NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Site Investigation - Scope of Work

OLD UPPER MOUNTAIN ROAD SITE
Site Number 932112

Routes 31 & 93
Lockport, New York

April 2007
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TABLE OF CONTENTS

SECTION **PAGE**

1.0 INVESTIGATION OBJECTIVES 1

2.0 SITE DESCRIPTION 1

3.0 SITE HISTORY 2

4.0 SCOPE OF WORK 3
- 4.1 Soil Boring Program 4
  - 4.1.1 *Type and Duration of the Soil Boring Program* 4
  - 4.1.2 *Sample Collection and Analysis* 4
  - 4.1.3 *Completion of the Soil Boring Program* 5
  - 4.1.4 *Geologic Logging* 5
- 4.2 Waste Pit Sampling Program 5
- 4.3 Micro-Well Installation 5
  - 4.3.1 *Number of Wells* 5
  - 4.3.2 *Well Construction* 6
  - 4.3.3 *Well Development* 6
  - 4.3.4 *Sample Collection and Analysis* 6
- 4.4 Surface Soil Samples 7
- 4.5 Surface Water and Sediment Samples 7
- 4.6 Mapping 7
- 4.7 Health & Safety 8
- 4.8 Decontamination 8

LIST OF FIGURES

Figure 1 Site Location Map
Figure 2 Historic Sample Location Map
Figure 3 Proposed Sample Location Map
Figure 4 Proposed Micro-Well Location Map

LIST OF TABLES

Table 1 Summary Key for Historic Samples Collected from the Old Upper Mountain Road Site
Table 2 Analytical Results for Soil and Waste Samples Collected from the Old Upper Mountain Road Site
Table 3 Analytical Results for Surface Water Samples Collected from the Old Upper Mountain Road Site
Table 4 Analytical Results for Sediment Samples Collected from the Old Upper Mountain Road Site

APPENDICES

Appendix A Health and Safety Plan

Old Upper Mountain Road Site
Routes 31 & 93
Lockport, New York
Site Investigation - Scope of Work

New York State Department of Environmental Conservation
Division of Environmental Remediation
June 2007

1.0 INVESTIGATION OBJECTIVES

The purpose of the Site Investigation is to obtain information sufficient to determine if the Old Upper Mountain Road Site should be included in the Registry of Inactive Hazardous Waste Disposal Sites in New York State (Registry), and if so, what the appropriate Site classification should be. The specific objectives of this investigation are to:

- evaluate the Site to determine if hazardous wastes or substances are present, and if present, to determine if there is a consequential amount; and
- determine the degree to which historical waste disposal has contaminated Site groundwater, surface soil, subsurface soil, surface water and sediment.

These objectives will be determined through the analysis of soil, waste, surface water, groundwater and sediment. The specific responsibilities of the NYSDEC and its Contractors are given in Section 4.0 of this Scope of Work. The NYSDEC is the lead agency for this investigation.

2.0 SITE DESCRIPTION

The Old Upper Mountain Road Site is located near the intersection of NY State Routes 31 and 93 in the Town of Lockport, Niagara County, New York (Figure 1). The Site occupies an area of approximately 10 acres in a mixed residential/commercial/industrial neighborhood, and is heavily vegetated with grasses and trees. The site is bounded on the west by Old Upper Mountain Road, on the south and east by the Somerset Railroad, and on the north by private property and the Gulf. The Old Upper Mountain Road Site includes several parcels and a ravine (the Gulf) that is approximately fifty feet deep. The ravine opens northward to form the headwaters of the East Branch of the Gulf, and is surrounded by a plateau on its other three sides (Figure 1). Evidence of disposal at the Site, such as ash, glass, tires and similar trash and debris was initially noted during a routine field inspection of the Lockport City Landfill (NYSDEC Site No. 932010).

3.0 SITE HISTORY

Available information indicates that the Old Upper Mountain Road Site was operated as a municipal dump by the City of Lockport from 1921 through the 1950's. Indications are that the wastes were dumped on the plateau area, and pushed over the bluff into the ravine. Industrial wastes from such local firms as Harrison Radiator, VanDeMark Chemical, Milward Alloys, Vanchlor, and Upson and Cotton Batting were reportedly disposed here.

On November 5, 1997 NYSDEC Central Office Division of Hazardous Site Control staff conducted a sampling event at the Old Upper Mountain Road Site. This investigation was to serve as the initial step of the Preliminary Site Assessment (PSA) described in an August 26, 1996 letter to the City of Lockport Mayor. Specifically, the purpose of this field sampling was to determine the level of overall chemical contamination at the site.

One surface water, one sediment and thirteen waste samples were collected from three general areas of the site: the plateau at the top of the bluff surrounding the headwaters area, the eastern precipice of the plateau, and the East Branch of The Gulf and its stream banks (Figure 2). Five samples were collected from the plateau area, four from the eastern precipice, and five from the East Branch of the Gulf. The surface water and sediment samples were also collected from the East Branch of the Gulf. Detailed information concerning sample collection and analysis is given in Table 1.

All thirteen waste samples contained volatile organic compounds, with the concentrations of trichloroethene and tetrachloroethene in one sample exceeding the Part 375 soil cleanup objectives (Table 2). All thirteen waste samples also contained semivolatile organic compounds, with the concentrations of seven compounds in one sample exceeding the Part 375 soil cleanup objectives (Table 2). Pesticides and PCBs were also detected in several samples, but none of the concentrations exceeded the Part 375 soil cleanup objectives (Table 2).

Twenty metals were detected in the waste samples collected from the site (Table 2). Of these compounds, sixteen were detected at concentrations that exceeded the Part 375 soil cleanup objectives (Table 2), with eleven of these metals being USEPA priority pollutant metals. The priority pollutant metals exceeding the soil cleanup objectives (with the number of exceedances and maximum concentrations) include: antimony (10 samples; 415 mg/kg); arsenic (7 samples; 35.6 mg/kg), cadmium (10 samples; 29.2 mg/kg), chromium (8 samples; 148 mg/kg), copper (10 samples; 26,800 mg/kg), lead (12 samples; 56,900 mg/kg); mercury (5 samples; 19.3 mg/kg), nickel (4 samples; 348 mg/kg), silver (3 samples; 147 mg/kg),

thallium (3 samples; 5.2 mg/kg) and zinc (6 samples; 6,510 mg/kg).

The surface water sample contained three volatile organic compounds (1,2-dichloroethene, trichloroethene and tetrachloroethene) at concentrations that exceeded the NY State Class A surface water standards (Table 3). The sediment sample collected from the same location contained one volatile, six semivolatile and eleven metals at concentrations that exceeded the NYSDEC sediment criteria or Part 375 soil cleanup objectives for the protection of ecological resources (Table 4).

On October 20, 1998 the NYSDOH collected one surface water and five soil/waste samples from the site. Detailed information concerning sample collection and analysis is given in Table 1. The surface water sample was collected upstream of the surface water sample collected by the NYSDEC the previous year, and analyzed only for volatile organic compounds. This sample contained seven volatile organic compounds, with the concentrations of four compounds (1,2-dichloroethene, trichloroethene, tetrachloroethene and vinyl chloride) exceeding the NY State Class A surface water standards (Table 3).

The soil/waste samples were only analyzed for metals. Seventeen metals were detected in these samples, with the concentrations of thirteen metals exceeding the Part 375 soil cleanup objectives (Table 2). Eight of these metals were USEPA priority pollutant metals. The priority pollutant metals exceeding the soil cleanup objectives (with the number of exceedances and maximum concentrations) include: arsenic (1 sample; 18.0 mg/kg), cadmium (5 samples; 62.0 mg/kg), chromium (4 samples; 974 mg/kg), copper (5 samples; 88,700 mg/kg), lead (5 samples; 36,600 mg/kg); mercury (1 sample; 2.0 mg/kg), nickel (3 samples; 995 mg/kg) and zinc (4 samples; 29,600 mg/kg).

4.0 SCOPE OF WORK

Initially, a soil boring program will be completed at the Site for the purpose of collecting subsurface soil and waste samples for chemical analysis. Four (4) of these borings will be converted into micro-wells to facilitate groundwater sampling and water level measurements. Surface soil samples will also be collected from the Site to evaluate potential direct contact exposures, while groundwater, surface water and sediment samples will be collected to determine if waste at the Site has impacted these environmental media. When field work is complete a map of the Site will be produced that includes all soil boring, micro-well and sample locations.

The Department will task a Standby Investigation & Remediation contractor to complete the following activities as part of the proposed Site Investigation:

- provide and mobilize equipment to clear vegetation at select locations to facilitate direct-push sampling. Trees will not be removed;
- sample continuously to bedrock (approximately 12 to 20 feet depth) with the direct-push unit at cleared sampling locations; and
- install four micro-wells with protective casings.

Specific details of the work to be completed during the Site Investigation, including those activities to be conducted by the Standby Investigation & Remediation contractor, are described in the following sections.

4.1 Soil Boring Program

To evaluate subsurface soil and waste at the Site, sixteen (16) soil borings will be completed at the approximate locations shown on Figure 3. Soil borings will be completed near the boundaries of the Site and in the plateau areas where drill rig access is possible. The borings to be completed include the following:

- borings SB-2, SB-8, SB-13 and SB-16 will be completed for the purpose of installing micro-wells MW-1 thru MW-4 (see Section 4.2 below). Additionally, subsurface soil and/or waste samples will be collected from these borings; and
- borings SB-1, SB-3 thru SB-7, SB-9 thru SB-12, SB-14 and SB-15 will be completed throughout the Site to further evaluate the historical disposal area and to facilitate the collection of subsurface soil and/or waste samples.

Based upon visual and/or olfactory evidence, and at the direction of the NYSDEC field representative, additional soil borings may be completed to help delineate the areal extent of any waste materials or contaminated soil encountered during the investigation.

4.1.1 ***Type and Duration of the Soil Boring Program***

The direct-push technique is the most cost and time effective method of conducting the soil boring program outlined above. It is anticipated that a special access mounted direct-push vehicle will be required for this investigation, and that the proposed activities can be completed during four (4) days of field work. This does not include the time required to clear vegetation for access to the soil boring locations. These locations will be staked by the NYSDEC prior to clearing activities.

