the reuse.

JHG/NYSDEC/70B

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LIST OF FIGURES

1.0 EXECUTIVE SUMMARY

The Robert Moses Parkway Site, Site No. 932057, is located in the City of Niagara Falls, Niagara County, New York (Figure 1). The Parkway was built on reclaimed land along the northern shoreline of the Niagara River. The site, owned by the Power Authority State of New York (PASNY), is under permanent easement to the New York State Department of Transportation (NYSDOT) (Violenti, 1990).

The site came to the attention of New York State Department of Environmental Conservation (NYSDEC) in 1978, after receiving a letter of complaint from a private citizen. This letter claimed that during the construction of the Parkway (circa 1963) 100 containers of unknown waste materials from Hooker Chemical were allegedly buried in trenches between the breakwall and the parkway. The location of the alleged disposal of these containers is not known.

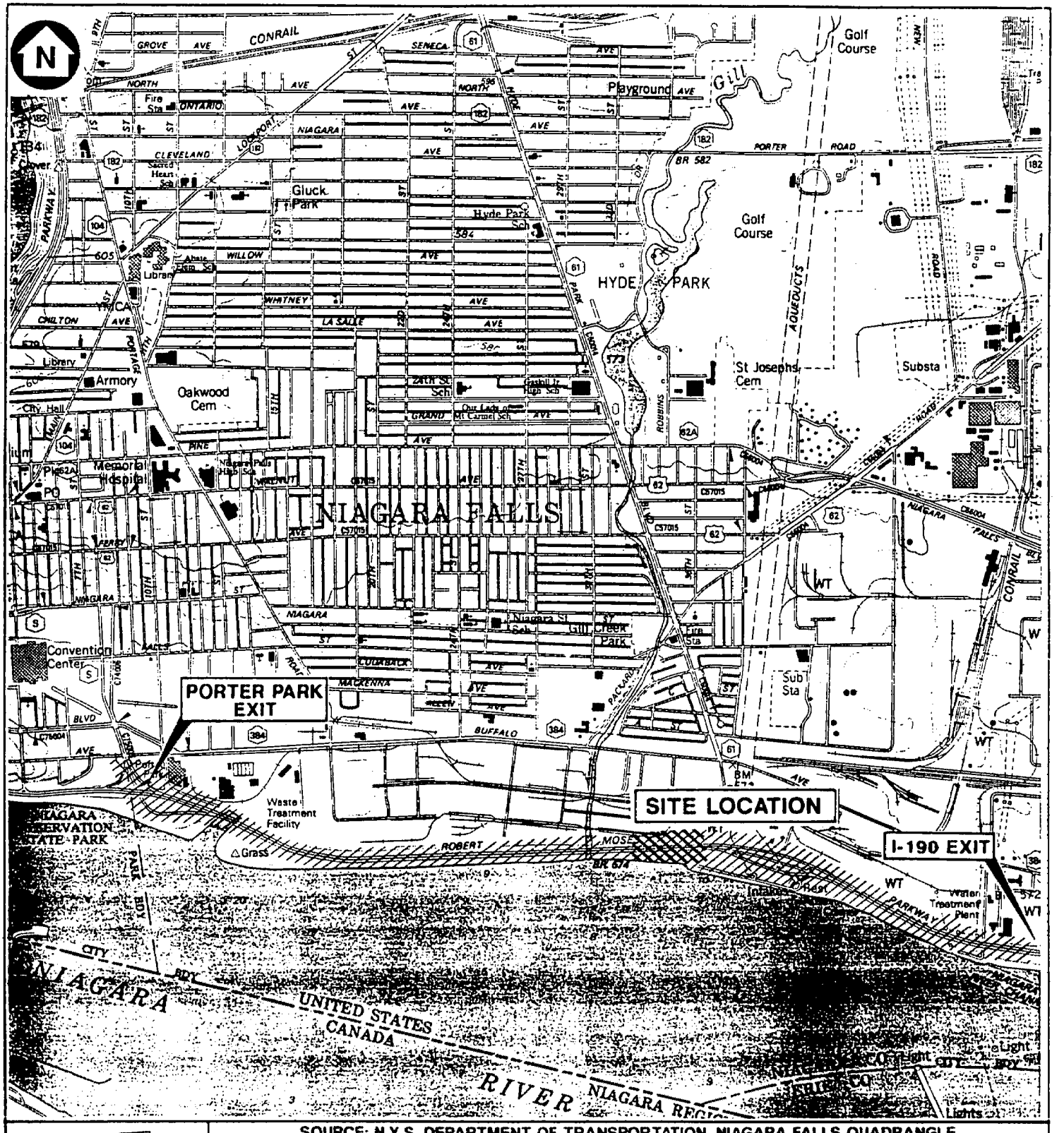
Three previous site inspections have been conducted at this site. In 1978, NYSDEC performed a site inspection and stated that there was insufficient evidence to draw any conclusions regarding the disposal of waste containers. In 1983, Engineering Science (ES) conducted a Phase I investigation and recommended Phase II activities be conducted to determine the location of the alleged buried containers. A geophysical investigation of this area was proposed by ES; however, there is no evidence that this investigation was ever performed. A letter to ES from NYSDEC terminating further geophysical activities was located in the file. This letter states that the "possibility [exists] that the geophysical readings of the magnetic anomaly were influenced by construction emplacements in the area" (Grikstas, 1985). In 1985, the New York State Department of Health (NYSDOH) conducted a site investigation and could not confirm the location of the alleged buried containers. There was no evidence of containers or burial activities noted during any of these site investigations.

E.C. Jordan (Jordan) conducted a data and file review and wind shield survey of the Robert Moses Parkway Site in July 1990. Based on information collected and reviewed, Jordan was unable to document the disposal of hazardous waste at this site. No visible evidence of the alleged containers or disposal area (e.g., no evidence of slumping of fill material) was noted during the wind shield survey. In addition, no known public health or environmental threats were identified that could be related to the alleged container disposal at this site.

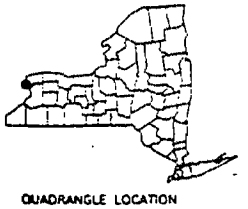
Groundwater contamination has been documented beneath the Robert Moses Parkway; however, this contamination is associated with hazardous waste disposal activities at chemical facilities abutting the site. Studies are currently underway to assess the groundwater contamination in this area from these facilities (Locey, 1990).

Based on available information, Jordan cannot recommend changing the classification of the Robert Moses Parkway Site on the New York State Registry of Inactive Hazardous Waste Disposal Sites. To obtain data to document the alleged burial of waste containers, and confirm or deny hazardous waste disposal, Preliminary Site Assessment (PSA) Task 3 activities should be initiated. Jordan recommends conducting a geophysical investigation of the area to identify the location of the alleged buried containers. The proposed location for the geophysical survey is the parkway between the I-190 interchange and Quay Street exit. Based on the interpretation of these results, borings and/or test pits are recommended to sample the soils in the disposal area. These soils should be analyzed for characteristics of Extraction Procedure (EP) toxicity, corrosivity, ignitability, and reactivity, and the United States Environmental Protection Agency (USEPA) Target Compound List (TCL) of organic and inorganic compounds.

