SUBSURFACE INVESTIGATION AND TETRACHLOROETHENE DELINIATION WORK PLAN

Industrial Property
100 Ridge Road
Lackawanna, New York

Prepared For:
Lackawanna Community Development Center
c/o Hurwitz & Fine, P.C.
1300 Liberty Building
Buffalo, New York 14202

Prepared By:
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September 12, 2011

SUBSURFACE INVESTIGATION AND TETRACHLOROETHENE DELINIATION WORK PLAN

1.0 INTRODUCTION

1.1 Background Information

The subject site consists of four contiguous parcels which comprise a combined total of approximately 2.6 acres of land located at 100 Ridge Road in the City of Lackawanna, Erie County, New York (Refer to Figure 1, Attachment 1). These parcels are located on the northern side of Ridge Road, northeast of the intersection of Ridge Road and Gates Avenue. The subject site is identified with SBL #s 141.07-3-27, 141.07-2-53, 141.07-3-4.111 and 141.07-4-5.1 and is currently owned by Lackawanna Community Development Corp. (LCDC). This site is currently occupied by a building approximately 24,000 square feet in size which is centrally located. A small wood-framed shed is located along the back (north side) of this building which recently was used for storing metal shavings in 55-gallon drums. Paved asphalt parking areas exist on both the north and west sides of the building. The remainder of the site generally consists of lawn and landscaped areas. The subject site had recently been used as a machine shop by PCB Machining Solutions Inc. (PCBMSI) prior to becoming vacant during the Spring of 2011. Site boundaries and significant site features are illustrated in Figure 2.

A summary of most probable site history indicates that the subject site is located in a former residential/commercial area of the City of Lackawanna and remained undeveloped through the early 1900s. It should be noted that while no structural development appears to have occurred prior to this period, sources suggest that industrial fill materials originating from the former nearby Bethlehem Steel plant may have been deposited on and around the subject site area during the late 1800s and early 1900s (past excavation on-site has revealed the presence of dark slag-like fill material beneath the ground surface). Historical fire insurance maps covering the subject site indicated that from as early as 1927 through 1950 the "Croation R.C. Church of Our Lady of the Sacred Heart of Jesus" was centrally located on-site. During this time, a paved roadway (Croatia St.) traversed the subject site just east of the church and intersected with Ridge Road. By 1950, two additional small commercial buildings were located on the eastern portion of the subject site; one on the east side of Croatia St. identified as a store and the other located at the eastern end of the site identified as a filling station. The building associated with the filling station was apparently converted into a take-out restaurant in the 1960s and was eventually demolished and removed. The store was removed from the subject site sometime prior to 1966. Baitman Cleaners & Dryers formerly occupied the southwestern corner of the subject site from at least 1960 through at least 1972. This structure was apparently removed from the property during the late 1970s or early 1980s. The existing building on the subject site was constructed by LCDC in 1987, and was used as a lumber warehouse for a few years prior to being leased by PCBMSI (formerly Now Tech Industries) in the early 1990s. An abandoned tank,

apparently associated with the former gasoline station, was discovered on-site during the construction of the existing building. Remedial work was undertaken within that southeastern corner of the site in accordance with NYSDEC guidance.

1.2 Purpose

This plan is being prepared in response to an August 18, 2011 letter from the NYSDEC to the LCDC indicating that additional investigation is necessary for the Department to determine which administrative program to which this site should be assigned. The purpose of this Work Plan is to both provide the NYSDEC with data and information collected during past investigative activities on-site and present a plan for conducting a Subsurface Site Investigation with the goal of delineating existing Tetrachloroethene (PCE) contamination encountered on-site. This plan will address: 1) vertical and lateral PCE levels in the soil profile where previously detected on the site; 2) possible PCE-contaminated groundwater on-site related to the likely source area (the former dry cleaner); and 3) potential soil vapor issues within the facility.

2.0 HYDROGEOLOGIC CONDITIONS

1.2 Topography and Surface Water Drainage

The USGS 7.5 minute Topographic Quadrangle Map of Buffalo, SE, New York[2] indicates that the subject site's ground surface is generally level. The nearest natural body of water is Lake Erie which is located approximately one mile west of the subject site. During the site walkover, no surface water bodies were observed. The surface elevation for the subject site is approximately 586 feet above mean sea level. According to the appropriate flood insurance map, the subject site is not located within a 100-year flood zone

2.2 Soil Conditions

According to the USDA Natural Resources Conservation Service, there are two different soils existing beneath the subject site classified as Udorthents, smoothed and Urban land-Lima complex. Udorthents, smoothed soils formed in deep manmade cuts or fills found typically in areas near industrial sites, urban developments or construction sites. These soils consist of various kinds of excavated earthy material that has been stockpiled for use as fill or topdressing, soil and rock material that has been trucked from other areas and leveled or soil deposits that are left in areas that have been excavated or deeply scalped. Urban land-Lima complex consists of nearly level to gently sloping areas of Urban land and moderately well drained Lima soils. The Lima soils formed in glacial till deposits.

2.3 Site Geology

The soils in the area of the subject site were deposited by extensive glaciation forming a glacial till deposit underlain by shale bedrock. The bedrock in the area of the subject site, the Skaneateles Formation (Levanna Shale Member), is generally five feet or more below ground surface and consists of dark-gray calcareous shale. Bedrock outcrops were not observed on the subject site.

