Draft

Waste Removal Report

for the

Ingalls Avenue Site
Troy, New York

Prepared for
Niagara Mohawk Power Corporation

August 1999

Prepared by

FOSTER WHEELER ENVIRONMENTAL CORPORATION

1.0 INTRODUCTION

The Niagara Mohawk Power Corporation (NMPC) conducted a limited waste removal action at the Ingalls Avenue Site in Troy, New York on May 10, 1999 in accordance with a Waste Removal Work Plan approved by the New York State Department of Environmental Conservation (NYSDEC) on May 5, 1999. This report briefly summarizes the events leading up to the removal action and documents the current status of the site. A photographic log is presented in Appendix A.

In August 1998, the NYSDEC requested that NMPC conduct an investigation to address apparent waste material that was discovered on the western extension of Ingalls Avenue. NYSDEC suggested that NMPC determine whether the material was a byproduct related to the Troy (Smith Avenue) former manufactured gas plant (MGP) Site, which is located approximately 300 yards to the north. Figure 1 shows the site location.

On October 19, 1998, Foster Wheeler Environmental Corporation (Foster Wheeler Environmental) personnel collected samples of the Ingalls Avenue waste material for chemical analysis. This material was exposed in a small mound on the north side of Ingalls Avenue (see Photograph 1), and in a layer approximately 0.5 feet thick along a section of the road. The mound was approximately 8 to 10 feet in diameter and approximately 2 feet thick. A layer of brown to light brown ash and clinker underlay the tarry material in the mound.

A Waste Characterization Report for the Ingalls Avenue Site was prepared by Foster Wheeler Environmental on behalf of NMPC in December 1998. Data presented in this report indicated that the waste material at Ingalls Avenue may represent MGP by-products.

Neither the physical nature of the material, hard tar containing wood chips (Photograph 2), nor the analytical data substantiated a direct linkage to MGP-type impacts observed at the Troy (Smith Avenue) Site. Nevertheless, the Ingalls Avenue Site is an unsecured public right-of-way. Therefore, in December 1998, NMPC proposed a limited waste removal action to eliminate the surface exposures of this material from the public right-of-way. This proposal was approved in concept by the NYSDEC in a letter to NMPC dated January 4, 1999.

On April 16, 1999, NMPC and Foster Wheeler Environmental met with NYSDEC at the Ingalls Avenue Site to discuss details of the proposed removal action. During this visit, City of Troy employees arrived to regrade the Ingalls Avenue extension to facilitate its use for access to the Hudson River. A layer of milled asphalt (waste material from road construction projects) was deposited on the ground surface to level and smooth the road bed (see Photographs 3 and 4). This milled asphalt is located within the area of the waste removal action. It was stated during this site visit that consideration of the high levels of polycyclic aromatic hydrocarbons (PAHs) in the milled asphalt would be necessary when determining the extent of remediation required for the site.

SOURCE: US Geological Survey 7.5-minute topographic map quadrangle for Troy North, NY (1954, photorevised 1980) and Troy South, NY (1953, photorevised 1980).

SCALE: 1:24000

NIAGARA MOHAWK POWER CORPORATION
INGALLS AVENUE SITE, TROY, NEW YORK

FIGURE 1

SITE LOCATION MAP

FOSTER WHEELER ENVIRONMENTAL CORPORATION

The final Waste Removal Work Plan was submitted to NYSDEC on May 3, 1999 and approved by NYSDEC on May 5, 1999. The following sections present a summary of the removal action.

2.0 WASTE REMOVAL ACTIVITIES

The removal action was completed in accordance with the NYSDEC-approved Waste Removal Work Plan (May 1999) on May 10, 1999. Pursuant to the work plan, the volume of material removed was limited to the capacity of a single roll-off container. The limits of the excavation were then marked with permeable fabric and the remaining material was covered with clean fill to eliminate surface exposures. The following sections present additional details regarding the removal action.