Based on the results of Task 3 activities, NYSDEC Central Office will determine if PSA Task 4 activities should be initiated to determine if the waste disposed on-site present a significant threat to public health or the environment. Jordan recommends installing monitoring wells and analyzing the groundwater for the USEPA TCL of organic and inorganic compounds. One well should be placed upgradient and two wells immediately downgradient of the disposal area. Results of these analyses should be compared to groundwater and drinking water standards to assess the potential risks to public health and the environment. The groundwater monitoring program should use the information available from on-going Remedial Investigations in this area to evaluate background concentrations and/or potential groundwater contamination beneath the site from other sources.



SOURCE: N.Y.S. DEPARTMENT OF TRANSPORTATION, NIAGARA FALLS QUADRANGLE DATED 1989, 7.5 MINUTE SERIES



LEGEND

ROBERT MOSES PARKWAY

POSSIBLE LOCATION OF DISPOSAL AREA (NYSDOH)

SITE NO.: 932057
LOCATION: CITY OF NIAGARA FALLS
NIAGARA COUNTY

SCALE IN FEET

0 2000 4000

FIGURE 1
SITE LOCATION MAP
ROBERT MOSES PARKWAY
PRELIMINARY SITE ASSESSMENT
NEW YORK STATE DEC

EC JORDAN CO

6291-30

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS WASTE REMEDIATION

Copy—REGION
Copy—DEE
Copy—DOH
Copy—PREPARER

ADDITIONS/CHANGES TO REGISTRY OF INACTIVE HAZARDOUS WASTE DISPOSAL SITES

1. SITE NAME	2. SITE NO.	3. TOWN	4. COUNTY
Robert Moses Parkway	932057	Niagara Falls, NY	Nigara

5. REGION	6. CLASSIFICATION	7. ACTIVITY
9	Current XX /Proposed ____	☐ Add ☐ Reclassify ☐ Delist ☒ Modify ____

8a. DESCRIBE LOCATION OF SITE (Attach U.S.G.S. Topographic Map showing site location).

The site is currently operated as a public highway and is located adjacent to the Niagara River in Niagara Falls, New York. Approximately 100 waste containers were allegedly buried beneath the parkway.

b. Quadrangle Niagara Falls c. Site Latitude 43°04'42" Longitude 79°01'25" d. Tax Map Number ____

9a BRIEFLY DESCRIBE THE SITE (Attach site plan showing disposal/sampling locations)

The site is a public highway located adjacent to the Niagara River in Niagara Falls, New York. During construction, waste containers were allegedly buried beneath the site. No evidence of hazardous waste disposal has been observed during four site investigations.

b. Area 4 miles ~~Acres~~ c. EPA ID Number NYD038635884 d. PA/SI ☒ Yes ☐ No

e. Completed: ☒ Phase I ☐ Phase II ☐ PSA ☐ Sampling

10. BRIEFLY LIST THE TYPE AND QUANTITY OF THE HAZARDOUS WASTE AND THE DATES THAT IT WAS DISPOSED OF AT THIS SITE

Approximately 100 55-gallon waste containers were allegedly buried during the construction of the Robert Moses Parkway. These containers allegedly were from the Hooker Chemical Co.

11a. SUMMARIZED SAMPLING DATA ATTACHED

☐ Air ☐ Groundwater ☐ Surface Water ☐ Soil ☐ Waste ☐ EP Tox ☐ TCLP.

b. List contravened parameters and values

No samples were collected as part of the Task 1 PSA activities.

12. SITE IMPACT DATA

a. Nearest surface water: Distance 0 ft. Direction South Classification AA

b. Nearest groundwater: Depth 10 ft. Flow Direction South ☐ Sole Source ☒ Primary ☐ Principal

c. Nearest water supply: Distance 0 ft. Direction South Active ☒ Yes ☐ No

d. Nearest building: Distance 500 ft. Direction North Use Industrial/Commercial

e. Crops or livestock on site? ☐ Yes ☒ No

f. Exposed hazardous waste? ☐ Yes ☒ No

g. Controlled site access? ☐ Yes ☒ No

h. Documented fish or wildlife mortality? ☐ Yes ☒ No

i. Impact on special status fish or wildlife resource? ☐ Yes ☒ No

j. Within a State Economic Development Zone? ☐ Yes ☒ No

k. For Class 2a: Code 5B Health Model Score Unknown

l. For Class 2: Priority Category III

m. HRS Score ~~Unknown~~

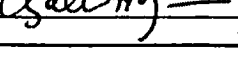
n. Significant Threat ☐ Yes ____ ☐ No ☒ Unknown

13. SITE OWNER'S NAME	14. ADDRESS	15. TELEPHONE NUMBER
Power Authority State of NY	5777 Lewiston Rd. Niagara Falls	(716) 278-1775

16. PREPARER

Elizabeth A. Ryan — Project Manager/E.C. Jordan Co.
Name, Title and Organization

December 20, 1990 — Date


Signature

17. APPROVED

Name, Title and Organization

Date

Signature

2.0 PURPOSE

The purpose of a PSA is to provide the information necessary for NYSDEC to adequately categorize the site according to the following classifications:

Class 2 - Hazardous waste sites presenting a significant threat to the public health or the environment.

Class 3 - Hazardous waste sites not presenting a significant threat to the public health or the environment.

Delist - Sites where hazardous waste disposal is not documented.

PSA Task 1, Data Records Search and Assessment, for the Robert Moses Parkway Site, Site No. 932057, in Niagara Falls, New York was conducted by Jordan under the NYSDEC Superfund Standby Contract (Contract No. D002472, Work Assignment No. D002472-6).

The Robert Moses Parkway Site is a suspected inactive hazardous waste site recognized by NYSDEC. This site is classified as Class 2a because there is insufficient information to document hazardous waste disposal and/or assess the significance of potential risk to public health or the environment.

3.0 SCOPE OF WORK

PSA Task 1 consists of a file review/records search and a site walkover. Specific activities performed for the Robert Moses Parkway Site under this task are described in the following subsections.

3.1 File Review

The Jordan project team began collecting information on the Robert Moses Parkway Site at the NYSDEC Central office in Albany, New York between June 25 and 27, 1990. In addition, Jordan personnel reviewed files and obtained site information at NYSDOH, the U.S. Geologic Survey, U.S. Fish and Wildlife Service, the NYSDOT, and the New York State Geologic Survey.

A review of the site files, provided by Abul Barkat, Environmental Engineer, at NYSDEC Region 9 Office, was conducted on July 24, 1990. On July 25, 1990, the Jordan team visited the Niagara Falls City Hall and the Niagara County Registry of Deeds to gather additional site information on property ownership, land use, water supply, and water quality.

3.2 Site Visit

On July 25, 1990 a site visit was conducted at the Robert Moses Parkway Site. The following attended the visit:

Name	Title	Affiliation
Kathleen Maguire	Geotechnical Engineer	E.C. Jordan Co.
Eric Sandin	Hydrologist	E.C. Jordan Co.

Since the site is currently operated as a public highway, the site visit consisted of a windshield survey. The site visit began at 8:30 a.m. The Jordan team entered the eastern end of the parkway at I-190 and proceeded west to the Porter Park exit, inspecting the west bound lanes of the parkway. At Porter Park, Jordan proceeded east on the Parkway returning to I-190 inspecting the east bound lanes. The Jordan team then proceeded east on Buffalo Avenue to inspect the facilities abutting the parkway to the north. No air monitoring equipment was used during the site visit. The site visit was completed at 10:00 a.m.