2.4 Regional Groundwater Conditions

Based on a review of the site topographic conditions as depicted on the USGS 7.5 minute Topographic Quadrangle Map of Buffalo, SE, New York, it appears that groundwater within the vicinity of the subject site flows in a westerly direction toward Lake Erie. HEI has assumed that the groundwater table typically conforms to surface and bedrock topography.

3.0 PRIOR SITE INVESTIGATION REPORTS

A Phase I ESA was performed on the subject site by GZA in 2004. According to this report, the subject site was historically used as a dry cleaning facility, gasoline station, apartments, barber shop, church and restaurants. The report indicates that three Recognized Environmental Conditions (RECs) were identified at the subject site based on the Phase I study, including potential impacts associated with prior use of the site as a dry cleaners, possible residual contamination from five former on-site USTs (discovered during construction of the existing building in 1987) and potential migration of contaminants from USTs on the eastern adjacent property. Other de-minimus issues noted in the report included the presence of strained vegetation within the vicinity of air conditioning units on the eastern side of the building and the storage of various regulated substances (i.e., motor, cutting, cooling and honing oils and solvent/degreaser) on-site within the building. The report states that further investigation, including sampling of subsurface soil and groundwater, would be necessary in order to determine possible impacts from the identified RECs.

A Phase I ESA was performed on the subject site by Hazard Evaluations, Inc. (HEI) in May 2011. That assessment revealed various RECs, including those associated with: 1) the historical use of the eastern portion of the site as a filling station during the mid-1900s due to records indicating not all USTs were removed and the former use, storage and handling of various regulated substances related to automotive services; 2) the historical use of the western portion of the site by a dry cleaning business from the early 1950s until at least 1972; 3) one tank-related spill that occurred during the removal of gasoline and diesel fuel USTs from the Concrete Delivery Co. Inc. facility located northeast adjacent to the subject site in 1996 for which sampling/analysis performed following the UST closure apparently showed minor exceedances of NYSDEC clean-up standards (STARS) in the groundwater; 4) a vacant adjacent property south of the subject site beyond Ridge Road was previously determined to contain fill materials with elevated levels of Chromium which was subsequently remediated under the NYSDEC's Brownfield Cleanup Program in 2006; however, according to the Record of Decision for that site the fill consisted of industrial material including slag, gravel and foundry sand similar to what was encountered on the subject site during excavation work performed for a building addition in 2001; and 5) limited areas of strained vegetation were observed next to the two air conditioning units on the east side of the building. HEI recommended that a Phase II Environmental Site Assessment be completed on the subject site.

A Focused Phase II ESA was completed on the subject site by Hazard Evaluations, Inc. on June 22, 2011. Based on the results of that focused investigation, past gasoline sales and service station operations were determined to have impacted the on-site soil profile within the southeastern corner of the subject site, with borings yielding analytical results substantially exceeding the UUSCOs for Ethylbenzene and Xylenes, both constituents of gasoline. In addition, past dry cleaning operations were determined to have impacted the on-site soil profile, with one boring yielding analytical results substantially exceeding the UUSCOs and CUSCO for Tetrachloroethene, commonly known as PCE or dry cleaning fluid. In addition, this contaminant was also detected in other subsurface samples from the northern portion of the facility some distance away from the former dry cleaning establishment at levels below the UUSCO. Finally, five metals were detected in a sample from the northern portion of the facility at levels above the applicable UUSCOs and or Protection of Ecological Resources, and Arsenic was detected at a level above the CUSCO. The summary data table for VOCs has been presented in Attachment 2

A Focused Phase II ESA Follow Up was completed on the subject site by Hazard Evaluations, Inc. on August 9, 2011. Based on the results of that focused investigation, additional evidence was obtained which indicated that past gasoline sales and dry cleaning operations impacted the on-site soil profile to a limited extent. In addition, evidence was obtained which indicated that groundwater quality in the vicinity of the former gasoline station has also been impacted. Of significance, during that investigation, eight subsurface soil samples were analyzed for TCL VOCs, with none exhibiting levels of any contaminants that exceeded NYSDEC Residential Use Soil Clean-up Objectives. Also, with respect to on-site groundwater, an adequate well was installed in the southeastern portion of the site from which a sample yielded BETX and PCE at levels above Class GA groundwater standards, with Toluene, Benzene and Tetrachloroethene being just slightly above the applicable standards. The summary data table for VOCs has been presented in Attachment 2

4.0 PROPOSED INVESTIGATIVE ACTIVITIES

4.1 Task 1 - Coordination

- Prior to any intrusive site activities being performed a utilities mark out will be requested from DIG SAFE New York. A notice period of 48 hours will be provided to the NYSDEC regarding any scheduled sampling, drilling, well installation and/or other related field activities. Health/Safety planning will be conducted for use on-site during sampling activities in the event that contaminants are encountered.

4.2 Soil Boring Installation and Soil/Fill Sampling/Analysis

- Specific sampling locations will be selected in the field across the subject site, including within the building. A direct-push rig will be utilized to install soil borings to either refusal, four feet into any clay aquitard, or an estimated maximum depth of 16 feet below the ground surface (bg), unless evidence of

contamination is observed in the deepest boring, which would necessitate boring installation to greater depth. At locations inside the building, 3.5" diameter cores will be removed from the concrete floor of the building (assumed to be a maximum 6" thick) using a diamond-bit coring machine. All borings will be used to collect soil/fill samples at approximately four foot depth intervals to the bottom of each boring. The soil/fill encountered at each sampling location will be visually described from the samples obtained. HEI has assumed that approximately 30 borings will be installed. **Please Note**: In the event that "cave-ins" occur, a Closed Piston Macro Core (CPMC) system will be utilized to collect discrete interval samples.