4.1.2 ***Sample Collection and Analysis***

Using direct-push technology, continuous soil cores will be collected with dedicated acetate liners in a Geoprobe MacroCore sampling system, or equivalent. The Standby Investigation & Remediation contractor will be responsible for opening these liners. Each boring will be advanced to bedrock, estimated

to be between 12 and 20 feet in depth, for the purpose of geologic logging and subsurface soil and/or waste collection. Soil cores will be screened for organic vapors using a photoionization detector (PID). One sample will be collected from each boring from the most contaminated interval (based upon instrument readings, visible staining, odors, etc.) for chemical analysis. If no gross contamination is observed or detected, the sample will be collected at the waste/overburden interface. Additional samples may be collected if multiple or distinct zones of gross contamination are encountered. All samples collected during the soil boring program will be analyzed for Target Compound List (TCL) volatile organic compounds and Target Analyte List (TAL) metals. Six of the samples will also be analyzed for TCL semivolatile organic compounds, PCBs and pesticides. Based upon the historical analytical data for the Site, up to six (6) samples will be analyzed for TCLP lead. All analyses will be completed by NYSDEC contract laboratories.

4.1.3 ***Completion of the Soil Boring Program***

Upon completion of the soil boring program, the Standby Investigation & Remediation contractor will backfill each soil boring not converted into a micro-well with excess soil from the samples, bentonite pellets or grout. To the extent possible, the Standby Investigation & Remediation contractor shall also restore the Site to conditions similar to those encountered prior to the start of the investigation. All excess material from the samples will be spread on the ground surface near each boring, unless gross contamination is encountered; these samples will be containerized in 55-gallon drums for later disposal. The Standby Investigation & Remediation contractor shall supply the drums if needed.

4.1.4 ***Geologic Logging***

All geologic logging will be completed by NYSDEC personnel.

4.2 Waste Pit Sampling Program

Five (5) waste samples will collected from pits located throughout the Site. The approximate locations of these samples are shown on Figure 3. All samples collected during the waste pit sampling program will be analyzed for TCL semivolatile organic compounds, PCBs, pesticides and TAL metals. Based upon the historical analytical data for the Site, up to five (5) samples will be analyzed for TCLP lead. All analyses will be completed by NYSDEC contract laboratories.

4.3 Micro-Well Installation

4.3.1 ***Number of Wells***

Four (4) soil borings (SB-2, SB-8, SB-13 and SB-16) will be converted into micro-wells for the purpose of collecting groundwater samples for chemical analysis, and for determining the groundwater flow

pattern across the Site. The approximate locations of these wells are shown on Figure 4, which should be sufficient to monitor upgradient and downgradient conditions of the overburden water bearing zone. These locations, however, may be modified during the investigation based upon Site conditions.

4.3.2 ***Well Construction***

Upon completion of borings SB-2, SB-8, SB-13 and SB-16, a 1-inch inner diameter (ID) micro-well will be installed in the borehole to provide a means for acquiring groundwater samples and water level measurements. All wells will be constructed with flush joint Schedule 40 PVC screen (10 slot), threaded bottom plugs, and flush-threaded PVC riser pipe. The micro-wells shall be constructed with either 5-feet or 10-feet long screens depending upon the thickness of the waste material encountered and the depth to native soils or bedrock.

All wells will be constructed with a 3' above grade stickup. An appropriately graded silica sand filter pack will be placed around the screen and extend to approximately 2' above the screen. A 2' thick seal of bentonite pellets will be placed above the filter pack, followed by a cement/5% bentonite grout mixture to grade. The bentonite pellets will be allowed to hydrate prior to placing the cement/bentonite grout. The wells will be completed by placing a protective casing with locking hinged lid over the stickup that extends 2' to 3' below grade. The protective casing will ensure that the wells are not damaged or tampered with if multiple water level measurements or samples are required.

4.3.3 ***Well Development***

Each micro-well will be developed, to the extent practicable, by reciprocating ½" dedicated polyethylene tubing containing a foot valve. The tubing will be supplied by the Standby Investigation & Remediation contractor, while the NYSDEC will supply the foot valves. A minimum of 10 well volumes will be removed during well development, with the purged water monitored for pH, temperature, conductivity and turbidity. If it appears that turbidity, pH, and conductivity are stabilizing and will benefit from further development, additional well volumes will be purged. All micro-well development will be conducted by NYSDEC personnel utilizing Department owned equipment.

4.3.4 ***Sample Collection and Analysis***

Groundwater samples will be collected from each of the micro-wells installed during the Site Investigation. Prior to sampling, the wells will be purged of at least three (3) well volumes, with the purged water monitored for pH, temperature, conductivity and turbidity. If it appears that turbidity, pH, and conductivity are stabilizing and will benefit from further purging, additional well volumes will be purged.

If the turbidity is greater than 50 NTU after purging, the well will be sampled for all parameters except metals, which will be sampled within 24 hours after the completion of purging. This technique is intended to reduce the amount of suspended soil in the metals sample. Each micro-well will be sampled using dedicated polyethylene tubing and foot valve. Micro-well purging and sampling will be conducted by NYSDEC personnel utilizing Department owned equipment. All samples will be analyzed for TCL volatile organic compounds, TCL semivolatile organic compounds, PCBs, pesticides, TAL metals and the major anions (chloride, sulfate and alkalinity). All analyses will be completed by NYSDEC contract laboratories.

4.4 Surface Soil Samples

Surface soil samples will be collected at six (6) of the soil boring locations to evaluate potential direct contact exposures. These samples will be collected from 0" - 2" depth following the removal of the vegetative cover, if present, and should be collected prior to implementing the soil boring program to avoid cross contamination. It may be necessary to collect several samples in the area of each boring to obtain sufficient sample volume. All sampling will be conducted by NYSDEC personnel utilizing Department owned equipment. All samples will be analyzed for TAL metals, with five (5) of the samples also analyzed for TCL semivolatile organic compounds, PCBs and pesticides. Based upon the historical analytical data for the Site, up to six (6) samples will be analyzed for TCLP lead. All analyses will be completed by NYSDEC contract laboratories.

4.5 Surface Water and Sediment Samples

Two (2) surface water and sediment samples will be collected during the Site Investigation to determine if historical waste disposal at the Site has impacted these environmental media. The approximate locations of these samples are shown on Figure 3. These samples will be collected by NYSDEC personnel utilizing Department owned equipment. All samples will be analyzed for TCL volatile organic compounds, TCL semivolatile organic compounds, PCBs, pesticides and TAL metals. All analyses will be completed by NYSDEC contract laboratories.

4.6 Mapping

A map of the Old Upper Mountain Road Site has been prepared by the NYSDEC using AutoCAD LT 2005. This map shows the entire Site boundaries and includes the approximate locations of property boundaries, roadways, the ravine and streams. As part of the Site Investigation, this map will be modified to include the locations of all borings, wells and samples completed/collected as part of the investigation. The sample and boring locations will be surveyed with a hand held GPS unit, while the monitoring well elevations will be surveyed by NYSDEC personnel utilizing Department owned equipment.

4.7 Health & Safety

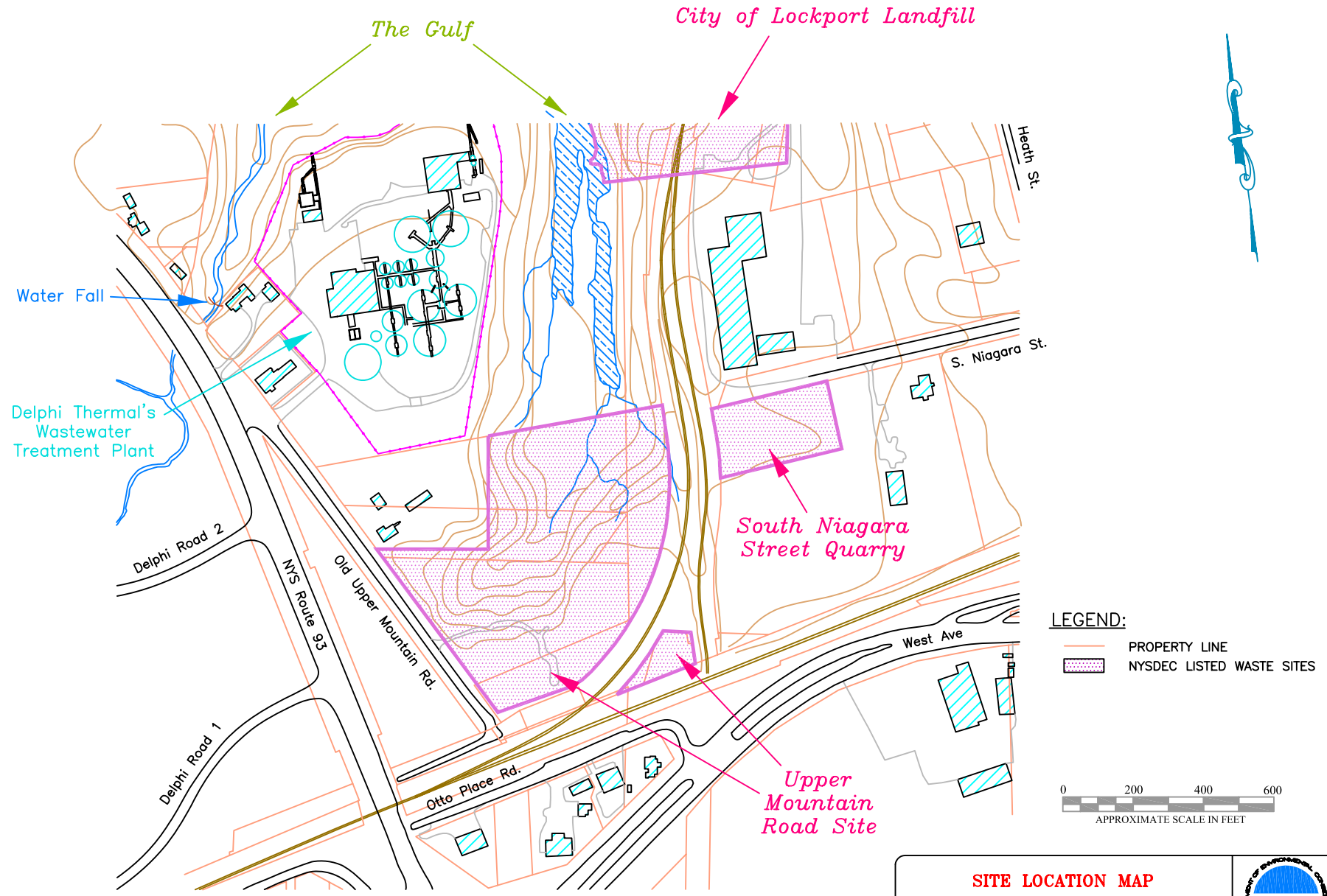
It is anticipated that all field work can be performed in Level D personal protective equipment with Level C backup. All field work should be conducted in accordance with the Health and Safety Plan included as Appendix A. The Standby Investigation & Remediation contractor will provide appropriate personal protective equipment (PPE) suitable for working in and around contaminated liquids, wastes and soils. NYSDEC personnel will conduct air monitoring for volatile organic vapors with a Department owned Photovac 2020 Pro.