4.0 SITE ASSESSMENT

The following sections describe the information gained through the records search and windshield survey of the Robert Moses Parkway Site.

4.1 Site History

The Robert Moses Parkway, Site Number 932057, is located in the City of Niagara Falls, Niagara County, New York. The site is owned by the PASNY and is under permanent easement to and maintained by NYSDOT (Violenti, 1990). During the construction of the parkway (circa, 1963) approximately 100 containers of unknown waste materials from Hooker Chemical were allegedly buried in trenches between the breakwall and the parkway (NYSDEC, 1978). The exact location of these containers is not known. No visible evidence of any containers was noted during site visits conducted by NYSDEC (1978), ES (1983), NYSDOH (1985) and Jordan (1990).

The Parkway was constructed on reclaimed land consisting of fill material obtained from the Niagara Power Project excavation. The shoreline of the Niagara River was extended up to several hundred feet into the river, and the parkway was constructed on top of this filled area.

4.2 Site Topography

The exact location of the alleged disposal area is not known; however, it is suspected to be beneath the Robert Moses Parkway between the Sewage Treatment Plant and the I-190 exit (ES, 1984). This area is across from the present Occidental Chemical Company Plant. The site borders the Niagara River to the south and an industrial area consisting of chemical companies to the north (Figure 1). The site has a slope of 9.0 percent with the Niagara River being the nearest downslope surface water (ES, 1984).

The land-use within one-half mile of the site is primarily commercial and industrial. There are residential areas east, north and west of the site. The drinking water for the town of Niagara Falls is supplied from the Niagara River.

4.3 Site Hydrology

The Robert Moses Parkway site is bordered on the south by the Niagara River. The River is approximately 1 mile wide and 20 feet deep where it borders the site.

The parkway was constructed on reclaimed land with a fill thickness in excess of 20 feet in several areas. The permeability of this material is estimated to be greater than 10^{-3} centimeters per second (cm/sec). A lacustrine layered silt and clay deposit underlies the

fill. This unit is underlain by silty and sandy till which rests on top of the Lockport Dolomite bedrock. The permeability of the Lockport Dolomite formation is between 10^{-4} to 10^{-6} cm/sec (ES, 1984). The total thickness of natural soils under the parkway is approximately 15 feet. A shallow aquifer exists within the fill materials and the natural soils. Flow of the groundwater through this aquifer is to the south into the Niagara River (USGS, 1985).

Groundwater in the overburden is expected to be approximately 10 feet below ground surface. General groundwater flow in the unconsolidated aquifer is towards the Niagara River. In the deeper bedrock aquifer the direction of groundwater flow is to the north-northwest, and is influenced by the drinking water intakes and the head loss above and below Niagara Falls.

The Buckhorn Island State Park, located on Buckhorn Island, approximately 1.5 miles south-south-west from the site contains three state regulated wetlands (TW-18, TW-19, and TW-20). The Buckhorn Island Tern Colony is also located on Buckhorn Island and serves as a major nesting site for the common tern (Sterna hirundo), a threatened species (USFW, 1980).

4.4 Contamination Assessment

The file review and wind shield survey revealed little quantitative data to document the disposal of hazardous wastes at the Robert Moses Parkway site. In 1989, NYSDEC collected one soil sample of a purple crumbly solid material found on-site a few inches below ground surface. This sample was collected approximately 38 feet southwest of Highway Marker 957A. This soil was uncovered during remedial activities conducted in support of an ongoing investigation of groundwater contamination in this area. This sample was analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, and for characteristics of EP toxicity. The sample was not analyzed for characteristics of corrosivity, ignitability, or reactivity. Results of these analyses are presented in Appendix C. The detection limit for the VOC, SVOC, and pesticide analyses were high (up to 4.8 parts per million [ppm]) precluding a determination of low level contamination in the sample. Elevated levels (up to 46 ppm) of unknown compounds were detected in the sample. The sample did not fail the EP toxicity test. Since no containers were observed in the area where the sample was collected, the relationship between this sample and the alleged buried containers is not known.

Groundwater sampling in the vicinity of the Robert Moses Parkway Site is performed on a regular basis in support of other investigations of hazardous waste disposal in the area. There is an ongoing Remedial Investigation of the "S-area" landfill located at the eastern end of the parkway. A plume of contaminated

groundwater has been documented emanating from this landfill, flowing towards the Robert Moses Parkway Site, and discharging to the Niagara River. Organic compounds have been detected in the groundwater near the site at concentrations in excess of New York state drinking water and ambient drinking water quality standards. Additional groundwater sampling has occurred west of the drinking water intakes, opposite the DuPont Plant. These data also show elevated levels of VOCs. (These data are presented in Appendix C.) Because of the poor groundwater quality upgradient of the site, it is difficult to assess the potential threat to public health or the environment from the alleged buried containers at the Robert Moses Parkway Site.

5.0 ASSESSMENT OF DATA ADEQUACY AND RECOMMENDATIONS

5.1 Hazardous Waste Deposition

Information collected by Jordan did not confirm hazardous waste deposition at the Robert Moses Parkway site. Unknown contaminants in concentrations up to 46 ppm were detected in a single surface soil sample collected in 1989. However, the relationship between the soil sampling and the alleged buried containers cannot be made since there was no evidence of buried containers in the area where the soil was collected.

Jordan was unable to document any disposal of hazardous waste at this site. No visible evidence of containers or the alleged disposal area (i.e. no evidence of slumping of fill material) was noted during the site inspection. A geophysical investigation of this area was proposed by ES in 1984. Site files contain a letter from NYSDEC terminating further geophysical activities in the area due in part to the "possibility that the geophysical readings of the magnetic anomaly were influenced by construction emplacements in the area" (Grikstas, 1985).

Chemical analyses of samples taken from monitoring wells along the parkway indicate significant groundwater contamination. VOCs were detected in excess of New York State drinking water and ambient water quality standards. A plume of contaminated groundwater, upgradient of the site, has been documented and is associated with the "S-area" landfill site. These monitoring wells and sample analyses are part of an ongoing Remedial Investigation of this landfill. Because of the adverse groundwater quality upgradient of the site, it is not possible to determine if the contamination detected beneath the Robert Moses Parkway site is from the alleged buried waste containers or has migrated from disposal areas north of the site.

5.2 Significant Threat Determination

There are no known public health or environmental threats related to the alleged disposal actions at this site. The chemical contamination detected in groundwater near the Robert Moses site is attributed to disposal activities occurring north of the site. It would be difficult to assess the impact of the alleged containers on groundwater quality because of the significant contamination from upgradient sources.

5.3 Recommendations

Based on available information Jordan cannot recommend changing the classification of the Robert Moses Parkway Site from the New York State Registry of Inactive Hazardous Waste Sites. To obtain data to document the alleged burial of waste containers, and confirm or deny hazardous waste disposal, PSA Task 3 activities should be

initiated. Jordan recommends conducting a geophysical investigation of the area to identify the location of the buried waste containers. The proposed location for the geophysical survey is the parkway between the I-190 interchange and the Quay Street exit. Based on the interpretation of these results, borings and/or test pits are recommended to sample the soil in the disposal area. These soils should be analyzed for characteristics of EP toxicity, corrosivity, ignitability, and reactivity, and the USEPA TCL of organic and inorganic compounds.