- Decontamination procedures for these sampling activities will be performed on the ground surface and will include the following: 1) Remove any bulk material (soil/debris) and place it in a 55-gallon drum for disposal; 2) Use an Alconox/tap water solution to remove mud and contaminants; and 3) Perform a double rinse with deionized water (**Please Note**: Wash water and rinse water will also be contained in a 55-gallon drum which will be managed for disposal at the end of the project).

- All borings in which piezometers are not to be installed will be backfilled with Bentonite, and the surface will be restored appropriately with asphalt or concrete patch, if applicable.

- Subsurface soil/fill samples will be obtained for VOCs screening with a portable Photo-ionization detector (PID) with the appropriate lamp for chlorinated hydrocarbons. As samples are withdrawn from the acetate sampling sleeve, a small portion of the sample will be placed into a re-sealable plastic bag for headspace screening, and the remaining portion of the sample will be immediately placed into appropriate sample containers and placed in a cooler, as this will provide the greatest sample integrity in the event that this sample is selected for analysis. In general, the discrete soil sample from a specific sampling location (i.e., probe hole) which registers the highest positive OVM reading or most apparent evidence of contamination (i.e., odor, residues, discoloration, etc.) will be submitted for laboratory analysis. However, HEI anticipates that, at certain boring locations, it will be necessary to submit all of the samples collected from the vertical profile of the boring to provide a vertical representation of contaminant concentrations. These locations will be field determined based on observations made during the investigation.

- HEI has assumed that an estimated thirty (30) soil/fill samples will be selected and submitted for laboratory analysis for select USEPA Method 8260 (direct) chlorinated hydrocarbon parameters. All samples collected will be preserved by cooling in the field, and will be handled under chain-of-custody procedures until receipt by the analytical laboratory.

- The QA/QC for the soil/fill sampling will include: 1) The laboratory will report the Method QA/QC that is regularly internally performed; and 2) HEI will collect one equipment blank by running deionized water over the surface of the decontaminated Geoprobe sampling tube, and then have it analyzed for chlorinated hydrocarbon parameters. This will be performed subsequent to collecting a sample that exhibits high levels of contamination, most likely in the area of the former SB2.

4.3 Subslab and Interior Air Monitoring/Analysis

- Within four coring/boring locations inside the building, temporary subslab vapor implants will be assembled (after borings are completed) to collect subslab air samples for analysis. Each coring will be initially prepared by manually excavating the top 6" of soil/fill beneath the slab, with the bulk material (soil/fill) being placed in the 55-gallon drum for disposal. The sampling implant tubing and inlet cover will then be placed centrally in the prepared coring to a depth 2" below the bottom of the slab, and the coring void will be backfilled with decontaminated glass marbles to a depth approximately 3" below the surface of the slab. A sculpy modeling clay seal will then be placed into the coring surrounding the tubing to prevent surface air from contaminating the subslab sample. The upper end of the tubing will be fastened approximately three feet above the floor, and an air-tight flow valve will be installed in the tubing. This apparatus will be used to evacuate three tubing volumes of air prior to a one liter stainless steel summa can being connected to the tubing. The implant will be left undisturbed for a half hour before and after the sampling has been conducted.

- At four locations inside the building to be selected in the field, temporary sampling apparatus will be assembled to collect interior air samples for analysis. The sampling tubing and inlet cover will be fastened approximately three feet above the concrete floor, and an air-tight flow valve will be installed in the tubing. This apparatus will be used to evacuate three tubing volumes of air prior to a one liter stainless steel summa can being connected to the tubing. The apparatus will be left undisturbed for a half hour after the sampling has been conducted.

4.4 Monitoring Well Installation & Groundwater Sampling/Analysis

- HEI will mobilize a rotary drilling rig to the site to install four four-inch diameter soil borings at the locations depicted in Figure 1. During the augering within the soil profile, continuous soil/fill samples will be obtained over two foot intervals with the use of a split-spoon sampling device. This overburden sampling and augering will be conducted to the point at which refusal is reached (consolidated bedrock assumed to be approximately 20' below grade). Bedrock coring will not be conducted. Upon each sample being collected, the soil/fill will be screened with a portable photoionization detector (PID) immediately upon the opening of the split spoon. As soil/fill samples are withdrawn from the sampling device, portions will be placed into a zip-lock bag for subsequent headspace screening and possible laboratory analysis.

- Subsequently, within each boring, a 2" diameter monitoring well will be constructed which will be screened at the overburden/bedrock interface with the appropriate sand pack to a depth one foot above the 10 ' screen, followed by a Bentonite seal within the annulus above the sand pack. The drill cuttings will be accumulated in 55-gallon drums. All new wells will be constructed with protective covers.

- All wells to be developed will be vertically surveyed to a common datum to allow the measurement of groundwater levels. After a period of at least 24 hours, the static groundwater elevation will be measured in the undeveloped well using a pre-cleaned water level indicator. Each well will then be developed by purging with a pre-cleaned, electric downwell pump, peristaltic pump, or a new polyethylene bailer until reduced turbidity is observed [Refer to ASTM D4448-01(6.1)]. HEI will monitor conductivity and temperature as indicator parameters for the purpose determining the extent of development. **Please Note**: All purged groundwater will be placed in 55-gallon drums and managed for disposal at the end of the project.