2.1 Excavation

Excavation of the waste material was performed by West Central Environmental Corporation, with oversight by NMPC and Foster Wheeler Environmental. The material was excavated using a trackhoe excavator (Photograph 5), and loaded directly into a plastic-lined 30 yd^3 roll-off container for transportation from the site. Pursuant to the work plan, the excavation was completed to a depth of approximately 2 feet below the ground surface along the southwestern side of the mound and across the road (Photographs 6 and 7). The total depth of the mound on the northern side of the road was approximately 3 to 4 feet. Excavation of the waste was continued until it was determined that the mass of waste removed was near the weight capacity of the roll-off container. As shown on the waste manifest (Appendix B) a total of approximately 28,000 pounds of waste material was removed for off-site disposal.

2.2 Real-Time Air Monitoring

Real-time air monitoring was conducted by Foster Wheeler Environmental during the excavation activities, both within and downwind of the work area. Photoionization detectors (PIDs) were used to monitor organic vapors, and a Miniram dust meter was used to monitor fugitive dust emissions in accordance with the NYSDEC-approved Work Plan. No readings above the background levels (0.0 ppm) of organic vapors were detected downwind of the work area. In the breathing zone of the workers within the work area, organic vapor readings did not exceed 0.2 ppm. The maximum measurement at ground level was 2.8 ppm from the exposed material during excavation. Dust readings were below the action level (0.2 mg/m^3) both downwind and in the work area. All readings were recorded in the logbook.

2.3 Waste and Soil Sampling

One composite sample, IA-WC-01, comprised of five discrete grab samples, was collected from the roll-off container for the purpose of characterizing the waste for disposal. The sample was submitted to Envirotech Research Inc. located in Edison, New Jersey, for laboratory analysis of the following chemical parameters: NYSDEC ASP Target Compound List (TCL) volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, and polychlorinated biphenyls (PCBs); NYSDEC ASP Target Analyte List (TAL) metals and

cyanide; Toxicity Characteristic Leaching Procedure (TCLP) testing and Resource Conservation and Recovery Act (RCRA) characteristics. The results of these analyses are presented in Appendix C, Table 1 and summarized in Section 3.0.

A total of four post-excavation samples (IA-PE-01 through IA-PE-04) were collected prior to backfilling at the Ingalls Avenue Site (see Figure 2) and analyzed for BTEX, PAHs, and total cyanide. A sample of the fill material used to backfill the excavation, and a field blank (IA-FB-21) collected by pouring laboratory-supplied deionized water over decontaminated sampling equipment were also submitted for the same analyses. The results of these analyses are presented in Appendix C, Tables 2, 3 and 4 and summarized in Section 3.0.

2.4 Backfilling

Prior to backfilling, permeable landscaping fabric was placed in the excavation to mark the limits of the excavation for future investigations or remediation that may be required (Photograph 8). The excavation was then backfilled with clean gravel supplied by West Central Environmental Corporation to restore the original grade (Photographs 9 and 10).

2.5 Transportation and Disposal

The excavated material was initially transported (under a hazardous waste manifest) by West Central Environmental Corporation to NMPC's Treatment Storage and Disposal Facility (TSDF) located in North Albany, New York for holding until the results of the waste characterization analyses were available. Prior to leaving the site, the roll-off was covered, and the truck was inspected to ensure no waste material was present on the tires or exterior of the container.

Following receipt of the analytical results (Appendix C, Table 1), the manifest was amended to reflect the non-hazardous waste determination, and the material was transported to the High Acres Landfill in Fairport, New York by West Central Environmental Corporation. A copy of the waste manifest is presented in Appendix B.

3.0 ANALYTICAL RESULTS

3.1 Waste Characterization Sample

Complete analytical results for waste characterization sample IA-WC-01 are presented in Appendix C, Table 1. These results, additional details of which are discussed below, show that the waste material is not characteristically hazardous.

Two VOCs were detected in the waste characterization sample, toluene (7,200 ug/kg) and xylene (28,000 ug/kg). Both of these results were estimated, with concentrations greater than the instrument detection limit, but below the method quantitation limit. Tentatively identified compounds (TICs) were also present in the sample, with a total volatile TIC concentration of 827,000 ug/kg. The waste characterization sample also contained numerous SVOCs, most of

which were polycyclic aromatic hydrocarbon (PAH) compounds. The SVOCs ranged in concentration from 2,400 ug/kg (carbazole) to 2,300,000 ug/kg (naphthalene). Tentatively identified compounds for the SVOC fraction had total concentrations of 9,710,000 ug/kg.