Based on the results of Task 3 activities, NYSDEC Central Office will determine if PSA Task 4 activities are warranted. To determine if the wastes disposed of on-site present a significant threat to public health or the environment, Jordan recommends installing monitoring wells and analyzing the groundwater for the USEPA TCL of organic and inorganic compounds. One well should be placed immediately upgradient and two wells downgradient of the disposal area. Results of these analyses should be compared to groundwater and drinking water standards to assess the potential risks to public health and the environment. The groundwater monitoring program should also utilize the information available from Remedial Investigations currently in progress in this area. This will provide information on background concentrations and potential groundwater contamination from other sources.

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

cm/sec	centimeters per second
EP	Extraction Procedure
ES	Engineering Science
Jordan	E.C. Jordan Co.
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation
PASNY	Power Authority State of New York
ppm	parts per million
PSA	Preliminary Site Assessment
SVOC	semi-volatile organic compounds
TCL	Target Compound List
USEPA	U.S. Environmental Protection Agency
VOC	volatile organic compounds

APPENDIX A
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REFERENCES

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APPENDIX B

SITE INSPECTION REPORT
(USEPA FORM 2070-13)

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

EPA

I. IDENTIFICATION

01 STATE	01 SITE NUMBER
New York	D038635884

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Robert Moses Parkway	Robert Moses Parkway

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG. DIST
Niagara Falls	New York	14301	Niagara	063	36

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
43 04 42.N	79 01 25.W	_ A. PRIVATE _ B. FEDERAL _____ X C. STATE _ D. COUNTY _ E. MUNICIPAL _ F. OTHER _____ _ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
7 / 25 / 90 (MONTH DAY YEAR)	_ ACTIVE X INACTIVE	1963 (BEGINNING YEAR) | 1963 (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)
_ A. EPA _ B. EPA CONTRACTOR _____ (Name of firm) _ C. MUNICIPAL _ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
_ E. STATE X F. STATE CONTRACTOR E.C. Jordan Co. (Name of firm) _ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Kathleen Maguire	Geotechnical Engineer	E.C. Jordan Co.	(207) 775-5401
09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Eric Sandin	Engineer/Scientist	E.C. Jordan Co.	(207) 775-5401
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO.
			( )
Dario Violenti		New York State Department of Transportation	(716) 278-1775
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
X PERMISSION ☐ WARRANT	8:30 am	Clear, Sunny, 70° F

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Sri Maddineni	New York State Department of Environmental Conservation	(518) 457-0638

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	03 DATE
Elizabeth Ryan		E.C. Jordan Co.	(207) 775-5401	8 / 1 / 90 (MONTH DAY YEAR)

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

EPA

I. IDENTIFICATION	
01 STATE	01 SITE NUMBER
New York	D038635884

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

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

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

TONS
CUBIC YARDS
NO. OF DRUMS 100

03 WASTE CHARACTERISTICS (Check all that apply)

_ A. TOXIC
_ B. CORROSIVE
_ C. RADIOACTIVE
_ D. PERSISTENT
_ E. SOLUBLE
_ F. INFECTIOUS
_ G. FLAMMABLE
_ H. IGNITABLE
_ I. HIGHLY VOLATILE
_ J. EXPLOSIVE
_ K. REACTIVE
_ L. INCOMPATIBLE
_ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	100	Drums	Unknown contents suspected Hooker chemical waste
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

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

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04/STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
	Unknown		drums	unknown	

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	N/A		FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

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

Preliminary Site Assessment Report, January 1991, E.C. Jordan Co., and references cited therein.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE: New York	01 SITE NUMBER: D038635884

II. HAZARDOUS CONDITIONS AND INCIDENTS

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

Potential for groundwater contamination if the alleged buried drums contained hazardous constituents and leaked.

01 X B. SURFACE WATER CONTAMINATION — 02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 3,000 04 NARRATIVE DESCRIPTION

Site is located adjacent to Niagara River. Potential for surface water contamination if the alleged drums contained hazardous constituents and leaked. Shallow groundwater flow is towards the river.

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

N/A - Drums were allegedly burried.

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

N/A - Drums were allegedly buried.

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

N/A - Drums were allegedly buried.

01 X F. CONTAMINATION OF SOIL — 02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 3,000 04 NARRATIVE DESCRIPTION

Potential for alleged buried drums to leak.

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

Potential for drinking water contamination if alleged buried drums contain hazardous constituents and leak. Shallow groundwater flow is towards the Niagara River which is used as a drinking water source.

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

N/A

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

N/A

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	01 SITE NUMBER
New York	D038635884

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

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

None observed

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

N/A - alleged drums are burried.

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

Unknown. Niagara River is used for recreational fishing.

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

Potential for alleged drums to leak.

01 _ N. DAMAGE TO OFFSITE PROPERTY — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

N/A

01 _ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

N/A

01 _ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

N/A

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

No other potential or alleged hazards exist.

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

Approximately 100 drums were allegedly buried during the construction of the Robert Moses Parkway (Circa, 1963). The contents and conditions of these drums are not known.

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

Preliminary Site Assessment Report, January 1991, E.C. Jordan Co., and references cited therein.

EPA

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

I. IDENTIFICATION	
01 STATE: New York	01 SITE NUMBER: D038635884

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
_ A. NPDES				
_ B. UIC				
_ C. AIR				
_ D. RCRA				
_ E. RCRA INTERIM STATUS				
_ F. SPCC PLAN				
_ G. STATE (specify)				
_ H. LOCAL (specify)				
_ I. OTHER (specify)				
_ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
_ A. SURFACE IMPOUNDMENT		
_ B. PILES		
_ C. DRUMS, ABOVE GROUND		
_ D. TANK, ABOVE GROUND		
_ E. TANK, BELOW GROUND		
_ F. LANDFILL		
_ G. LANDFARM		
_ H. OPEN DUMP		
X I. OTHER Buried Drums (specify)	100	Drums

04 TREATMENT (check all that apply)
_ A. INCINERATION
_ B. UNDERGROUND INJECTION
_ C. CHEMICAL/PHYSICAL
_ D. BIOLOGICAL
_ E. WASTE OIL PROCESSING
_ F. SOLVENT RECOVERY
_ G. OTHER RECYCLING/RECOVERY
_ H. OTHER _____ (specify)

05 OTHER
_ A. BUILDINGS ONSITE

06 AREA OF SITE
Unknown (acres)

07 COMMENTS

Hooker chemical waste materials allegedly buried on-site during highway construction.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (check one) - unknown

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

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

Drums were allegedly buried and thus not visible for inspection. Condition of containment is unknown.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: _ YES _ NO X Unknown
02 COMMENTS

Drums were allegedly buried beneath the parkway.

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

Preliminary Site Assessment Report, January 1991, E.C. Jordan Co., and references cited therein.