- Four groundwater samples (unfiltered) will then be collected using new polyethylene bailers and will be appropriately containerized, preserved and cooled in the field. The wells to be selected for sampling will reflect the headspace screening results from the boring installations. All samples will be handled under standard chain-of-custody procedures until receipt by the analytical laboratory. All groundwater samples will be analyzed for the select USEPA Method 8260 (direct) chlorinated hydrocarbon parameters.

- The QA/QC for the groundwater sampling will include the following: 1) The laboratory will report the Method QA/QC that is regularly internally performed; and 2) HEI will prepare a trip blank at its office and will transport it to the job site during all field activities, and then have it analyzed for the chlorinated hydrocarbon parameters

4.5 Disposal of Waste Material

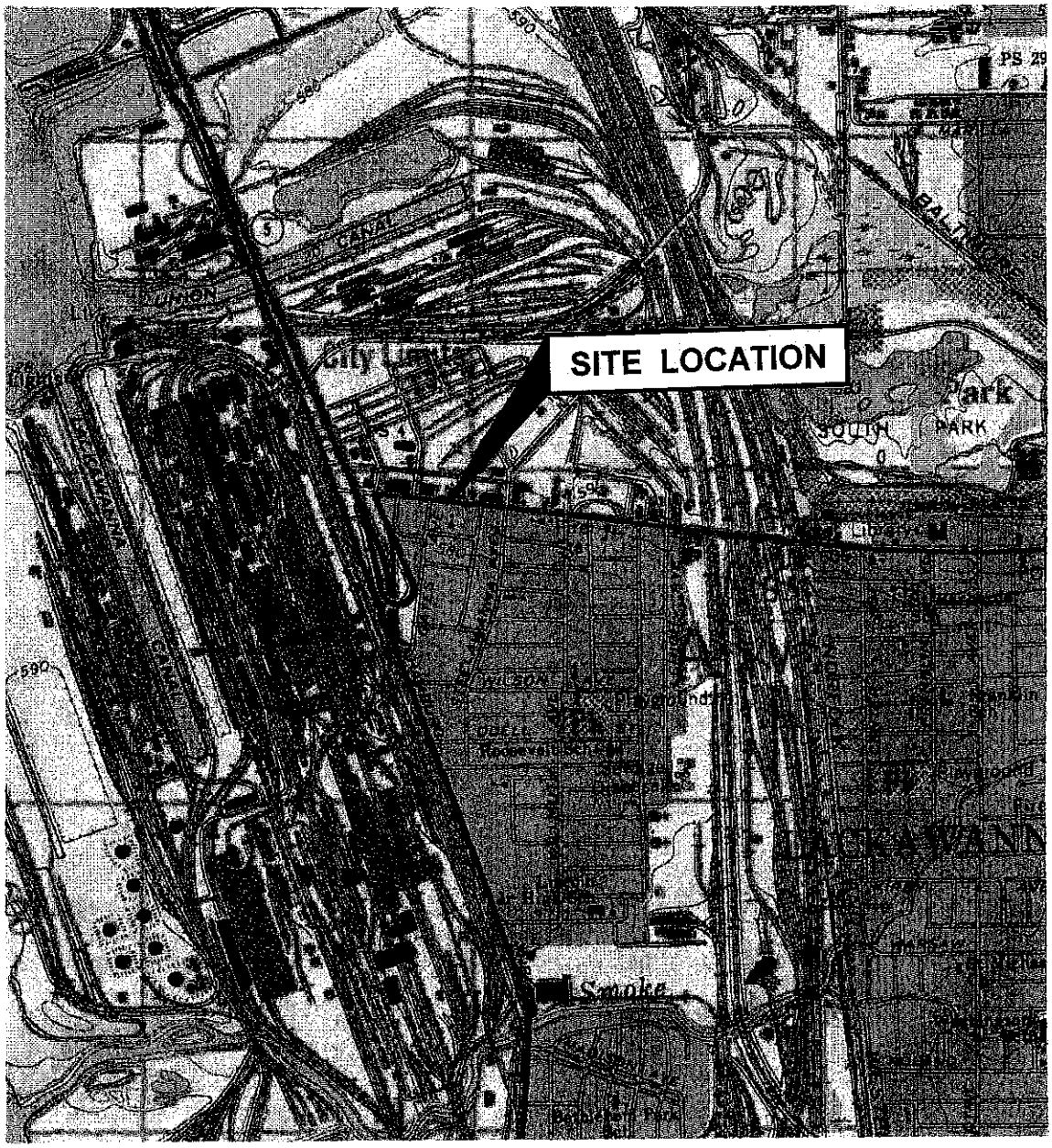
- All drums of soil/fill cuttings, decon solution and/or purged groundwater will be appropriately characterized and managed for disposal at a permitted waste disposal facility.

4.6 Summary Report

- HEI will prepare a report which summarizes the data and information collected. Figures will be prepared which will include the approximate locations of the piezometers and soil borings, estimated site groundwater flow direction, and related site characteristics.