No PCBs were detected in the sample. Three pesticides, dieldrin, endrinaldehyde, and methoxychlor were present at concentrations up to 6,200 ug/kg. Analysis of the waste characterization sample indicated the presence of 20 metals at detectable concentrations. Total cyanide was present in the waste characterization sample at a concentration of 185 mg/kg.

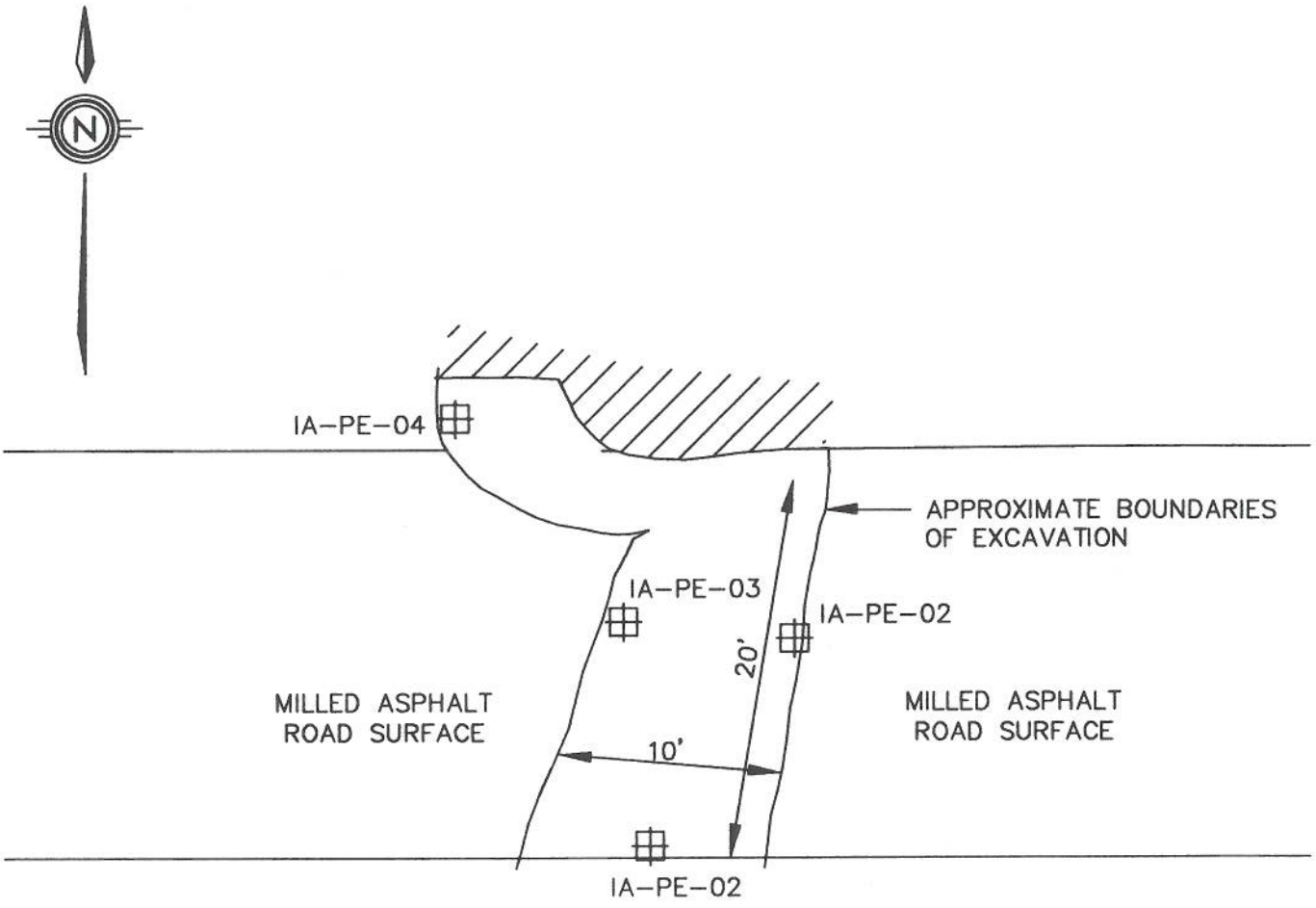
TCLP testing for VOCs, SVOCs and metals indicated that the waste material is not characteristically hazardous as a result of toxicity. Benzene was the only VOC detected in the leachate, and was present at a concentration of 0.25 mg/l, well below the 0.5 mg/l regulatory limit. For the SVOC fraction, only o-cresol and m&p-cresol were present, at concentrations of 0.0034 mg/l and 0.0066 mg/l, respectively. These concentrations are significantly below the TCLP regulatory limit of 200 mg/l for o-cresol and m&p-cresol. Barium and lead were both detected at a concentration of 0.31 mg/l, below the TCLP regulatory limits of 100 mg/l and 5.0 mg/l, respectively.