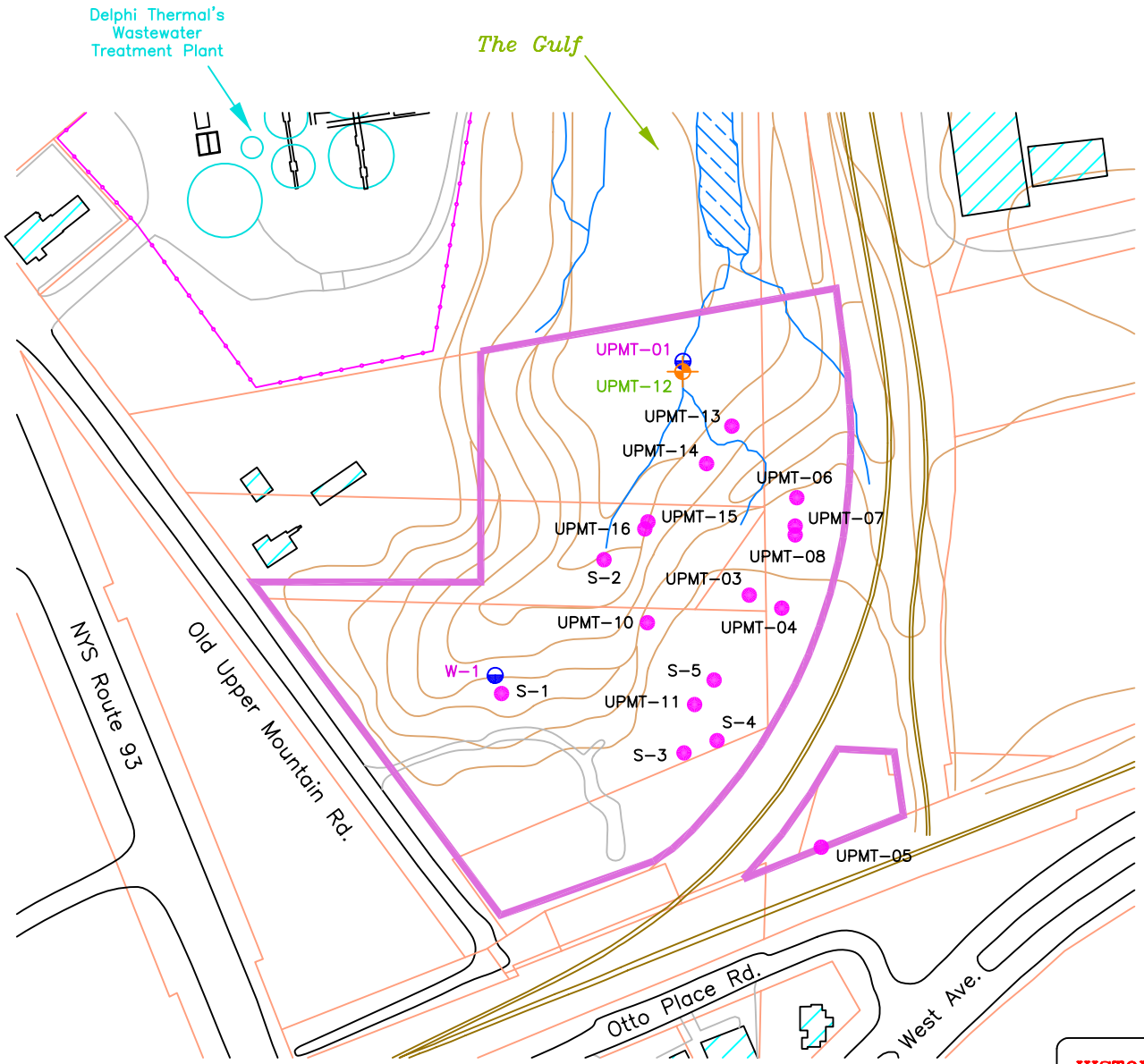
All field personnel shall be informed of the location of the hospital listed in Appendix A, and be made aware of the list of emergency contacts contained therein. Field supervisory personnel shall become thoroughly familiar with the route to the hospital.

The Standby Investigation & Remediation contractor shall also identify and avoid all underground utility lines in the areas where soil borings are to be completed and monitoring wells installed. The work areas will be clearly delineated to prevent unauthorized access. During all intrusive activities, continuous air monitoring will be conducted for organic vapors to determine the necessity to upgrade personal protective equipment.

4.8 Decontamination

The direct-push vehicle and sampling equipment will be decontaminated prior to the implementation of any field activities. This equipment will also be decontaminated between sampling locations. Decontamination wastes, used PPE, sampling equipment and garbage generated during the project will be bagged and removed from the Site at the end of each work day. Construction of a decon pad will not be required for this project.


The Gulf
City of Lockport Landfill
Heath St.
Water Fall
S. Niagara St.
Delphi Thermal's Wastewater Treatment Plant
South Niagara Street Quarry
Delphi Road 2
NYS Route 93
Old Upper Mountain Rd.
West Ave
Delphi Road 1
Otto Place Rd.
Upper Mountain Road Site
LEGEND:
PROPERTY LINE
NYSDEC LISTED WASTE SITES
0
200
400
600
APPROXIMATE SCALE IN FEET
SITE LOCATION MAP
DIVISION OF ENVIRONMENTAL REMEDIATION
DATE: 04/03/07
DRAWING: Upper Mtn Road.dwg
PROJECT:
OLD UPPER MOUNTAIN ROAD SITE
FIGURE 1



LEGEND:

- SOIL AND WASTE SAMPLE
- WATER SAMPLE
- SEDIMENT SAMPLE

0 100 200 300

APPROXIMATE SCALE IN FEET

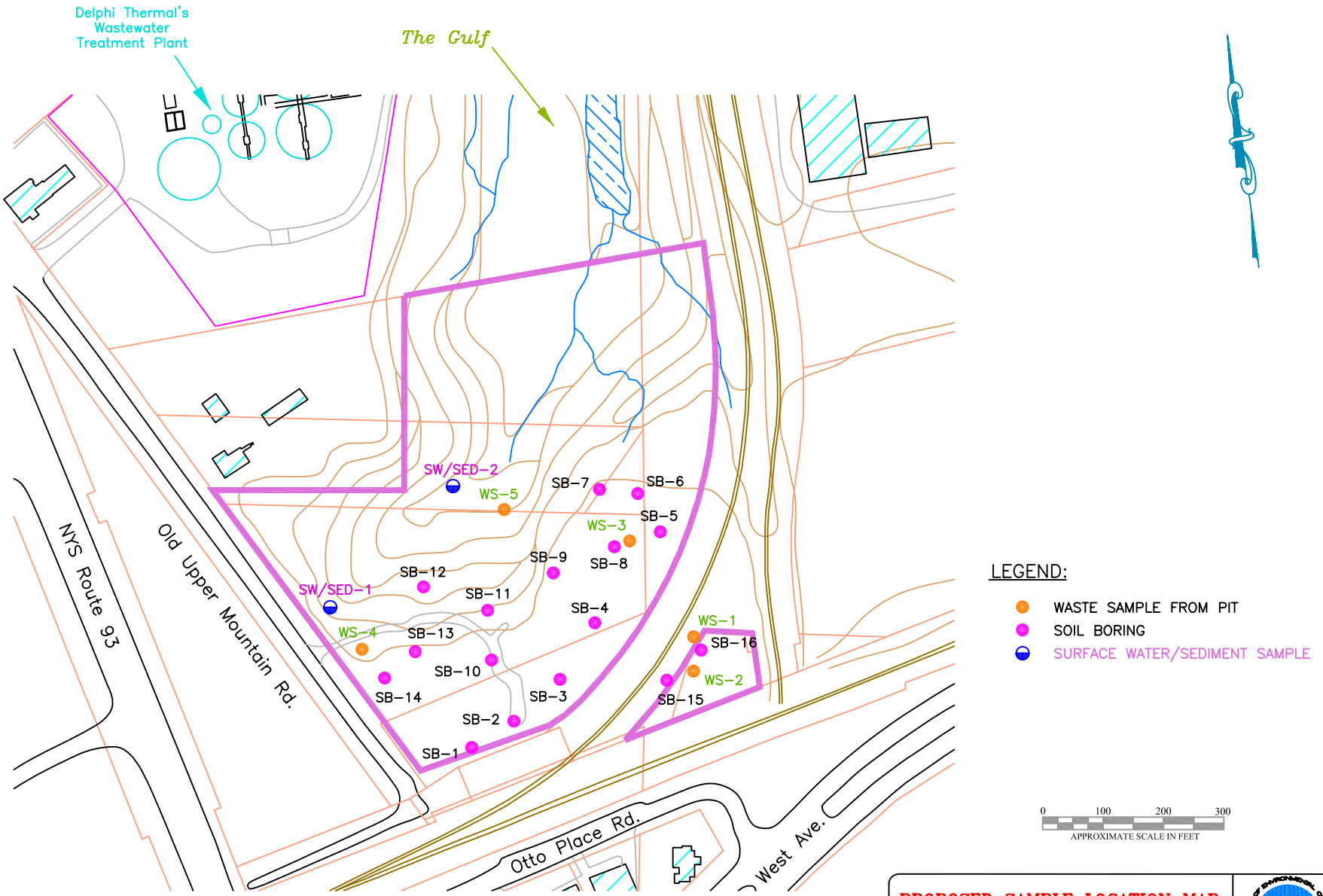
HISTORIC SAMPLE LOCATION MAP

DIVISION OF ENVIRONMENTAL REMEDIATION

DATE: 04/03/07 DRAWING: Upper Mtn Road.dwg

PROJECT: OLD UPPER MOUNTAIN ROAD SITE

FIGURE 2



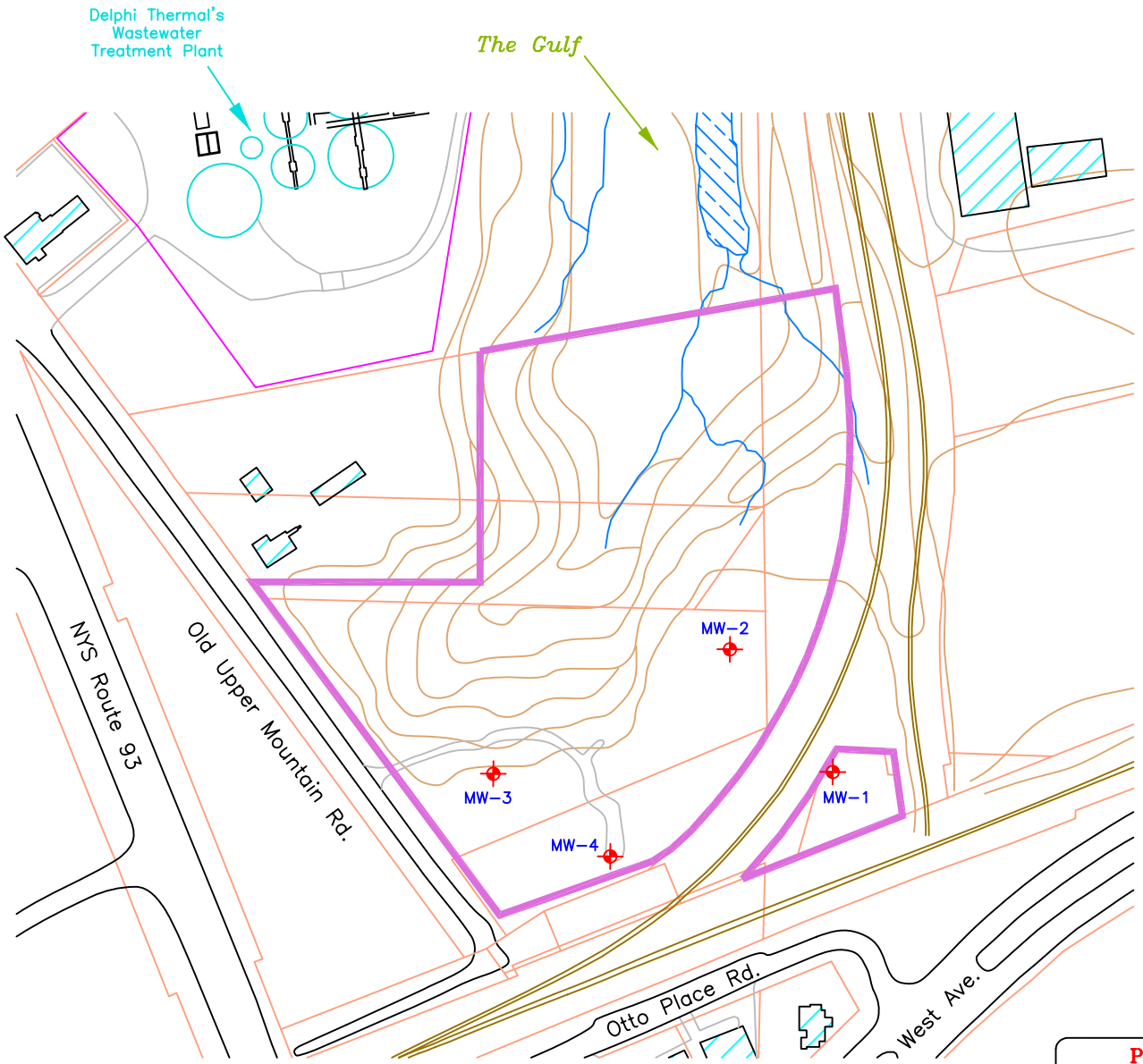
PROPOSED SAMPLE LOCATION MAP

DIVISION OF ENVIRONMENTAL REMEDIATION

DATE: 04/03/07 DRAWING: Upper Mtn Road.dwg

PROJECT: OLD UPPER MOUNTAIN ROAD SITE

FIGURE 3



LEGEND:

MICRO-WELL

0 100 200 300

APPROXIMATE SCALE IN FEET

PROPOSED MICRO-WELL LOCATION MAP

DIVISION OF ENVIRONMENTAL REMEDIATION

DATE: 04/03/07 DRAWING: Upper Mtn Road.dwg

PROJECT: OLD UPPER MOUNTAIN ROAD SITE

FIGURE 4

Table 1. Summary Key for Historic Samples Collected from the Old Upper Mountain Road Site, Site No. 932112.							
Lab ID	**Sample ID**	**Date Sampled**	**Time Sampled**	**Interval Sampled***	**Analytical Parameters**	**Comments**	**Table Reference**
Soil Samples							
S-1	S-1	10/20/98	unknown	unknown	Metals	washout area	Table 2
Waste Samples							
UPMT-03	UPMT-03	11/05/97	1002	1.0' - 1.5'	VOCs, SVOCs, PCBs, Pesticides, Metals, cyanide	cinders & grit	Table 2
UPMT-04	UPMT-04	11/05/97	1025	1.5'	VOCs, SVOCs, PCBs, Pesticides, Metals, cyanide	soil mixed with cinders & grit	Table 2
UPMT-05	UPMT-05	11/05/97	1040	2.0'	VOCs, SVOCs, PCBs, Pesticides, Metals, cyanide	brownish/gray soil with grit and some slag	Table 2
UPMT-06	UPMT-06	11/05/97	1050	2.0'	VOCs, SVOCs, PCBs, Pesticides, Metals, cyanide	ground up “scrap” mixed with soil	Table 2
UPMT-07	UPMT-07	11/05/97	1105	1.5'	VOCs, SVOCs, PCBs, Pesticides, Metals, cyanide	deep brown soil that is gritty	Table 2
UPMT-08	UPMT-08	11/05/97	1118	unknown	VOCs, SVOCs, PCBs, Pesticides, Metals, cyanide	dirty white, somewhat crystalline and crumbly waste	Table 2
UPMT-09	UPMT-09	11/05/97	1120	2.5'	VOCs, SVOCs, PCBs, Pesticides, Metals, cyanide	reddish brown and gritty, like kitty litter	Table 2
UPMT-10	UPMT-10	11/05/97	1130	1.5'	VOCs, SVOCs, PCBs, Pesticides, Metals, cyanide	C&D waste, incinerator waste, old bottles	Table 2
UPMT-11	UPMT-11	11/05/97	1155	0.0' - 0.17'	VOCs, SVOCs, PCBs, Pesticides, Metals, cyanide	green “dirt”	Table 2
UPMT-13	UPMT-13	11/05/97	1238	0.0' - 0.17'	VOCs, SVOCs, PCBs, Pesticides, Metals, cyanide	tannish red, gritty, hard and dry material	Table 2
UPMT-14	UPMT-14	11/05/97	1240	1.0'	VOCs, SVOCs, PCBs, Pesticides, Metals, cyanide	incinerator grit	Table 2
UPMT-15	UPMT-15	11/05/97	1245	unknown	VOCs, SVOCs, PCBs, Pesticides, Metals, cyanide	gritty mix of soil and some incinerator ash	Table 2
UPMT-16	UPMT-16	11/05/97	1250	unknown	VOCs, SVOCs, PCBs, Pesticides, Metals, cyanide	greenish colored, gritty excrement mixed with soil	Table 2

Table 1 (Continued). Summary Key for Historic Samples Collected from the Old Upper Mountain Road Site, Site No. 932112.							
Lab ID	**Sample ID**	**Date Sampled**	**Time Sampled**	**Interval Sampled***	**Analytical Parameters**	**Comments**	**Table Reference**
Waste Samples (Continued)							
S-2	S-2	10/20/98	unknown	unknown	Metals	shiny silver surface debris	Table 2
S-3	S-3	10/20/98	unknown	unknown	Metals	mixture of gray-green sandy material and black sandy material	Table 2
S-4	S-4	10/20/98	unknown	unknown	Metals	ash material	Table 2
S-5	S-5	10/20/98	unknown	unknown	Metals, TCLP Lead	mixture of tan sandy material and a rusty stained material	Table 2
Sediment Samples							
UPMT-12	UPMT-12	11/05/97	1225	0.0' - 0.17'	VOCs, SVOCs, PCBs, Pesticides, Metals, cyanide	sediment mixed with incinerator waste	Table 3
Water Samples							
UPMT-01	UPMT-01	11/05/97	1228	N/A	VOCs, SVOCs, PCBs, Pesticides, Metals, cyanide	clear and cold, no surface sheen or odor	Table 4
W-1	W-1	10/20/98	unknown	N/A	VOCs	headwaters for the Gulf creek	Table 4

Table 2.
Analytical Results for Soil and Waste Samples Collected from the Old Upper Mountain Road Site.