Attachment 1

Figures



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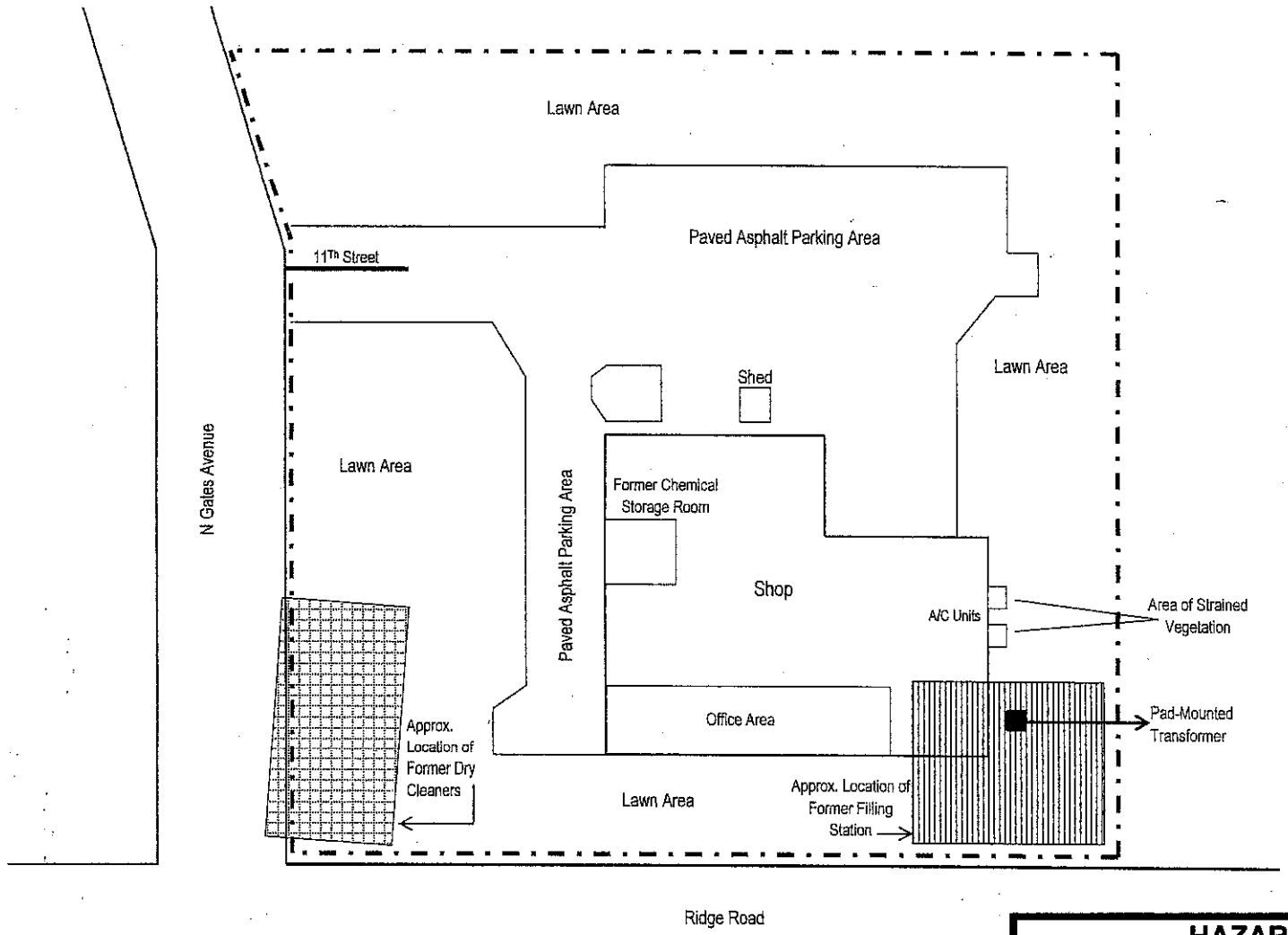
HAZARD EVALUATIONS, INC.
Phase I/II Audits – Site Investigations – Facility Inspections

LOCATION PLAN
COMMERCIAL PROPERTY
100 RIDGE ROAD
LACKAWANNA, NEW YORK

LACKAWANNA COMMUNITY DEVELOPMENT CORP.
LACKAWANNA, NEW YORK

DRAWN BY: LSH	SCALE: NOT TO SCALE	PROJECT: 30301
CHECKED BY: CMH	DATE: 09/11	FIGURE NO: 1



HAZARD EVALUATIONS, INC.