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

EPA

PART 6 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	01 SITE NUMBER
New York	D038635884

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (check as applicable)	SURFACE	WELL
COMMUNITY	A. X	A. _
NON-COMMUNITY	B. _	B. _

02 STATUS		
ENDANGERED	AFFECTED	MONITORED
A. _	B. _	C. X
D. _	E. _	F. _

03 DISTANCE TO SITE
A. 0.5 (mi)
B. _____ (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (check one)

_ A. ONLY SOURCE FOR DRINKING
_ B. DRINKING (other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available)
X C. COMMERCIAL INDUSTRIAL IRRIGATION (Limited other sources available)
_ D. NOT USED, UNUSABLE

02 POPULATION SERVED BY GROUNDWATER None

03 DISTANCE TO NEAREST DRINKING WATER WELL N/A (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
10 (ft)	south	10 (ft)	unknown (gpd)	_ YES X NO

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

10 RECHARGE AREA		11 DISCHARGE AREA	
X YES _ NO	COMMENTS	X YES _ NO	COMMENTS

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

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

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Niagara River	_	< 100 feet
	_	_____ (mi)
	_	_____ (mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 3,000 NO. OF PERSONS	B. 5,700 NO. OF PERSONS	C. 9,500 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION
0.5 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE
3,000

04 DISTANCE TO NEAREST OFF-SITE BUILDING
0.2 (mi)

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

The Robert Moses Parkway is located in an industrial section of the city. A residential area is located east of the site. Several industrial chemical companies are located north of the Parkway.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

PART 6 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION	
01 STATE	01 SITE NUMBER
New York	D038635884

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 X D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

A. IMPERMEABLE (less than 10^{-6} cm/sec) X B. RELATIVELY IMPERMEABLE (10^{-4} - 10^{-6} cm/sec) _ C. RELATIVELY PERMEABLE (10^{-2} - 10^{-4} cm/sec) _ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL Ph	
25 (ft)	10 (ft)	unknown	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE		
		SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
8 (in)	2 (in)	9 %	North and South	0.1 %

09 FLOOD POTENTIAL

SITE IS IN N/A YEAR FLOODPLAIN

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

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTAURINE OTHER

A. _____ (mi) B. > 3 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

1.5 (mi)

ENDANGERED SPECIES: Sterna hirundo (threatened)

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	PRIME AG LAND	AG LAND
A. 0.1 (mi)	B. 0.3 (mi)	C. N/A (mi)	D. N/A (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The Robert Moses Parkway parallels the Niagara River on the northern shoreline. The Parkway is built up approximately 15 feet relative to the surrounding area.

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

Preliminary Site Assessment Report, February 1991, E.C. Jordan Co., and references cited therein.

EPA

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

I. IDENTIFICATION	
01 STATE	01 SITE NUMBER
New York	D038635884

II. SAMPLES TAKEN - No samples were collected as part of PSA Task 1

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

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
None	

IV. PHOTOGRAPHS AND MAPS

01 TYPE _ GROUND _ AERIAL

02 IN CUSTODY OF _____
(Name of organization or individual)

03 MAPS
X YES
_ NO

04 LOCATION OF MAPS
Sri Maddineni, NYSDEC, 50 Wolf Road, Albany, New York

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

No other field data collected during site visit.

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

Preliminary Site Assessment Report, February 1991, E.C. Jordan Co., and references cited therein.

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

EPA

I. IDENTIFICATION	
01 STATE: New York	01 SITE NUMBER: D038635884

II. CURRENT OWNER(S) | **PARENT COMPANY** (If applicable)

Current Owner			Parent Company		
01 NAME: Power Authority of New York State		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.): 5777 Lewiston Road		04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE
05 CITY: Niagara Falls	STATE: New York	07 ZIP CODE: 14305	12 CITY	13 STATE	14 ZIP CODE
01 NAME: Power Authority of New York State		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.): 5777 Lewiston Road		04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE
05 CITY: Niagara Falls	06 STATE: New York	07 ZIP CODE: 14305	12 CITY	13 STATE	14 ZIP CODE
01 NAME		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
01 NAME		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE

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

Previous Owner			Realty Owner		
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
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)

Preliminary Site Assessment Report, February 1991, E.C. Jordan Co., and references cited therein.

EPA

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

I. IDENTIFICATION	
01 STATE: New York	01 SITE NUMBER: D038635884

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME: New York State Dept. of Transportation	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY: Buffalo	06 STATE: New York	07 ZIP CODE	
08 YEARS OF OPERATION: 1960's to Present	09 NAME OF OWNER		

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
14 CITY	15 STATE	16 ZIP CODE	

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	
08 YEARS OF OPERATION	09 NAME OF OWNER		

PREVIOUS OPERATOR'S PARENT COMPANIES (If applicable)

10 NAME	11 D+B NUMBER	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
14 CITY	15 STATE	16 ZIP CODE	

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	
08 YEARS OF OPERATION	09 NAME OF OWNER		

10 NAME	11 D+B NUMBER	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
14 CITY	15 STATE	16 ZIP CODE	

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	
08 YEARS OF OPERATION	09 NAME OF OWNER		

10 NAME	11 D+B NUMBER	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
14 CITY	15 STATE	16 ZIP CODE	

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

Preliminary Site Assessment Report, February 1991, E.C. Jordan Co., and references cited therein.

EPA

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

I. IDENTIFICATION	
01 STATE: New York	01 SITE NUMBER: D038635884

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	02 D+B NUMBER	01 NAME	02 D+B NUMBER
Hooker Chemical (alleged)			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
Buffalo Avenue			
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
Niagara Falls	New York		
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)

Preliminary Site Assessment Report, February 1991, E.C. Jordan Co., and references cited therein.

EPA

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

I. IDENTIFICATION	
01 STATE	01 SITE NUMBER
New York	D038635884

II. PAST RESPONSE ACTIVITIES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

I. IDENTIFICATION	
01 STATE	01 SITE NUMBER
New York	D038635884

II. PAST RESPONSE ACTIVITIES (Continued)

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

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

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

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

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

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

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

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

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

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

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

01 _ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

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

Preliminary Site Assessment Report, February 1991, E.C. Jordan Co., and references cited therein.

EPA	POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 11 - ENFORCEMENT INFORMATION	I. IDENTIFICATION	
		01 STATE New York	01 SITE NUMBER D038635884

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION _ YES X NO

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

Site Investigation by NYSDEC, 1978.

Site Investigation by ES, 1983.

Site Investigation by NYSDOH, 1985.