Sample Number Date Sampled Sample Depth Sample Type	Part 375 Soil Cleanup Objective *	UPMT-03 11/05/97 1.0' - 1.5' Cinders & Grit	UPMT-04 11/05/97 1.5' Cinders & Grit	UPMT-05 11/05/97 2.0' Grit & Slag	UPMT-06 11/05/97 2.0' Soil with "Scrap"	UPMT-07 11/05/97 1.5' Gritty Soil	UPMT-08 11/05/97 Unknown Crystalline Waste
Volatile Organic Compounds (µg/kg or ppb)							
1,1-Dichloroethane	19,000				9 J	9 J	
1,1,1-Trichloroethane	100,000	15 J	24.0	41,000	160.0	99.0	27.0
Trichloroethene	10,000	3 J	6 J	**22,000 J**	20.0	8 J	
Tetrachloroethene	5,500	14 J	28.0	**600,000**	99.0	24.0	5 J
Toluene	100,000		4 J	5,500 J		6 J	
Xylene (Total)	100,000			19,000 J			
Semivolatile Organic Compounds (µg/kg or ppb)							
Acenaphthene	100,000		24 J				32 J
Acenaphthylene	100,000						
Anthracene	100,000		34 J				120 J
Benzo(a)pyrene	1,000		130 J		230 J	220 J	570.0
Benzo(a)anthracene	1,000		130 J		150 J	200 J	640.0
Benzo(b)fluoranthene	1,000		130 J	180 J	250 J	260 J	640.0
Benzo(g,h,i)perylene	100,000		100 J		230 J	170 J	290 J
Benzo(k)fluoranthene	1,000		160 J		240 J	290 J	570.0
Bis(2-ethylhexyl)phthalate	NS		97 JB	2,900 B	290 JB	320 JB	85 JB
Carbazole	NS						62 J
Chrysene	1,000		140 J		170 J	240 J	630.0
Dibenzo(a,h)anthracene	330.0						92 J
Dibenzofuran	NS						

Table 2 (Continued).
Analytical Results for Soil and Waste Samples Collected from the Old Upper Mountain Road Site.

Sample Number Date Sampled Sample Depth Sample Type	Part 375 Soil Cleanup Objective *	UPMT-03 11/05/97 1.0' - 1.5' Cinders & Grit	UPMT-04 11/05/97 1.5' Cinders & Grit	UPMT-05 11/05/97 2.0' Grit & Slag	UPMT-06 11/05/97 2.0' Soil with "Scrap"	UPMT-07 11/05/97 1.5' Gritty Soil	UPMT-08 11/05/97 Unknown Crystalline Waste
Semivolatile Organic Compounds (Continued)							
Di-n-butylphthalate	NS	40 J	52 J	170 J	38 J	160 J	28 J
Fluoranthene	100,000	33 J	200 J		130 J	170 J	1,100
Fluorene	100,000						31 J
Hexachlorobenzene	NS				280 J		
Indeno(1,2,3-cd)pyrene	500.0		82 J		210 J	160 J	310 J
2-Methylnaphthalene	NS						
Naphthalene	100,000				25 J		
Phenanthrene	100,000		150 J		110 J	68 J	490 J
Pyrene	100,000	31 J	240 J	200 J	280 J	320 J	1,300
Total SVOCs	NS	104.0	1,669	3,450	2,633	2,578	6,990
Pesticides (µg/kg or ppb)							
4,4'-DDD	2,600		23 P				
4,4'-DDT	1,700		74 P			38.0	
PCBs (µg/kg or ppb)							
Aroclor-1254			690.0				
Aroclor-1260							
Total PCBs	1,000		690.0				
Inorganic Compounds (mg/kg or ppm)							
Aluminum	SB (11,670)	8,310	4,860	5,580	10,400	6,840	668.0
Antimony	SB (1.8)	**2.1 B**		**7.0 B**	**415.0**	**225.0**	**18.5**

Table 2 (Continued).
Analytical Results for Soil and Waste Samples Collected from the Old Upper Mountain Road Site.

Sample Number **Date Sampled** **Sample Depth** **Sample Type**	**Part 375 Soil Cleanup Objective ***	**UPMT-03** **11/05/97** **1.0' - 1.5'** **Cinders & Grit**	**UPMT-04** **11/05/97** **1.5'** **Cinders & Grit**	**UPMT-05** **11/05/97** **2.0'** **Grit & Slag**	**UPMT-06** **11/05/97** **2.0'** **Soil with "Scrap"**	**UPMT-07** **11/05/97** **1.5'** **Gritty Soil**	**UPMT-08** **11/05/97** **Unknown** **Crystalline Waste**
Inorganic Compounds (Continued)							
Arsenic	16.0	**16.5**	10.8	12.5	**20.2**	**24.2**	2.0 B
Barium	350.0	321.0	**524.0**	**576.0**	**6,110**	**1,930**	125.0
Beryllium	14.0	0.91 B	0.52 B	0.68 B	0.19 B	0.39 B	0.20 B
Cadmium	2.5	1.8	**6.0**	**12.3**	**14.1**	**29.2**	0.35 B
Chromium	36.0	18.3	20.5	**53.6**	**148.0**	**121.0**	4.5
Cobalt	SB (8)	**9.5 B**	6.0 B	**8.8 B**	**22.0**	**28.9**	1.1 B
Copper	270.0	135 N	**655 N**	**2,060 N**	**7,050 N**	**2,690 N**	96.0 N
Cyanide	27.0	0.39 B	0.68	3.6	1.4	2.1	
Iron	SB (17,300)	**17,700**	11,800	17,200	**52,600**	**160,000**	2,130
Lead	400.0	**417 N**	**593 N**	**3,450 N**	**56,900 N**	**28,000 N**	**643 N**
Manganese	2,000	370.0	405.0	448.0	563.0	1,090	46.1
Mercury	0.81	0.10 B	0.35	0.21	**1.6**	**1.4**	
Nickel	140.0	31.0	44.4	96.1	**162.0**	123.0	7.4 B
Selenium	36.0	3.8	1.5	2.0	3.9	4.1	
Silver	36.0		5.1	13.9	**91.3**	**147.0**	0.48 B
Thallium	SB (2.6)	1.5 B			**3.4**	**3.3**	
Vanadium	SB (22)	**40.7**	17.2	21.7	**23.6**	**52.7**	2.0 B
Zinc	2,200	1,960	1,010	**2,340**	1,100	**6,510**	253.0

Table 2 (Continued).
Analytical Results for Soil and Waste Samples Collected from the Old Upper Mountain Road Site.

Sample Number Date Sampled Sample Depth Sample Type	Part 375 Soil Cleanup Objective *	UPMT-09 11/05/97 2.5' Gritty Waste	UPMT-10 11/05/97 1.5' Incinerator Waste	UPMT-11 11/05/97 0.0' - 0.17' Green Dirt	UPMT-13 11/05/97 0.0' - 0.17' Gritty Waste	UPMT-14 11/05/97 1.0' Incinerator Grit	UPMT-15 11/05/97 Unknown Gritty Soil
Volatile Organic Compounds (µg/kg or ppb)							
1,1-Dichloroethane	19,000						
1,1,1-Trichloroethane	100,000	7 J	11 J	22.0	8 J	8 J	16.0
Trichloroethene	10,000		12 J	5 J		2 J	19.0
Tetrachloroethene	5,500		36.0	4 J		8 J	82.0
Toluene	100,000						
Xylene (Total)	100,000						
Semivolatile Organic Compounds (µg/kg or ppb)							
Acenaphthene	100,000	100 J					
Acenaphthylene	100,000						
Anthracene	100,000	930 J				24 J	
Benzo(a)pyrene	1,000	**5,100**				150 J	110 J
Benzo(a)anthracene	1,000	**4,600**				130 J	94 J
Benzo(b)fluoranthene	1,000	**4,500**				150 J	130 J
Benzo(g,h,i)perylene	100,000	2,900				89 J	75 J
Benzo(k)fluoranthene	1,000	**4,700**				210 J	170 J
Bis(2-ethylhexyl)phthalate	NS		200 JB	1,100 JB	370 JB	360 JB	170 JB
Carbazole	NS	330 J					
Chrysene	1,000	**4,900**	120 J	220 J		180 J	130 J
Dibenzo(a,h)anthracene	330.0	**960 J**					
Dibenzofuran	NS	96 J					

Table 2 (Continued).
Analytical Results for Soil and Waste Samples Collected from the Old Upper Mountain Road Site.

Sample Number Date Sampled Sample Depth Sample Type	Part 375 Soil Cleanup Objective *	UPMT-09 11/05/97 2.5' Gritty Waste	UPMT-10 11/05/97 1.5' Incinerator Waste	UPMT-11 11/05/97 0.0' - 0.17' Green Dirt	UPMT-13 11/05/97 0.0' - 0.17' Gritty Waste	UPMT-14 11/05/97 1.0' Incinerator Grit	UPMT-15 11/05/97 Unknown Gritty Soil
Semivolatile Organic Compounds (Continued)							
Di-n-butylphthalate	NS	280 J					31 J
Fluoranthene	100,000	6,300				320 J	190 J
Fluorene	100,000	140 J					
Hexachlorobenzene	NS						
Indeno(1,2,3-cd)pyrene	500.0	**2,900**				97 J	79 J
2-Methylnaphthalene	NS						
Naphthalene	100,000	160 J					
Phenanthrene	100,000	3,000				160 J	110 J
Pyrene	100,000	6,200				290 J	210 J
Total SVOCs	NS	48,096	320.0	1,320	370.0	2,160	1,499
Pesticides (µg/kg or ppb)							
4,4'-DDD	2,600		14 P				
4,4'-DDT	1,700		54 P			16.0	
PCBs (µg/kg or ppb)							
Aroclor-1254			690.0				
Aroclor-1260		350.0					
Total PCBs	1,000	350.0	690.0				
Inorganic Compounds (mg/kg or ppm)							
Aluminum	SB (11,670)	8,380	7,120	3,860	8,010	3,470	8,690
Antimony	SB (1.8)	**40.1**	**80.3**	0.75 B		**14.1 B**	**111.0**

Table 2 (Continued).
Analytical Results for Soil and Waste Samples Collected from the Old Upper Mountain Road Site.