The waste characterization sample was also analyzed for RCRA characteristics (i.e., corrosivity, ignitability, and reactivity). The sample had a pH of 4.24, and was thus not characteristically hazardous for corrosivity. The flash point was >160 degrees Fahrenheit, and therefore, the material is not characteristically hazardous for ignitability. No reactive cyanide or sulfide was detected.

3.2 Post-Excavation Samples

Four post-excavation soil samples and a corresponding field blank sample were collected prior to backfilling at the Ingalls Avenue Site (Figure 2) and analyzed for BTEX, PAHs, and total cyanide. BTEX compounds exceeded NYSDEC soil cleanup criteria in only one of the post-excavation samples, IA-PE-03 (Appendix C, Table 2). Benzene (74 ug/kg) and total xylenes (2200 ug/kg) were detected in this sample. PAH concentrations in all four of the post-excavation samples exceeded NYSDEC soil cleanup criteria, ranging from 620 ug/kg (dibenz(a,h)anthracene in IA-PE-01) to 1,400,000 ug/kg (phenanthrene in IA-PE-02). Sample IA-PE-01, located at the southern extent of the excavation, had the lowest overall PAH concentrations, exceeding only six of the TAGM standards. Sample IA-PE-02, located at the northern extent of the excavation along the road bed, had the greatest overall PAH concentrations, exceeding all of the TAGM standards for the analyzed PAH compounds. Note that these analytical results for PAH compounds are not unexpected, given the milled-asphalt substrate of the Ingalls Avenue roadbed.

Total cyanide ranged among the four samples from 29.6 mg/kg (IA-PE-01) to 372 mg/kg (IA-PE-04). There is no NYSDEC TAGM soil cleanup criteria for cyanide.



POST EXCAVATION SAMPLE LOCATION

NOT TO SCALE

THIS DRAWING PRODUCED ON AUTOCAD DO NOT REVISE IT MANUALLY
NIAGARA MOHAWK POWER CORPORATION
NIAGARA MOHAWK POWER CORPORATION INGALLS AVENUE SITE
FIGURE 2 MAP OF EXCAVATION AND POST-EXCAVATION SAMPLE LOCATION
FOSTER WHEELER ENVIRONMENTAL CORPORATION LIVINGSTON, NEW JERSEY

CAD FILE NAME: NM72999.DWG DATE: 08/13/99
PLOT SCALE: 1=1 TIME: 11:03 AM

FWA3R12.DW

3.3 Clean Fill Sample

One sample was collected from the clean gravel used as backfill at the Ingalls Avenue Site to verify that the material met NYSDEC TAGM standards. The sample was analyzed for BTEX, PAHs, and cyanide. No BTEX compounds or cyanide were detected in the sample (Appendix C, Table 3). Nine PAHs were detected, all at concentrations <1 ppm, well below their applicable soil cleanup guidelines.

3.4 Field Blank Sample

None of the target compounds (i.e., BTEX, PAHs, cyanide) were detected in the field blank sample (Appendix C, Table 4).