Phase I/II Audits – Site Investigations – Facility Inspections

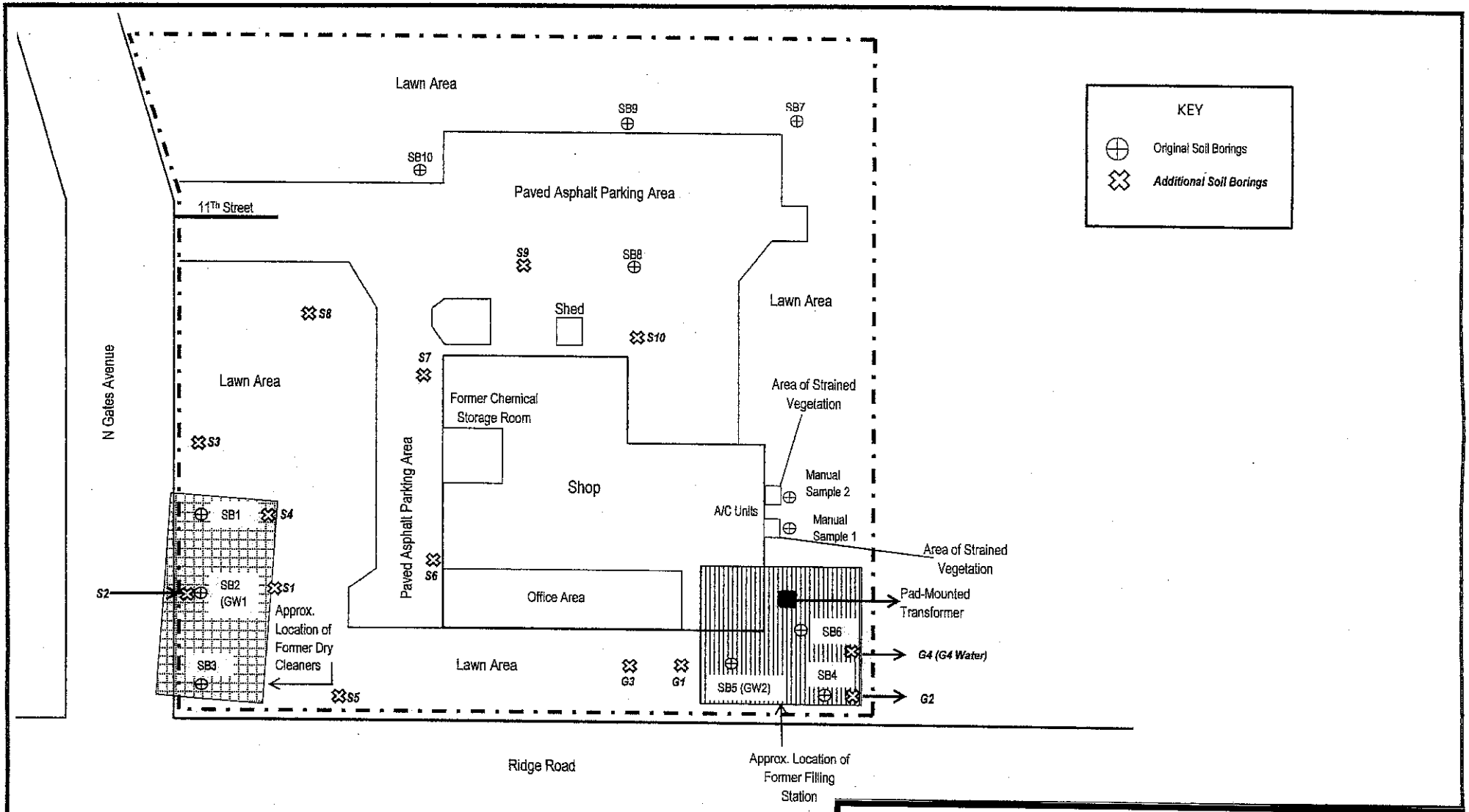
SITE LOCATION

COMMERCIAL PROPERTY
100 RIDGE ROAD
LACKAWANNA, NEW YORK

LACKAWANNA COMMUNITY DEVELOPMENT CORP.

LACKAWANNA, NEW YORK

DRAWN BY: LSH	SCALE: NOT TO SCALE	PROJECT: 30301
CHECKED BY: CMH	DATE: 09/11	FIGURE NO: 2



HAZARD EVALUATIONS, INC.