Sample Number Date Sampled Sample Depth Sample Type	Part 375 Soil Cleanup Objective *	UPMT-09 11/05/97 2.5' Gritty Waste	UPMT-10 11/05/97 1.5' Incinerator Waste	UPMT-11 11/05/97 0.0' - 0.17' Green Dirt	UPMT-13 11/05/97 0.0' - 0.17' Gritty Waste	UPMT-14 11/05/97 1.0' Incinerator Grit	UPMT-15 11/05/97 Unknown Gritty Soil
Inorganic Compounds (Continued)							
Arsenic	16.0	**26.5**	**29.9**	6.7	6.7	12.4	**35.6**
Barium	350.0	**1,160**	**1,800**	127.0	169.0	**2,870**	**1,400**
Beryllium	14.0	0.42 B	0.62 B	0.29 B	0.71 B	0.46 B	0.72 B
Cadmium	2.5	**8.3**	**15.7**	**7.7**		**5.7**	**17.7**
Chromium	36.0	**132.0**	**138.0**	**56.8**	4.6	34.4	**81.1**
Cobalt	SB (8)	**18.9**	**24.1**	**5.4 B**	3.2 B	**9.4 B**	**13.5 B**
Copper	270.0	**1,290 N**	**5,930 N**	**26,800 N**	45.4 N	**295 N**	**815 N**
Cyanide	27.0	2.9	2.8	0.82		1.3	1.2
Iron	SB (17,300)	**80,300**	**114,000**	**17,700**	3,090	**38,400**	**49,900**
Lead	400.0	**7,310 N**	**3,990 N**	**1,030 N**	26.0 N	**2,370 N**	**7,190 N**
Manganese	2,000	893.0	1,090	173.0	51.3	438.0	1,430
Mercury	0.81	**1.8**	**19.3**			0.24	**1.2**
Nickel	140.0	111.0	**148.0**	**348.0**	10.0 B	29.2	92.5
Selenium	36.0	3.0	2.2	1.4		3.0	5.8
Silver	36.0	9.1	10.3	11.8		3.4	**44.2**
Thallium	SB (2.6)	1.6 B	1.9 B	1.4 B		2.2 B	**5.2**
Vanadium	SB (22)	**28.3**	**33.3**	12.9	9.0 B	18.7	**44.6**
Zinc	2,200	**3,340**	**3,700**	2,080	27.6	2,150	**6,110**

Table 2 (Continued).
Analytical Results for Soil and Waste Samples Collected from the Old Upper Mountain Road Site.

Sample Number Date Sampled Sample Depth Sample Type	Part 375 Soil Cleanup Objective *	UPMT-16 11/05/97 Unknown Gritty Waste	S-1 10/20/98 Unknown Soil	S-2 10/20/98 Unknown Silver Debris	S-3 10/20/98 Unknown Sandy Material	S-4 10/20/98 Unknown Ash Material	S-5 10/20/98 Unknown Sandy Material
Volatile Organic Compounds (µg/kg or ppb)							
1,1-Dichloroethane	19,000	10 J	N/A	N/A	N/A	N/A	N/A
1,1,1-Trichloroethane	100,000	230.0	″	″	″	″	″
Trichloroethene	10,000	10 J	″	″	″	″	″
Tetrachloroethene	5,500	40.0	″	″	″	″	″
Toluene	100,000		″	″	″	″	″
Xylene (Total)	100,000		″	″	″	″	″
Semivolatile Organic Compounds (µg/kg or ppb)							
Acenaphthene	100,000		N/A	N/A	N/A	N/A	N/A
Acenaphthylene	100,000	74 J	″	″	″	″	″
Anthracene	100,000	150 J	″	″	″	″	″
Benzo(a)pyrene	1,000	570.0	″	″	″	″	″
Benzo(a)anthracene	1,000	670.0	″	″	″	″	″
Benzo(b)fluoranthene	1,000	630.0	″	″	″	″	″
Benzo(g,h,i)perylene	100,000	470.0	″	″	″	″	″
Benzo(k)fluoranthene	1,000	550.0	″	″	″	″	″
Bis(2-ethylhexyl)phthalate	NS	160 JB	″	″	″	″	″
Carbazole	NS	80 J	″	″	″	″	″
Chrysene	1,000	760.0	″	″	″	″	″
Dibenzo(a,h)anthracene	330.0	150 J	″	″	″	″	″
Dibenzofuran	NS		″	″	″	″	″

Table 2 (Continued).
Analytical Results for Soil and Waste Samples Collected from the Old Upper Mountain Road Site.

Sample Number **Date Sampled** **Sample Depth** **Sample Type**	**Part 375 Soil Cleanup Objective ***	**UPMT-16** **11/05/97** **Unknown** **Gritty Waste**	**S-1** **10/20/98** **Unknown** **Soil**	**S-2** **10/20/98** **Unknown** **Silver Debris**	**S-3** **10/20/98** **Unknown** **Sandy Material**	**S-4** **10/20/98** **Unknown** **Ash Material**	**S-5** **10/20/98** **Unknown** **Sandy Material**
Semivolatile Organic Compounds (Continued)							
Di-n-butylphthalate	NS	110 J	N/A	N/A	N/A	N/A	N/A
Fluoranthene	100,000	1,100	″	″	″	″	″
Fluorene	100,000	32 J	″	″	″	″	″
Hexachlorobenzene	NS		″	″	″	″	″
Indeno(1,2,3-cd)pyrene	500.0	380 J	″	″	″	″	″
2-Methylnaphthalene	NS	43 J	″	″	″	″	″
Naphthalene	100,000	70 J	″	″	″	″	″
Phenanthrene	100,000	680.0	″	″	″	″	″
Pyrene	100,000	1,100	″	″	″	″	″
Total SVOCs	NS	7,779	″	″	″	″	″
Pesticides (µg/kg or ppb)							
4,4'-DDD	2,600		N/A	N/A	N/A	N/A	N/A
4,4'-DDT	1,700	24 P	″	″	″	″	″
PCBs (µg/kg or ppb)							
Aroclor-1254			N/A	N/A	N/A	N/A	N/A
Aroclor-1260			″	″	″	″	″
Total PCBs	1,000		″	″	″	″	″
Inorganic Compounds (mg/kg or ppm)							
Aluminum	SB (11,670)	10,800	9,750	**25,200**	5,590	**12,700**	**13,600**
Antimony	SB (1.8)	**11.0 B**					

Table 2 (Continued).
Analytical Results for Soil and Waste Samples Collected from the Old Upper Mountain Road Site.

Sample Number Date Sampled Sample Depth Sample Type	Part 375 Soil Cleanup Objective *	UPMT-16 11/05/97 Unknown Gritty Waste	S-1 10/20/98 Unknown Soil	S-2 10/20/98 Unknown Silver Debris	S-3 10/20/98 Unknown Sandy Material	S-4 10/20/98 Unknown Ash Material	S-5 10/20/98 Unknown Sandy Material
Inorganic Compounds (Continued)							
Arsenic	16.0	**24.8**	**18.0**	7.7		7.9	12.0
Barium	350.0	**1,030**	**741.0**	**595.0**	180.0	**464.0**	**3,880**
Beryllium	14.0	0.54 B	1.1	0.6		0.7	1.2
Cadmium	2.5	**11.7**	**13.0**	**22.0**	**8.0**	**6.0**	**62.0**
Chromium	36.0	**121.0**	**75.0**	**130.0**	31.0	**109.0**	**974.0**
Cobalt	SB (8)	**14.0 B**	**12.0**	**10.0**	**11.0**	**10.0**	**27.0**
Copper	270.0	**1,860 N**	**442.0**	**1,770**	**88,700**	**2,040**	**11,800**
Cyanide	27.0	6.6	N/A	N/A	N/A	N/A	N/A
Iron	SB (17,300)	**122,000**	**98,000**	**32,900**	11,200	**20,400**	**85,000**
Lead	400.0	**2,370 N**	**1,750**	**3,440**	**2,080**	**1,240**	**36,600**
Manganese	2,000	1,610	793.0	1,050	132.0	313.0	981.0
Mercury	0.81	0.50	**2.0**	0.5	0.3	0.4	0.3
Nickel	140.0	**155.0**	70.0	**206.0**	**858.0**	101.0	**995.0**
Selenium	36.0	2.3	3.1	0.6		0.7	
Silver	36.0	7.1			8.0	6.0	13.0
Thallium	SB (2.6)						
Vanadium	SB (22)	**32.6**	**26.0**	**33.0**	9.0	**31.0**	**29.0**
Zinc	2,200	**6,120**	**3,990**	**4,090**	**5,090**	1,550	**29,600**

Table 2 (Continued).
Analytical Results for Soil and Waste Samples Collected from the Old Upper Mountain Road Site.

*	6 NYCRR Part 375: Environmental Remediation Programs, Residential Soil Cleanup Objectives, NYSDEC, 2006.
B	Analyte detected in the associated blank, as well as in the sample (organics) or the value is greater than or equal to the instrument detection limit, but less than the contract required detection limit (inorganics).
J	Compound reported at an estimated concentration below the sample quantitation limit.
N	Spike sample recovery or spike analysis is not within quality control limits (inorganics).
NA	Not analyzed.
NS	No standard or guidance value available.
P	>25% difference between the analytical results on two GC columns. The lower value is reported.
SB	Site background concentration as determined during the Site Investigation of the Former Flintkote Plant Site (TVGA, 2005).
	Blanks indicate that the sample was analyzed for the associated compound but it was not detected.
	Shaded values equal or exceed the Part 375 soil cleanup objectives.

Table 3.
Analytical Results for Surface Water Samples Collected from the Old Upper Mountain Road Site.