4.0 SUMMARY

A total of approximately 28,000 pounds of non-hazardous waste material was removed by NMPC from the Ingalls Avenue Site on May 10, 1999 pursuant to the NYSDEC-approved Waste Removal Work Plan (May 1999). This removal action was limited to the capacity of a single 30 cubic yard roll-off waste container. Visual observations indicated the presence of additional material similar to that removed extending to the northeast, beneath a vegetated mound of soil and construction debris. No waste material was observed near the post excavation sample locations. However, pieces of milled asphalt were pervasive in the roadbed and are likely responsible for the relatively high levels of PAH compounds measured in the post-excavation samples. As discussed in Section 1.0, this material has been used by the City of Troy to improve the roadbed to facilitate access to the Hudson River.

APPENDIX A

PHOTOGRAPHIC LOG

Photo 1: Mound of waste material on the north side of Ingalls Avenue right-of-way, Photograph facing north.

Photo 2: Waste material during excavation.

Photo 3: Ingalls Avenue Site prior to waste removal activities. Photograph, facing southeast, shows milled asphalt placed over road bed by the City of Troy.

Photo 4: Ingalls Avenue Site prior to waste removal activities. Photograph, facing northeast, shows milled asphalt placed over road bed by the City of Troy.

Photo 5: Excavation of waste material by trackhoe.

Photo 6: Ingalls Avenue Site after completion of excavation. Photograph facing north.

Photo 7: Ingalls Avenue Site after completion of excavation, showing prior location of mound of waste material. Photograph facing north.

Photo 8: Placement of filter fabric in excavation prior to backfilling.

Photo 9: Backfilling of excavation.

Photo 10: Ingalls Avenue Site, facing northwest, after completion of backfilling.

APPENDIX B

WASTE MANIFEST

NON-HAZARDOUS WASTE MANIFEST

S.T.D. Angelica, NY

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NYD000730408

Manifest Document No. NH085 2. Page 1 of 1

3. Generator's Name and Mailing Address
NIAGARA MOHAWK POWER CORPORATION
1125 Broadway, Albany, NY 12204-2505

SAME

4. Generator's Phone (518) 433-3696 Attn: Mike Abbott

5. Transporter 1 Company Name: West Central Environmental
6. US EPA ID Number: NYD000708371
A. Transporter 1 Phone (518) 272-6591
B. State Transporter's ID: 2.5350W (NY)

7. Transporter 2 Company Name
8. US EPA ID Number
C. Transporter 2 Phone
D. State Facility's ID

9. Designated Facility Name and Site Address
High Acres Landfill
425 Perinton Parkway
Fairport, NY 14450
10. US EPA ID Number
E. Facility's Phone (716) 223-6152

11. WASTE DESCRIPTION

	Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.
a. Non Regulated Material	1	CM	28,000 Est.	P
b.				
c.				
d.				

E. Additional Descriptions for Materials Listed Above

G. Handling Codes for Wastes Listed Above: L-A

15. Special Handling Instructions and Additional Information
Profile - CI9341
Please retuen copy to generator

GENERATOR

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Jack Halloran
Signature: Jack Halloran
Date: Month 06 Day 08 Year 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Edward Conrad J. Jones
Signature: Edward J. Jones
Date: Month 06 Day 08 Year 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in Item 19