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

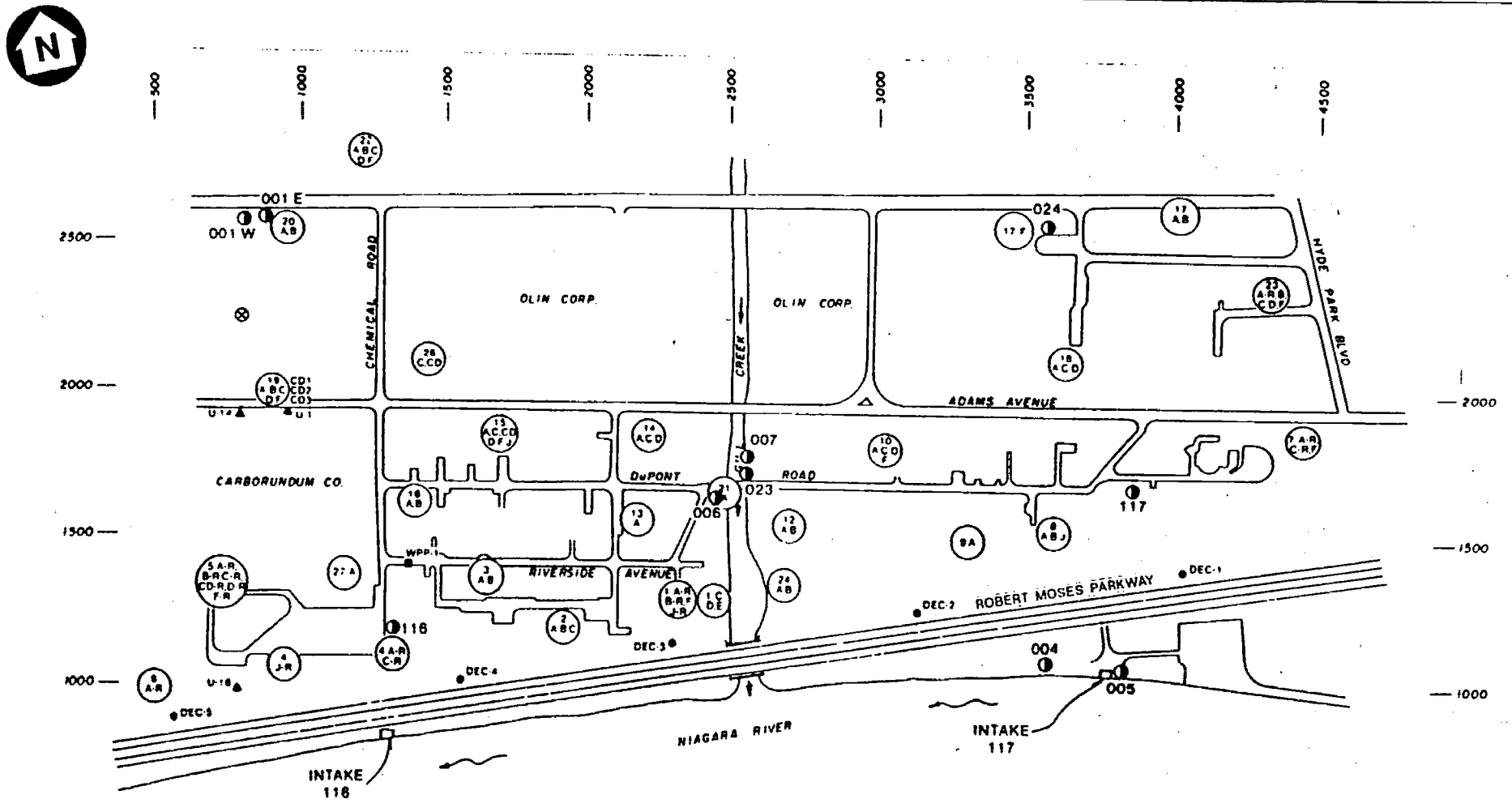
Preliminary Site Assessment Report, February 1991, E.C. Jordan Co., and references cited therein.

APPENDIX C

RESULTS OF ANALYSES

APPENDIX C-1

GROUNDWATER ANALYSES



LEGEND:

- WELL CLUSTER NUMBER (NO.)
- WELL TYPE (LETTER)
- OLIN PRODUCTION WELL
- DEC WELLS
- UTILITY WELLS
- PIEZOMETERS
- OUTFALL MONITORING STATION

SOURCE: WOODWARD-CLYDE CONSULTANTS

SCALE IN FEET

0 400 800

FIGURE C-1
MONITORING WELL LOCATION PLAN
NIAGARA PLANT
E. I. du PONT de NEMOURS & COMPANY
ROBERT MOSES PARKWAY SITE
PRELIMINARY SITE ASSESSMENT
NEW YORK STATE DEC

6291-30

E.C.JORDAN CO.

TABLE 1 (continued)
FIRST SEMI-ANNUAL, 1990
NIAGARA PLANT GROUNDWATER INVESTIGATION
MONITORING WELL INDICATOR PARAMETER ANALYSIS

LOCATION		DEC1	DEC2	DEC3	DEC4	DEC5
DATE SAMPLED		03/08/90	03/08/90	03/08/90	03/08/90	03/08/90
FIELD PARAMETERS						
PH		10.49	10.49	6.85	7.62	7.66
SPEC. COND.	umhos/cm	14,400	17,000	2450	1250	375
SPEC. GRAVITY	g/ml	1.013	1.022	1.002	1.001	1.000
TEMPERATURE	C	10.0	10.0	8.5	9.5	10.5
OTHER PARAMETERS						
CHLORIDE	ppm	NS	2420	1170	448	114
PHENOLS, TOTAL	ppm	NS	0.0682	0.0598	0.050 U	0.050 U
TOC	ppm	NS	47.3	13.9	14.5	20.1
TOX	ppm	NS	1.18	612	3.92	0.085
CYANIDE, TOTAL	ppm	NS	4.76 R	0.020 UR	0.020 U	0.020 U
BARIUM, SOLUBLE	ppm	NS	1.0 U	1.0 U	1.0 U	1.0 U
TOTAL INDICATOR ORGANICS	ppb	6.4	2703	1,342,227	2989.062	77.8
VOLATILES						
*VINYL CHLORIDE	ppb	2 U	1110	10,000 U	50 U	2 U
CHLOROMETHANE	ppb	5 U	50 U	25,000 U	125 U	5 U
1,1-DICHLOROETHENE	ppb	1 U	16.7	5000 U	25 U	1 U
*METHYLENE CHLORIDE	ppb	1 U	14.3	529,000	26.5	2
*TRANS-1,2-DICHLOROETHENE	ppb	1 U	17.2	5000 U	90.7	1
1,1-DICHLOROETHANE	ppb	1 U	10 U	5000 U	25 U	1 U
*CIS-1,2-DICHLOROETHENE	ppb	1 U	961	104,000	1070	23.6
*CHLOROFORM	ppb	1 U	79.6	28,300	214	1.3 Be
1,1,1-TRICHLOROETHANE	ppb	1 U	10 U	5000 U	25 U	1 U
CARBON TETRACHLORIDE	ppb	1 U	10 U	5000 U	25 U	1 U
*TRICHLOROETHENE	ppb	1.8	304	563,000	1380	22.3
1,1,2-TRICHLOROETHANE	ppb	1 U	10 U	5000 U	25 U	1 U
*TETRACHLOROETHENE	ppb	4.6	187	70,800	268	21.7
1,4-DICHLOROBUTANE	ppb	3 U	30 U	15,000 U	75 U	3 U
*1,1,2,2-TETRACHLOROETHANE	ppb	2 U	20 U	47,100	939	5.9
*CHLOROBENZENE	ppb	2 U	20 U	10,000 U	50 U	2 U
HEXACHLOROETHANE	ppb	2 U	20 U	10,000 U	50 U	2 U
1,4-DICHLOROBENZENE(P)	ppb	2 U	20 U	10,000 U	50 U	2 U
1,2-DICHLOROBENZENE(O)	ppb	2 U	20 U	10,000 U	50 U	2 U
HEXACHLOROBUTADIENE	ppb	3 U	30 U	15,000 U	75 U	3 U
TETRAHYDROTHIOPHENE	ppb	3 U	162	15,000 U	75 U	3 U
*BENZENE	ppb	2 U	29.9	10,000 U	50 U	2 U
TOLUENE	ppb	2 U	45.3	10,000 U	50 U	2 U
TOTAL VOLATILES	ppb	6.4	2927	1,342,200	3988.2	77.8
OTHER ORGANICS						
*alpha-BHC	ppb	NS	0.50 U	55.7	0.50 U	0.50 U
*gamma-BHC	ppb	NS	0.50 U	1.14	0.50 U	0.50 U
*beta-BHC	ppb	NS	0.50 U	12.3	0.862	0.50 U
*delta-BHC	ppb	NS	0.50 U	2.54	0.50 U	0.50 U
*PCB 1221	ppb	NS	0.50 U	50.0 U	0.50 U	0.50 U
*PCB 1232	ppb	NS	0.50 U	50.0 U	0.50 U	0.50 U
*PCB 1026	ppb	NS	0.50 U	50.0 U	0.50 U	0.50 U
*PCB 1242	ppb	NS	0.50 U	5.0 U	0.50 U	0.50 U
*PCB 1248	ppb	NS	0.50 U	5.0 U	0.50 U	0.50 U
*PCB 1254	ppb	NS	0.50 U	5.0 U	0.50 U	0.50 U
*PCB 1260	ppb	NS	0.50 U	5.0 U	0.50 U	0.50 U
BIS(2-ETHYLHEXYL)PHTHALATE	ppb	NS	96.6	22.2	68.3	31.6
NAPHTHALENE	ppb	NS	20 U	20 U	20 U	20 U