Sample Number **Date Sampled** **Sample Location**	**Surface Water Standard ***	**W-1** **10/20/98** **Upstream**	**UPMT-01** **11/05/97** **Downstream**
Volatile Organic Compounds (µg/L or ppb)			
Chloroform	7.0	5.8	ND (10)
1,1-Dichloroethane	5.0	0.5	ND (10)
1,2-Dichloroethene (total)	5.0	**220.7**	**9 J**
Tetrachloroethene	0.7 G	**15.0**	**4 J**
1,1,1-Trichloroethane	5.0	2.8	ND (10)
Trichloroethene	5.0	**79.0**	**9 J**
Vinyl Chloride	0.3 G	**0.5**	ND (10)
Inorganic Compounds (µg/L or ppb)			
Aluminum	100.0	N/A	52.5 B
Antimony	3.0	″	ND (2.9)
Arsenic	50.0	″	ND (2.4)
Barium	1,000	″	47.5 B
Beryllium	3.0 G	″	ND (0.3)
Cadmium	5.0	″	0.46 B
Chromium	50.0	″	ND (0.6)
Cobalt	5.0	″	ND (1.6)
Copper	200.0	″	16.0 B
Cyanide	200.0	″	ND (12.5)
Iron	300.0	″	49.9 B
Lead	50.0	″	4.2
Manganese	300.0	″	4.0 B
Mercury	0.7	″	ND (0.1)
Nickel	100.0	″	4.4 B
Selenium	10.0	″	ND (4.4)
Silver	50.0	″	ND (0.8)
Thallium	0.5 G	″	ND (4.8)
Vanadium	14.0	″	ND (0.8)
Zinc	2,000 G	″	231.0

Table 3 (Continued).
Analytical Results for Surface Water Samples Collected from the Old Upper Mountain Road Site.

*	NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998.
B	Value greater than or equal to the instrument detection limit, but less than the contract required detection limit (inorganics).
G	Guidance value.
J	Compound reported at an estimated concentration below the reporting limit.
NA	Not analyzed.
ND (3)	Indicates that the compound was not detected at the method detection limit specified in parentheses.
	Shaded values equal or exceed the NYSDEC surface water standards or guidance values.

Table 4.
Analytical Results for Sediment Samples Collected from the Old Upper Mountain Road Site.

Sample Number **Date Sampled** **Sample Depth** **Sample Type**	**NYSDEC Sediment Criteria ***	**UPMT-12** **11/05/97** **0.0' - 0.17'** **Sediment +**	
Volatile Organic Compounds (µg/kg or ppb)			
1,2-Dichloroethene	0.8 ●	**6 J**	
Trichloroethene	67.3 ●	2 J	
Semivolatile Organic Compounds (µg/kg or ppb)			
Acenaphthene	4,396	180 J	
Anthracene	3,363	290 J	
Benzo(a)pyrene	41.3 ●	**360 J**	
Benzo(a)anthracene	383.8	**560.0**	
Benzo(b)fluoranthene	41.3 ●	**570.0**	
Benzo(g,h,i)perylene	NS	220 J	
Benzo(k)fluoranthene	41.3 ●	**360 J**	
Bis(2-ethylhexyl)phthalate	3,759	770 B	
Carbazole	NS	140 J	
Chrysene	41.3 ●	**530.0**	
Dibenzofuran	NS	100 J	
Di-n-butylphthalate	NS	24 J	
Fluoranthene	32,028	1,100	
Fluorene	256.6	170 J	
Indeno(1,2,3-cd)pyrene	41.3 ●	**220 J**	
2-Methylnaphthalene	1,069	48 J	
Naphthalene	957	160 J	
Phenanthrene	3,768	1,200	
Pyrene	30,178	1,100	
Inorganic Compounds (mg/kg or ppm)			
Aluminum	SB (11,670) **	3,920	
Antimony	2.0	**20.9**	
Arsenic	6.0	**16.8**	
Barium	433 **	**2,260**	
Beryllium	10 **	0.47 B	

Table 4 (Continued).
Analytical Results for Sediment Samples Collected from the Old Upper Mountain Road Site.

Sample Number **Date Sampled** **Sample Depth** **Sample Type**	**NYSDEC Sediment Criteria ***	**UPMT-12** **11/05/97** **0.0' - 0.17'** **Sediment**	
Inorganic Compounds (Continued)			
Cadmium	0.6	**3.7**	
Chromium	26.0	**31.7**	
Cobalt	SB (8) **	7.5 B	
Copper	16.0	**2,420 N**	
Cyanide	NS	0.67	
Iron	20,000	**54,800**	
Lead	31.0	**3,190 N**	
Manganese	460.0	277.0	
Mercury	0.15	ND (0.06)	
Nickel	16.0	**49.4**	
Selenium	3.9 **	2.5	
Silver	1.0	**7.5**	
Thallium	SB (2.6) **	ND (1.2)	
Vanadium	SB (22) **	20.3	
Zinc	120.0	**1,530**	

***** **NYSDEC Technical Guidance for Screening Contaminated Sediments, January 1999. Sediment criteria calculated using a total organic carbon content of 3.14%. Sediment criteria given are for the protection of benthic aquatic life from chronic toxicity (organics) and the lowest effect level (metals) unless otherwise noted.**

● **Sediment criteria for the protection of human health bioaccumulation.**

+ **Sediment mixed with incinerator waste.**

****** **6 NYCRR Part 375: Environmental Remediation Programs, Soil Cleanup Objectives for the Protection of Ecological Resources, NYSDEC, 2006.**

B **Analyte detected in the associated blank, as well as in the sample (organics) or the value is greater than or equal to the instrument detection limit, but less than the contract required detection limit (inorganics).**

J **Compound reported at an estimated concentration below the sample quantitation limit.**

N **Spike sample recovery or spike analysis is not within quality control limits (inorganics).**

ND (3) **The compound was analyzed for but not detected at the detection limit in parentheses.**

NS **No standard or guidance value available.**

SB **Site background concentration as determined during the Site Investigation of the Former Flintkote Plant Site (TVGA, 2005).**

Shaded values equal or exceed the NYSDEC sediment criteria or Part 375 soil cleanup objectives.

APPENDIX A

HEALTH AND SAFETY PLAN

This Health and Safety Plan was developed for use by all personnel involved in the Site Investigation of the Old Upper Mountain Road Site. This plan provides only general guidance that should be supplemented by the Standby Investigation & Remediation contractor's corporate Health and Safety Plan.

General Health and Safety Guidelines

All work should be conducted in accordance with standard health and safety procedures for hazardous waste site work. All Personnel must have the 40-hour HAZWOPER training certification as required by 29 CFR 1910.120, and maintain this training by taking the annual 8-hour Refresher Course. The Standby Investigation & Remediation contractor should provide, as necessary, appropriate personal protective equipment (PPE) suitable for working in and around contaminated liquids, wastes and soils. The NYSDEC will supply a photoionization detector (PID) for monitoring organic vapors, which will be utilized to determine the necessity to upgrade PPE requirements.

It is anticipated that all field work can be performed in Level D personal protective equipment: steel toe shoes/boots, hard hat and latex gloves. The Standby Investigation & Remediation contractor should ensure that sufficient personal protective equipment is available for all personnel prior to entering the exclusion zone. All appropriate PPE should be donned, used and removed as described in the 40-hour training course. Air monitoring will be done with a PID. An air-purifying respirator must be worn whenever there are sustained organic vapor concentrations of 5 ppm or above in the breathing zone.

Emergency Telephone Numbers

This section includes a list of emergency telephone numbers for use by all personnel involved in the Site Investigation.

Niagara County Sheriff's Department	(716) 438-3393
Emergency Services	911
Lockport Memorial Hospital	(716) 514-5561
Poison Control Center	(800) 222-1222

APPENDIX A

HEALTH AND SAFETY PLAN

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General Health and Safety Guidelines

All work should be conducted in accordance with standard health and safety procedures for hazardous waste site work. All Personnel must have the 40-hour HAZWOPER training certification as required by 29 CFR 1910.120, and maintain this training by taking the annual 8-hour Refresher Course. The Standby Investigation & Remediation contractor should provide, as necessary, appropriate personal protective equipment (PPE) suitable for working in and around contaminated liquids, wastes and soils. The NYSDEC will supply a photoionization detector (PID) for monitoring organic vapors, which will be utilized to determine the necessity to upgrade PPE requirements.

It is anticipated that all field work can be performed in Level D personal protective equipment: steel toe shoes/boots, hard hat and latex gloves. The Standby Investigation & Remediation contractor should ensure that sufficient personal protective equipment is available for all personnel prior to entering the exclusion zone. All appropriate PPE should be donned, used and removed as described in the 40-hour training course. Air monitoring will be done with a PID. An air-purifying respirator must be worn whenever there are sustained organic vapor concentrations of 5 ppm or above in the breathing zone.

Emergency Telephone Numbers

This section includes a list of emergency telephone numbers for use by all personnel involved in the Site Investigation.

Niagara County Sheriff's Department	(716) 438-3393
Emergency Services	911
Lockport Memorial Hospital	(716) 514-5561
Poison Control Center	(800) 222-1222

National Response Center	(800) 424-8802
Chemical Manufacturers Association Chemical Referral Center	(800) 262-8200
NYSDEC Region 9: Gregory Sutton	(716) 851-7220
NYSDOH Western Regional Office: Matthew Forcucci	(716) 847-4500
Niagara Company Health Department: Paul Dicky	(716) 439-7595
Underground Facilities Protective Org. (UFPO)	(800) 962-7962

Medical Assistance

Lockport Memorial hospital is located within 4 miles of the Old Upper Mountain Road Site. All personnel should be familiar with the location of this hospital and know how to get there from the Site. The primary source of medical assistance is:

- Lockport Memorial Hospital
  521 East Avenue
  Lockport, New York 14094
  Phone: (716) 514-5561

Directions to the hospital are given on the following page.