Printed/Typed Name
Signature
Date: Month Day Year

RCRA NON-HAZARDOUS WASTE

Rev. 10-95

APPENDIX C

ANALYTICAL RESULTS

Table 1
Waste Characterization Sample Results

Sample ID	IA-WC-01	
Lab Sample Number	130798	
Sampling Date	05/10/99	
Matrix	SOLID	
VOLATILE COMPOUNDS	**ug/kg**	
Chloromethane	12000	U
Bromomethane	12000	U
VinylChloride	12000	U
Chloroethane	12000	U
MethyleneChloride	19000	U
Acetone	31000	U
CarbonDisulfide	31000	U
1,1-Dichloroethene	12000	U
1,1-Dichloroethane	31000	U
trans-1,2-Dichloroethene	31000	U
cis-1,2-Dichloroethene	31000	U
Chloroform	31000	U
1,2-Dichloroethane	12000	U
2-Butanone	31000	U
1,1,1-Trichloroethane	31000	U
CarbonTetrachloride	12000	U
Bromodichloromethane	6300	U
1,2-Dichloropropane	6300	U
cis-1,3-Dichloropropene	31000	U
Trichloroethene	6300	U
Dibromochloromethane	31000	U
1,1,2-Trichloroethane	19000	U
Benzene	6300	U
trans-1,3-Dichloropropene	31000	U
Bromoform	25000	U
4-Methyl-2-Pentanone	31000	U
2-Hexanone	31000	U
Tetrachloroethene	6300	U
1,1,2,2-Tetrachloroethane	6300	U
Toluene	7200	J
Chlorobenzene	31000	U
Ethylbenzene	25000	U
Styrene	31000	U
Xylene(Total)	28000	J
Total Estimated Conc. VOA TICs (s)	827000	

Table 1
Waste Characterization Sample Results

SEMIVOLATILE COMPOUNDS	ug/kg	
Phenol	110000	U
2-Chlorophenol	110000	U
2-Methylphenol	110000	U
4-Methylphenol	110000	U
2-Nitrophenol	110000	U
2,4-Dimethylphenol	110000	U
2,4-Dichlorophenol	110000	U
4-Chloro-3-methylphenol	110000	U
2,4,6-Trichlorophenol	110000	U
2,4,5-Trichlorophenol	110000	U
2,4-Dinitrophenol	440000	U
4-Nitrophenol	440000	U
4,6-Dinitro-2-methylphenol	440000	U
Pentachlorophenol	440000	U
bis(2-Chloroethyl)ether	11000	U
1,3-Dichlorobenzene	110000	U
1,4-Dichlorobenzene	110000	U
1,2-Dichlorobenzene	110000	U
bis(2-chloroisopropyl)ether	110000	U
N-Nitroso-di-n-propylamine	11000	U
Hexachloroethane	11000	U
Nitrobenzene	11000	U
Isophorone	110000	U
bis(2-Chloroethoxy)methane	110000	U
1,2,4-Trichlorobenzene	11000	U
Naphthalene	2300000	
4-Chloroaniline	110000	U
Hexachlorobutadiene	22000	U
2-Methylnaphthalene	1100000	
Hexachlorocyclopentadiene	110000	U
2-Chloronaphthalene	110000	U
2-Nitroaniline	220000	U
Dimethylphthalate	110000	U
Acenaphthylene	110000	
2,6-Dinitrotoluene	22000	U
3-Nitroaniline	220000	U
Acenaphthene	59000	J
Dibenzofuran	30000	J
2,4-Dinitrotoluene	22000	U
Diethylphthalate	110000	U
4-Chlorophenyl-phenylether	110000	U
Fluorene	260000	
4-Nitroaniline	220000	U
N-Nitrosodiphenylamine	110000	U
4-Bromophenyl-phenylether	110000	U
Hexachlorobenzene	11000	U
Phenanthrene	1200000	
Anthracene	47000	J
Carbazole	2400	J
Di-n-butylphthalate	110000	U

Table 1
Waste Characterization Sample Results

SEMIVOLATILE COMPOUNDS (Continued)	ug/kg	
Fluoranthene	420000	
Pyrene	610000	
Butylbenzylphthalate	110000	U
3,3'-Dichlorobenzidine	220000	U
Benzo(a)anthracene	200000	
Chrysene	280000	
bis(2-Ethylhexyl)phthalate	110000	U
Di-n-octylphthalate	110000	U
Benzo(b)fluoranthene	160000	
Benzo(k)fluoranthene	84000	
Benzo(a)pyrene	36000	
Indeno(1,2,3-cd)pyrene	72000	
Dibenz(a,h)anthracene	27000	
Benzo(g,h,i)perylene	67000	J
Total Estimated Conc. BNA TICs (s)	9710000	
PCBs	**ug/kg**	
Aroclor-1016	87	U
Aroclor-1221	87	U
Aroclor-1232	87	U
Aroclor-1242	87	U
Aroclor-1248	87	U
Aroclor-1254	87	U
Aroclor-1260	87	U
Aroclor-1262	87	U
Aroclor-1268	87	U
PESTICIDES	**ug/kg**	
Aldrin	440	U
alpha-BHC	440	U
beta-BHC	440	U
delta-BHC	440	U
gamma-BHC (Lindane)	440	U
Chlordane	4400	U
4,4'-DDD	440	U
4,4'-DDE	440	U
4,4'-DDT	440	U
Dieldrin	6200	
Endosulfan I	440	U
Endosulfan II	440	U
Endosulfansulfate	440	U
Endrin	440	U
Endrinaldehyde	540	P*
Endrinketone	440	U
Heptachlor	440	U
Heptachlorepoxide	440	U
Methoxychlor	2400	P*
Toxaphene	4400	U