NOTE: ND indicates that the parameter was not detected; < indicates a detectable concentration below the detection limit; <= indicates a concentration less than or equal to the detection limit; NS indicates that there was insufficient sample for analysis.

* Compounds used

APPENDIX C-2

SOIL ANALYSES

000045 A

NYSDEC SAMPLE NO.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93280101

Lab Name: IT PITTSBURGH Contract: C002165

Lab Code: ITPA Case No.: SH989 SAS No.: _____ SDG No.: 8910B

Matrix: (soil/water) SOIL Lab Sample ID: 93280101

Sample wt/vol: 4.2 (g/mL) G Lab File ID: 1061024N

Level: (low/med) LOW Date Received: 10/21/89

% Moisture: not dec. 25 Date Analyzed: 10/24/89

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	16	U
74-83-9	Bromomethane	16	U
75-01-4	Vinyl Chloride	16	U
75-00-3	Chloroethane	16	U
75-09-2	Methylene Chloride	8	U
67-64-1	Acetone	8	BJ
75-15-0	Carbon Disulfide	8	U
75-35-4	1,1-Dichloroethene	8	U
75-34-3	1,1-Dichloroethane	8	U
540-59-0	1,2-Dichloroethene (total)	8	U
67-66-3	Chloroform	8	U
107-06-2	1,2-Dichloroethane	8	U
78-93-3	2-Butanone	16	U
71-55-6	1,1,1-Trichloroethane	8	U
56-23-5	Carbon Tetrachloride	8	U
108-05-4	Vinyl Acetate	16	U
75-27-4	Bromodichloromethane	8	U
78-87-5	1,2-Dichloropropane	8	U
10061-01-5	cis-1,3-Dichloropropene	8	U
79-01-6	Trichloroethene	8	U
124-48-1	Dibromochloromethane	8	U
79-00-5	1,1,2-Trichloroethane	8	U
71-43-2	Benzene	8	U
10061-02-6	Trans-1,3-Dichloropropene	8	U
75-25-2	Bromoform	8	U
108-10-1	4-Methyl-2-Pentanone	16	U
591-78-6	2-Hexanone	16	U
127-18-4	Tetrachloroethene	8	U
79-34-5	1,1,2,2-Tetrachloroethane	8	U
108-88-3	Toluene	8	U
108-90-7	Chlorobenzene	8	U
100-41-4	Ethylbenzene	8	
100-42-5	Styrene	8	
1330-20-7	Total Xylenes	8	

000046A

NYSDEC SAMPLE NO.

93280101

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: IT PITTSBURGH Contract: C002165

Lab Code: ITPA Case No.: SH989 SAS No.: SDG No.: 8910B

Matrix: (soil/water) SOIL Lab Sample ID: 93280101

Sample wt/vol: 4.2 (g/mL) G Lab File ID: 1061024N

Level: (low/med) LOW Date Received: 10/21/89

% Moisture: not dec. 25 Date Analyzed: 10/24/89

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	2.33	85	J
2.		UNKNOWN	8.49	14	J

000114 A

NYSDEC SAMPLE NO.

EPA SAMPLE NO.

93280101

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: IT PITTSBURGH Contract: C002165

Lab Code: ITPA Case No.: SH989 SAS No.: _____ SDG No.: 8910B

Matrix: (soil/water) SOIL Lab Sample ID: 93280101

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4071108D

Level: (low/med) LOW Date Received: 10/21/89

% Moisture: not dec. 33 dec. ____ Date Extracted: 10/31/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/08/89

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	990	U
111-44-4	bis(2-Chloroethyl)Ether	990	U
95-57-8	2-Chlorophenol	990	U
541-73-1	1,3-Dichlorobenzene	990	U
106-46-7	1,4-Dichlorobenzene	130	J
100-51-6	Benzyl Alcohol	990	U
95-50-1	1,2-Dichlorobenzene	990	U
95-48-7	2-Methylphenol	990	U
108-60-1	bis(2-Chloroisopropyl)Ether	990	U
106-44-5	4-Methylphenol	990	U
621-64-7	N-Nitroso-Di-n-Propylamine	990	U
67-72-1	Hexachloroethane	990	U
98-95-3	Nitrobenzene	990	U
78-59-1	Isophorone	990	U
88-75-5	2-Nitrophenol	990	U
105-67-9	2,4-Dimethylphenol	990	U
65-85-0	Benzoic Acid	4800	U
111-91-1	bis(2-Chloroethoxy)Methane	990	U
120-83-2	2,4-Dichlorophenol	990	U
120-82-1	1,2,4-Trichlorobenzene	990	U
91-20-3	Naphthalene	990	U
106-47-8	4-Chloroaniline	990	U
87-68-3	Hexachlorobutadiene	990	U
59-50-7	4-Chloro-3-Methylphenol	990	U
91-57-6	2-Methylnaphthalene	990	U
77-47-4	Hexachlorocyclopentadiene	990	U
88-06-2	2,4,6-Trichlorophenol	990	U
95-95-4	2,4,5-Trichlorophenol	4800	U
91-58-7	2-Chloronaphthalene	990	U
88-74-4	2-Nitroaniline	4800	U
131-11-3	Dimethyl Phthalate	990	U
208-96-8	Acenaphthylene	990	U
606-20-2	2,6-Dinitrotoluene	990	U

000115 A

NYSDEC SAMPLE NO.

EPA SAMPLE NO.