Phase I/II Audits – Site Investigations – Facility Inspections

SOIL BORING LOCATIONS

COMMERCIAL PROPERTY

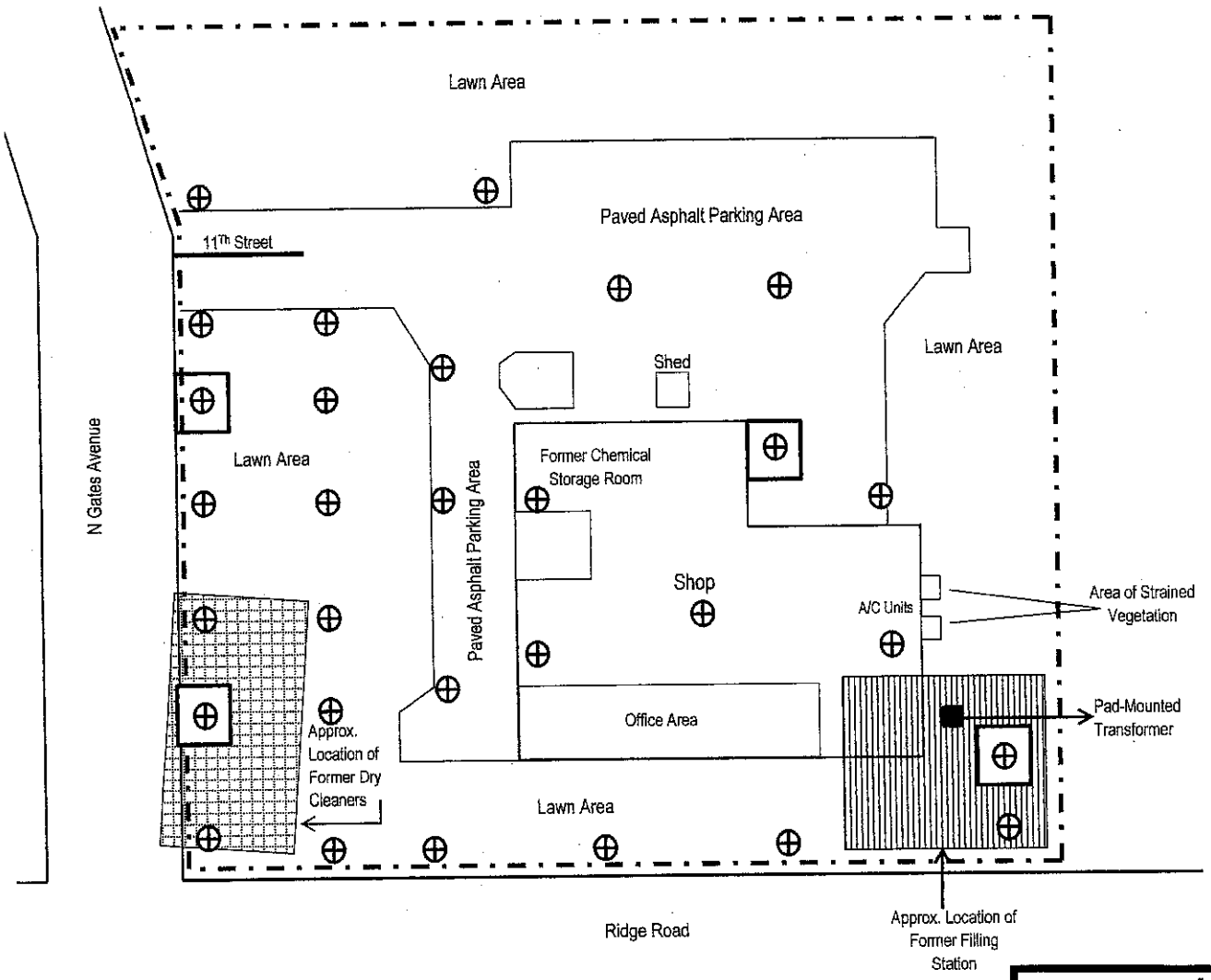
100 RIDGE ROAD

LACKAWANNA, NEW YORK

LACKAWANNA COMMUNITY DEVELOPMENT CORP.

LACKAWANNA, NEW YORK

DRAWN BY: LSH	SCALE: NOT TO SCALE	PROJECT: 30301
CHECKED BY: CMH	DATE: 09/11	FIGURE NO: 3



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PROPOSED SAMPLING LOCATIONS

COMMERCIAL PROPERTY

100 RIDGE ROAD

LACKAWANNA, NEW YORK

LACKAWANNA COMMUNITY DEVELOPMENT CORP.

LACKAWANNA, NEW YORK

DRAWN BY: LSH	SCALE: NOT TO SCALE	PROJECT: 30301
CHECKED BY: CMH	DATE: 09/11	FIGURE NO: 4

Attachment 2

Summary VOCs Data Tables for Previous Reports

Table 1
Soil Sample Analytical Results; Volatile Organics (TCL & STARS)
100 Ridge Road, Lackawanna, New York
June 3, 2011 Sampling Date

Analytical Parameter	SB2 (0-4')	SB5 (4-8')	SB6 (8-12')	SB8 (0-4')	(7, 9, 10, 4-8') Composite	Unrestricted Use Soil Cleanup Objectives (RPSC 375-6.8)	Restricted Use Soil Cleanup Objectives Commercial (RPSC 375-6.8)
Bromodichloromethane	ND	ND	NA	ND	ND	*	*
Bromomethane	ND	ND	NA	ND	ND	*	*
Bromoform	ND	ND	NA	ND	ND	*	*
Carbon Tetrachloride	ND	ND	NA	ND	ND	760	22,000
Chloroethane	ND	ND	NA	ND	ND	*	*
Chloromethane	ND	ND	NA	ND	ND	*	*
2-Chloroethyl vinyl ether	ND	ND	NA	ND	ND	*	*
Chloroform	ND	ND	NA	ND	ND	370	350,000
Dibromochloromethane	ND	ND	NA	ND	ND	10,000	*
1,1-Dichloroethane	ND	ND	NA	ND	ND	270	240,000
1,2-Dichloroethane	ND	ND	NA	ND	ND	20	30,000
1,1-Dichloroethene	ND	ND	NA	ND	ND	330	500,000
cis-1,2-Dichloroethene	ND	ND	NA	ND	ND	250	500,000
trans-1,2-Dichloroethene	ND	ND	NA	ND	ND	190	500,000
1,2-Dichloropropane	ND	ND	NA	ND	ND	700,000	*
cis-1,3-Dichloropropene	ND	ND	NA	ND	ND	*	*
trans-1,3-Dichloropropene	ND	ND	NA	ND	ND	*	*
Methylene Chloride	ND	ND	NA	37.4	ND	50	500,000
1,1,2,2-Tetrachloroethane	ND	ND	NA	ND	ND	*	*
Tetrachloroethene	232,000	ND	NA	290	72.6	1,300	150,000
1,1,1-Trichloroethane	ND	ND	NA	ND	ND	680	500,000
1,1,2-Trichloroethane	ND	ND	NA	ND	ND	*	*
Trichloroethene	ND	ND	NA	14.4	ND	470	200,000
Trichlorofluoromethane	ND	ND	NA	ND	ND	*	*
1,2,4-Trimethylbenzene	NA	NA	392	NA	NA	3,600	190,000
1,3,5-Trimethylbenzene	NA	NA	ND	NA	NA	8,400	190,000
Vinyl Chloride	ND	ND	NA	ND	ND	20	13,000
Benzene	ND	ND	ND	ND	ND	60	44,000
n-Butylbenzene	NA	NA	ND	NA	NA	12,000	*
Chlorobenzene	ND	ND	NA	ND	ND	1,100	500,000
Hexachlorobenzene	NA	NA	NA	NA	NA	330	6,000
Ethylbenzene	ND	4,520	88.0	27.3	ND	1,000	390,000
Methyl tert-butyl ether	NA	NA	ND	NA	NA	930	500,000
n-Propylbenzene	NA	NA	ND	NA	NA	3,900	500,000
sec-Butylbenzene	NA	NA	ND	NA	NA	11,000	500,000
tert-Butylbenzene	NA	NA	ND	NA	NA	5,900	500,000
Naphthalene	NA	NA	ND	NA	NA	12,000	*
p-Isopropyltoluene	NA	NA	ND	NA	NA	10,000	*