Table 1
Waste Characterization Sample Results

METALS and CYANIDE	mg/kg	
Aluminum	5270	
Antimony	2.1	B
Arsenic	42.2	
Barium	246	
Beryllium	0.29	B
Cadmium	0.10	U
Calcium	3630	
Chromium	12.7	
Cobalt	4.8	B
Copper	103	
Iron	34600	
Lead	312	
Magnesium	638	B
Manganese	509	
Mercury	0.26	
Nickel	14.2	
Potassium	763	B
Selenium	3.8	
Silver	0.37	U
Sodium	479	B
Thallium	1.2	U
Vanadium	21.1	
Zinc	114	
Total Cyanide	185	

U - Analyte not detected at reported detection limit.
J - Reported concentration is estimated.
B (organics) - Compound was also present in an associated blank sample.
B (inorganics) - Reported concetration is < required method detection limit, but > instrument detection limit.
P - For dual column analysis, the percent difference between the quantitated concentration is >40%.
* - For dual column analysis, the lowest quantitated concentration is reported 'due to coeluting interference.

Table 1
Waste Characterization Sample Results

RCRA CHARACTERISTICS		
Corrosivity (std pH units)	4.24	
Ignitability (deg F)	>160	
ReactiveCyanide	25.0	U
ReactiveSulfide	20.0	U
TCLP VOLATILE COMPOUNDS	**mg/l**	
VinylChloride	0.02	U
1,1-Dichloroethene	0.02	U
Chloroform	0.05	U
1,2-Dichloroethane	0.02	U
MethylEthylKetone	0.05	U
CarbonTetrachloride	0.02	U
Trichloroethene	0.01	U
Benzene	0.025	
Tetrachloroethene	0.01	U
Chlorobenzene	0.05	U
TCLP SEMIVOLATILE COMPOUNDS	**mg/l**	
o-Cresol	0.0034	J
m&p-Cresol	0.0066	J
2,4,6-Trichlorophenol	0.08	U
2,4,5-Trichlorophenol	0.08	U
Pentachlorophenol	0.32	U
1,4-Dichlorobenzene	0.08	U
Hexachloroethane	0.008	U
Nitrobenzene	0.008	U
Hexachlorobutadiene	0.016	U
2,4-Dinitrotoluene	0.016	U
Hexachlorobenzene	0.008	U
Pyridine	0.08	U
TCLP METALS	**mg/l**	
Arsenic	0.14	U
Barium	0.31	B
Cadmium	0.0060	U
Chromium	0.015	U
Lead	0.31	B
Mercury	0.00010	U
Selenium	0.13	U
Silver	0.025	U