Start: **[200-218] Upper Mountain Rd**
Lockport, NY 14094, US

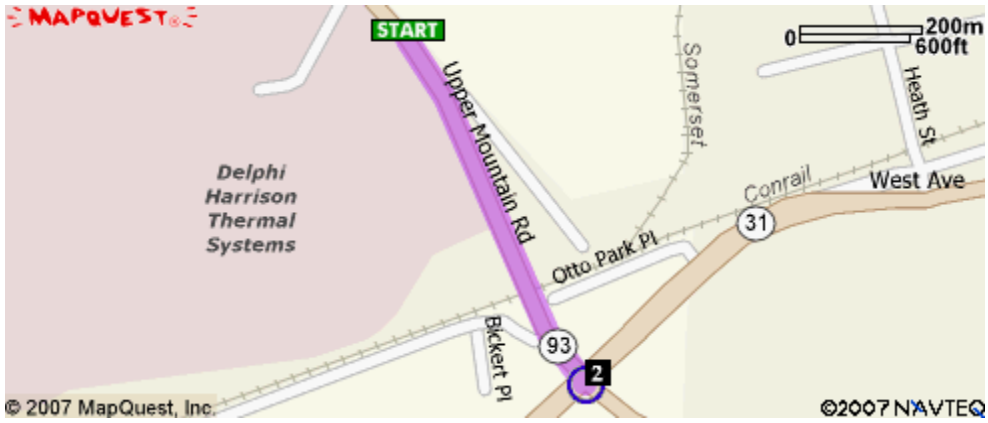
End: **521 East Ave**
Lockport, NY 14094-3201, US

Notes:

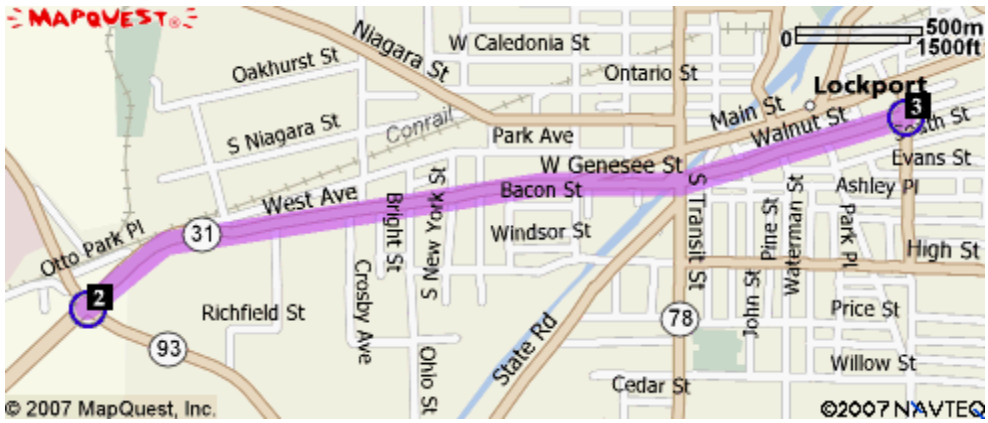
Directions	Distance

Total Est. Time: 9 minutes **Total Est. Distance:** 3.40 miles

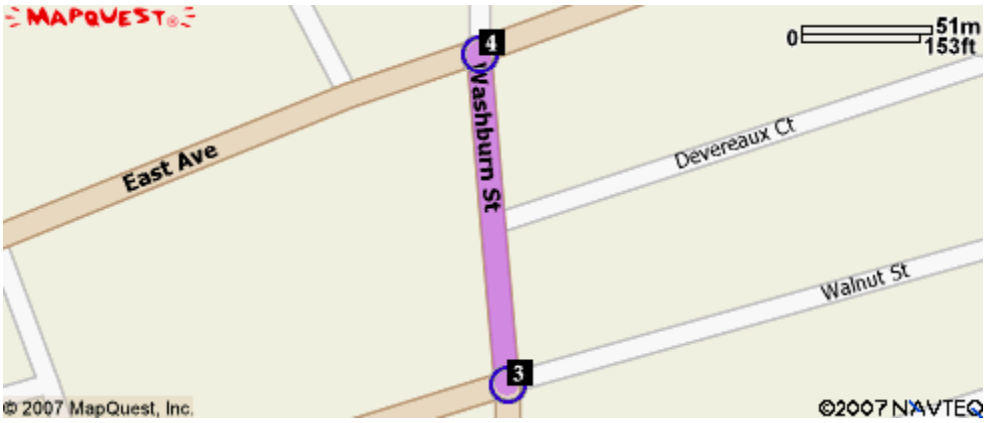
START **1:** Start out going SOUTHEAST on UPPER MOUNTAIN RD / NY-93 / CR-5 toward OLD SAUNDERS SETTLEMENT RD. Continue to follow NY-93 / CR-5. 0.4 miles



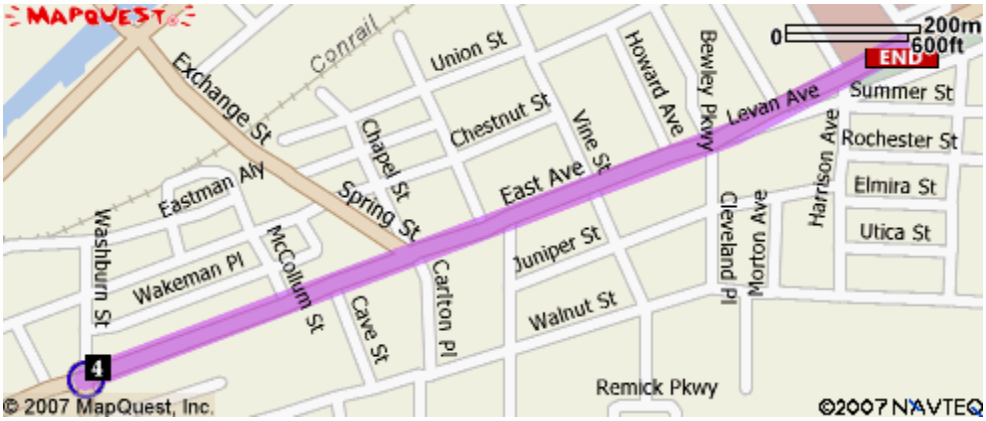
EAST 31 **2:** Turn LEFT onto SAUNDERS SETTLEMENT RD / NY-31 E. Continue to follow NY-31 E. 2.0 miles



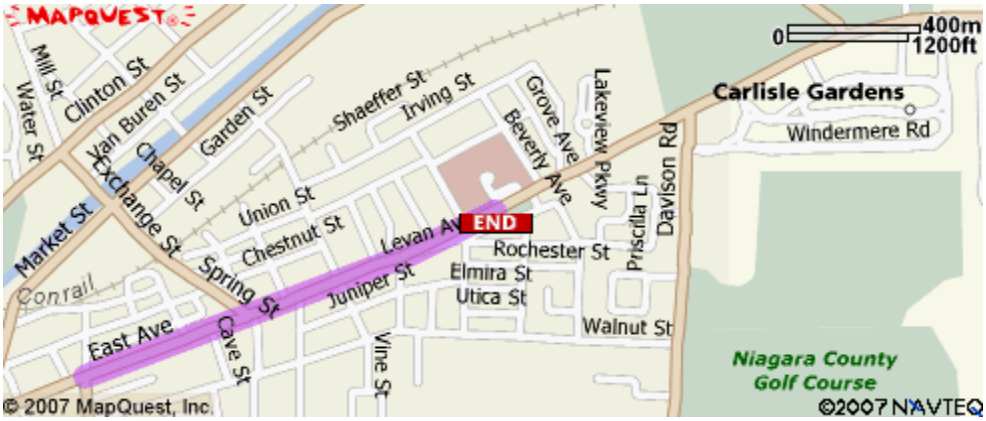
3: Turn LEFT onto WASHBURN ST / NY-31. <0.1 miles



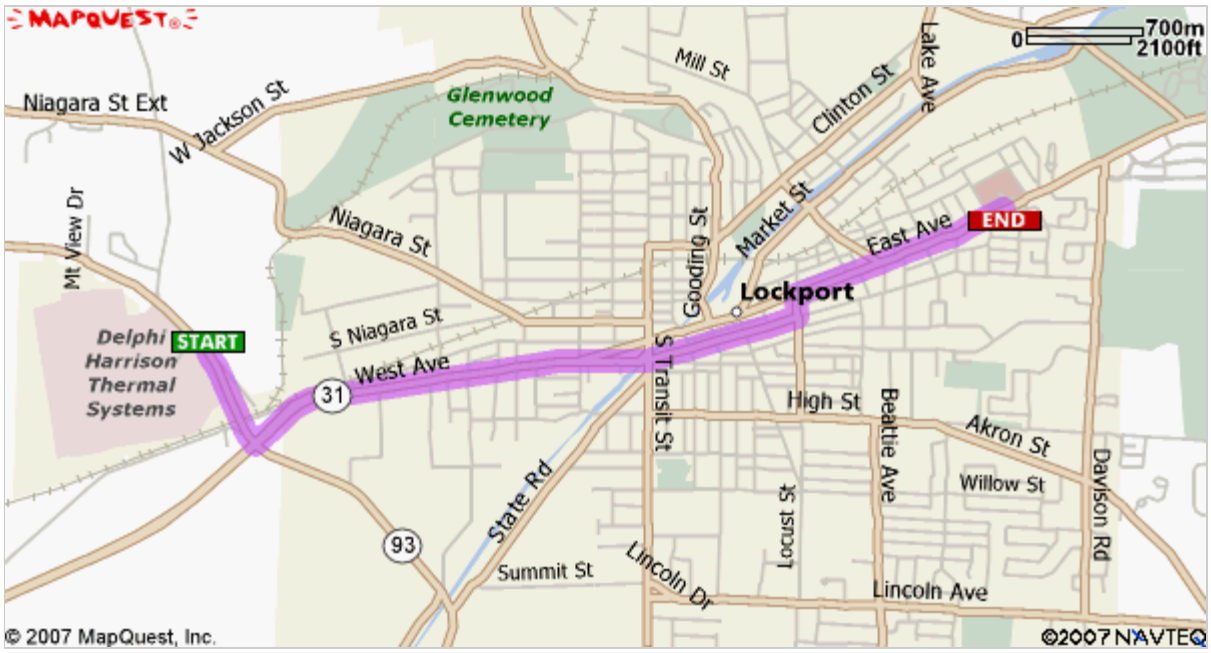
4: Turn RIGHT onto EAST AVE / NY-31. 0.8 miles



END **5:** End at **521 East Ave**
Lockport, NY 14094-3201, US



Total Est. Time: 9 minutes **Total Est. Distance:** 3.40 miles



Start:
[200-218] Upper Mountain Rd
Lockport, NY 14094, US

End:
521 East Ave
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