93280101

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: IT PITTSBURGH Contract: C002165

Lab Code: ITPA Case No.: SH989 SAS No.: _____ SDG No.: 8910B

Matrix: (soil/water) SOIL Lab Sample ID: 93280101

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4071108D

Level: (low/med) LOW Date Received: 10/21/89

% Moisture: not dec. 33 dec. ____ Date Extracted: 10/31/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/08/89

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4800	U
83-32-9	Acenaphthene	990	U
51-28-5	2,4-Dinitrophenol	4800	U
100-02-7	4-Nitrophenol	4800	U
132-64-9	Dibenzofuran	990	U
121-14-2	2,4-Dinitrotoluene	990	U
84-66-2	Diethylphthalate	990	U
7005-72-3	4-Chlorophenyl-phenylether	990	U
86-73-7	Fluorene	990	U
100-01-6	4-Nitroaniline	4800	U
534-52-1	4,6-Dinitro-2-Methylphenol	4800	U
86-30-6	N-Nitrosodiphenylamine (1)	990	U
101-55-3	4-Bromophenyl-phenylether	990	U
118-74-1	Hexachlorobenzene	990	U
87-86-5	Pentachlorophenol	4800	U
85-01-8	Phenanthrene	990	U
120-12-7	Anthracene	990	U
84-74-2	Di-n-Butylphthalate	100	J
206-44-0	Fluoranthene	990	U
129-00-0	Pyrene	990	U
85-68-7	Butylbenzylphthalate	990	U
91-94-1	3,3'-Dichlorobenzidine	2000	U
56-55-3	Benzo(a)Anthracene	990	U
218-01-9	Chrysene	990	U
117-81-7	bis(2-Ethylhexyl)Phthalate	420	J
117-84-0	Di-n-Octyl Phthalate	990	U
205-99-2	Benzo(b)Fluoranthene	990	U
207-08-9	Benzo(k)Fluoranthene	990	U
50-32-8	Benzo(a)Pyrene	990	U
193-39-5	Indeno(1,2,3-cd)Pyrene	990	U
53-70-3	Dibenz(a,h)Anthracene	990	U
191-24-2	Benzo(g,h,i)Perylene	990	U

(1) - Cannot be separated from Diphenylamine

000116A

NYSDEC SAMPLE NO.

[redacted]

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

93230101

Lab Name: IT PITTSBURGH Contract: C002165

Lab Code: ITPI Case No.: SH989 SAS No.: _____ SDG No.: 8910B

Matrix: (soil/water) SOIL Lab Sample ID: 93280101

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4071108D

Level: (low/med) LOW Date Received: 10/21/89

% Moisture: not dec. 33 dec. ____ Date Extracted: 10/31/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/08/89

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

Number TICs found: 15

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	4.15	1800	J
2.		UNKNOWN	4.83	46000	J
3.		UNKNOWN	8.20	1000	J
4.	98-86-2	ETHANONE, 1-PHENYL-	9.84	840	J
5.	932-98-9	BENZENE, 1-CHLORO-4-NITROSO-	23.07	590	J
6.		UNKNOWN	26.14	410	J
7.	32038-83-8	2-PROPYNENITRILE, 3-FLUORO-	30.17	680	J
8.	6285-05-8	1-PROPANONE,1-(4-CHLOROPHENY	30.54	800	J
9.		UNKNOWN	30.86	2700	J
10.		UNKNOWN	30.99	900	J
11.		UNKNOWN	31.32	620	J
12.		UNKNOWN	31.47	2100	J
13.		UNKNOWN	32.54	1600	J
14.		UNKNOWN	34.74	970	J
15.		UNKNOWN	43.79	6400	J

000135 A

NYSDEC

NYSDEC SAMPLE NO.

1

INORGANIC ANALYSES DATA SHEET

280101

Lab Name: ITAS_PITTSBURGH_____ Contract: C002165___

Lab Code: ITPA__ Case No.: SF989 SAS No.: _____ SDG No.: 8910-B

Matrix (soil/water): SOIL_ Lab Sample ID: 932801-01_

Level (low/med): LOW__ Date Received: 10/21/89

% Solids: _66.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	10400			P	
7440-36-0	Antimony	3.5	U	N	P	
7440-38-2	Arsenic	7.5			F	✓
7440-39-3	Barium	133			P	
7440-41-7	Beryllium	1.5			P	
7440-43-9	Cadmium	0.59	U		P	
7440-70-2	Calcium	41700			P	
7440-47-3	Chromium	46.2			P	
7440-48-4	Cobalt	11.6	B		P	
7440-50-8	Copper	286			P	
7439-89-6	Iron	20400		E*	P	
7439-92-1	Lead	62.4		*	F	✓
7439-95-4	Magnesium	7760			P	
7439-96-5	Manganese	580		E	P	
7439-97-6	Mercury	0.57		N*	CV	
7440-02-0	Nickel	72.8			P	
7440-09-7	Potassium	1760			P	
7782-49-2	Selenium	0.60	U	N	F	✓
7440-22-4	Silver	0.96	B	N	P	
7440-23-5	Sodium	257	B		P	
7440-28-0	Thallium	0.60	U		F	✓
7440-62-2	Vanadium	32.1			P	
7440-66-6	Zinc	102		E	P	

Color Before: BLACK____ Clarity Before: _____ Texture: MEDIUM

Color After: BLACK____ Clarity After: _____ Artifacts: YES___

Comments:

ARTIFACTS: ROOTS

000101

NYSDEC SAMPLE NO.

Extract for EP TOX

				Standard
		ppb		
				vs 5.0 (min)
				vs 5.0
				vs 100
				vs 1.0
				vs 5.0
				vs 0.2
				vs 1.0
				vs 5.0

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

NYSDEC
Date: 11/18/89

IT ANALYTICAL SERVICES
PITTSBURGH, PA

Case: SH989 SDG:8910D

E.P. Toxicity Leachate Analysis of Pesticides

Sample ID:	Lindane	Endrin	Methoxychlor	Toxaphene
		Concentration µg/L		
Blank 10/30/89	ND0.05	ND0.10	ND0.5	ND1.0
EP-PB 10/26/89	ND0.05	ND0.10	ND0.5	ND1.0
902001-01	ND0.05	ND0.10	ND0.5	ND1.0
902001-02	ND0.05	ND0.10	ND0.5	ND1.0
902001-03	ND0.05	ND0.10	ND0.5	ND1.0
915008A-01	ND0.05	ND0.10	ND0.5	ND1.0
915008A-02	ND0.05	ND0.10	ND0.5	ND1.0
915105-01	ND0.05	ND0.10	ND0.5	ND1.0
915105-02	ND0.05	ND0.10	ND0.5	ND1.0
915105-03	ND0.05	ND0.10	ND0.5	ND1.0
→ 932801-01	ND0.05	ND0.10	ND0.5	ND1.0

RMP

Matrix Spike Percent Recovery

	Lindane	Endrin	Methoxychlor
	Percent Recovery		
915008A-02 MS	84%	106%	106%
915008A-02 MSD	86%	130%	107%

NYSDEC
Date: 11/18/89

Case: SH989 SDG:8910D

IT ANALYTICAL SERVICES
PITTSBURGH, PA

E.P. Toxicity Leachate Analysis of Herbicides

Sample ID:	2,4-D	2,4,5-TP (Silvex)
Blank 10/30/89	ND12	ND1.7
EP-PB 10/26/89	ND12	ND1.7
902001-01	ND12	ND1.7
902001-02	ND12	ND1.7
902001-03	ND12	ND1.7
915008A-01	ND12	ND1.7
915008A-02	ND12	ND1.7
915105-01	ND12	ND1.7
915105-02	ND12	ND1.7
915105-03	ND12	ND1.7
932801-01	ND12	ND1.7

RMP →

Matrix Spike
Percent Recovery

	2,4-D	2,4,5-TP (Silvex)
Blank Spike 10/30/89	67%	61%
915008A-02 MSD	74%	62%