Table 2
Post-Excavation Sample Results

Sample ID		IA-PE-01		IA-PE-02		IA-PE-03		IA-PE-04	
Lab Sample Number		130799		130800		130801		130802	
Sampling Date	NYSDEC	05/10/99		05/10/99		05/10/99		05/10/99	
Matrix	TAGM 4046	SOLID		SOLID		SOLID		SOLID	
VOLATILE COMPOUNDS (ug/kg)									
Benzene	*60*	1.2	J	1.3		**74**	J	1.2	U
Toluene	*5500*	6.2	U	11		720		6.1	U
Ethylbenzene	*1500*	5.0	U	5.0	U	150	J	4.9	U
Xylene(Total)	*1200*	6.2	U	18		**2200**		6.1	U
SEMIVOLATILE COMPOUNDS (ug/kg)									
Naphthalene	*13,000*	350	J	**73000**	J	**55000**		**34000**	J
Acenaphthylene	*41,000*	1300		**190000**		38000		**75000**	
Acenaphthene	*50,000*	620	J	**68000**	J	19000	J	12000	J
Fluorene	*50,000*	630	J	**270000**		**78000**		**100000**	
Phenanthrene	*50,000*	5900		**1400000**		**410000**		**850000**	
Anthracene	*50,000*	1800		**86000**	J	20000		32000	J
Fluoranthene	*50,000*	7300		**600000**		**210000**		**400000**	
Pyrene	*50,000*	6600		**770000**		**260000**		**520000**	
Benzo(a)anthracene	*224*	**3800**		**290000**		**110000**		**190000**	
Chrysene	*400*	**4300**		**390000**		**130000**		**270000**	
Benzo(b)fluoranthene	*1,100*	**4300**		**230000**		**77000**		**150000**	
Benzo(k)fluoranthene	*1,100*	**2000**		**120000**		**35000**		**74000**	
Benzo(a)pyrene	*61*	**3200**		**84000**		**15000**		**26000**	
Indeno(1,2,3-cd)pyrene	*3,200*	2400		**110000**		**33000**		**71000**	
Dibenz(a,h)anthracene	*14*	**620**		**43000**		**14000**		**29000**	
Benzo(g,h,i)perylene	*50,000*	2200		**110000**		30000		**60000**	
CYANIDE (mg/kg)									
Total Cyanide	*NC*	29.6		299		134		372	

U - The compound was not detected at or above the indicated detection limit.

J - Data indicates the presence of a compound, the concentration is approximate, and less than the quantitation limit but greater than zero.
'The reported concentration is an estimated value.

Bolded values exceed New York State DEC TAGM Standards

Table 3
Clean Fill Sample Results

Sample ID	Clean_Fill	
Lab Sample Number	130803	
Sampling Date	05/10/99	
Matrix	SOLID	
VOLATILE COMPOUNDS	**ug/Kg**	
Benzene	1.1	U
Toluene	5.4	U
Ethylbenzene	4.3	U
Xylene(Total)	5.4	U
SEMIVOLATILE COMPOUNDS	**ug/kg**	
Naphthalene	120	J
Acenaphthylene	7.7	J
Acenaphthene	370	U
Fluorene	22	J
Phenanthrene	130	J
Anthracene	370	U
Fluoranthene	41	J
Pyrene	52	J
Benzo(a)anthracene	18	J
Chrysene	21	J
Benzo(b)fluoranthene	13	J
Benzo(k)fluoranthene	37	U
Benzo(a)pyrene	37	U
Indeno(1,2,3-cd)pyrene	37	U
Dibenz(a,h)anthracene	37	U
Benzo(g,h,i)perylene	370	U
CYANIDE	**mg/kg**	
TotalCyanide	0.5	U

U - Analyte not detected at reported detection limit.
J - Reported concentration is estimated.

Table 4
Field Blank Sample Results

Sample ID	IA-FB-21	
Lab Sample Number	130797	
Sampling Date	05/10/99	
Matrix	WATER	
VOLATILE COMPOUNDS (ug/l)		
Benzene	0.3	U
Toluene	0.3	U
Ethylbenzene	0.2	U
Xylene(Total)	0.3	U
SEMIVOLATILE COMPOUNDS (ug/l)		
Naphthalene	0.8	U
Acenaphthylene	0.9	U
Acenaphthene	0.9	U
Fluorene	0.6	U
Phenanthrene	0.5	U
Anthracene	0.6	U
Fluoranthene	0.6	U
Pyrene	0.7	U
Benzo(a)anthracene	0.6	U
Chrysene	0.7	U
Benzo(b)fluoranthene	0.6	U
Benzo(k)fluoranthene	0.7	U
Benzo(a)pyrene	0.6	U
Indeno(1,2,3-cd)pyrene	0.8	U
Dibenz(a,h)anthracene	0.7	U
Benzo(g,h,i)perylene	0.9	U
CYANIDE		
Total Cyanide	0.01	U

U - The compound was not detected at or above the indicated concentration