Table 1 (continued)
Soil Sample Analytical Results; Volatile Organics (TCL & STARS)
100 Ridge Road, Lackawanna, New York
June 3, 2011 Sampling Date

Analytical Parameter	SB2 (0-4')	SB5 (4-8')	SB6 (8-12')	SB8 (0-4')	(7, 9, 10, 4-8') Composite	Unrestricted Use Soil Cleanup Objectives (RPSC 375-6.8)	Restricted Use Soil Cleanup Objectives Commercial (RPSC 375-6.8)
Isopropylbenzene	NA	NA	ND	NA	NA	2,300	*
Toluene	ND	ND	ND	ND	ND	700	500,000
Xylenes (mixed)	ND	15,400	113	181.4	18.8	260	500,000
Styrene	ND	ND	NA	ND	ND	300,000	*
1,2-Dichlorobenzene	ND	ND	NA	ND	ND	1,100	500,000
1,3-Dichlorobenzene	ND	ND	NA	ND	ND	2,400	280,000
1,4-Dichlorobenzene	ND	ND	NA	ND	ND	1,800	130,000
Acetone	ND	ND	NA	ND	ND	50	500,000
2-Butanone (MEK)	ND	ND	NA	ND	ND	120	500,000
2-Hexanone	ND	ND	NA	ND	ND	*	*
4-Methyl-2-pentanone	ND	ND	NA	ND	ND	*	*
Carbon Disulfide	ND	ND	NA	9.89	ND	*	*
Vinyl acetate	ND	ND	NA	ND	ND	*	*

Notes:
1) Results from USEPA Method 8260 for Volatiles; All results in ppb (ug/kg).
2) SCOs from 6NYCRR Subpart 375-6: Remedial Program Soil Cleanup (ppb).
3) ND means compound not detected above MDL.
4) Lightly shaded results indicate concentration exceeds UUSCO.
5) Darker shaded results indicate concentration exceeds RUSCO.
6) * means no SCO determined, or if present, Soil Cleanup Level from DEC Policy CP51.
7) NA means Not Applicable; -- means no analysis conducted

Table 1
Soil Sample Analytical Results; Volatile Organics (TCL & STARS)
100 Ridge Road, Lackawanna New York
July 28, 2011 Sampling Date

Analytical Parameter	S1 (0-4')	S2 (0-4')	S3 (8-12')	S4 (8-12')	S5 (4-8')	S8 (4-8')	S9 (0-4')	G4 (4-8')	Unrestricted Use Soil Cleanup Objectives (RPSC 375-6.8)	Restricted Use Soil Cleanup Objectives Commercial (RPSC 375-6.8)
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	*	*
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	*	*
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	*	*
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	760	22,000
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	*	*
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	*	*
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	*	*
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	370	350,000
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	*	*
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	270	240,000
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	20	30,000
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	330	500,000
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	254	ND	ND	250	500,000
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	190	500,000
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	*	*
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	*	*
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	*	*
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	50	500,000
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	*	*
Tetrachloroethene	256	1,840	1,770	2,090	35.9	137	156	ND	1,300	150,000
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	680	500,000
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	*	*
Trichloroethene	155	90.3	ND	ND	ND	19.8	ND	ND	470	200,000
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	*	*
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	3,600	190,000

Table 1 (continued)
Soil Sample Analytical Results; Volatile Organics (TCL & STARS)
100 Ridge Road, Lackawanna New York
July 28, 2011 Sampling Date

Analytical Parameter	S1 (0-4')	S2 (0-4')	S3 (8-12')	S4 (8-12')	S5 (4-8')	S8 (4-8')	S9 (0-4')	G4 (4-8')	Recommended Soil Cleanup Objective (RPSC 375-6.8)	Restricted Use Soil Cleanup Objectives Commercial (RPSC 375-6.8)
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	8,400	190,000
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	20	13,000
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	60	44,000
n-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	12,000	*
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	1,100	500,000
Hexachlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	330	6,000
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	1,050	1,000	390,000
Methyl tert-butyl ether	NA	NA	NA	NA	NA	NA	NA	NA	930	500,000
n-Propylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	3,900	500,000
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	11,000	500,000
tert-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	5,900	500,000
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	12,000	*
p-Isopropyltoluene	NA	NA	NA	NA	NA	NA	NA	NA	*	*
Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	*	*
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	700	500,000
Xylenes (mixed)	ND	ND	ND	ND	ND	ND	ND	2,250	260	500,000
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	*	*
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	1,100	500,000
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	2,400	280,000
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	1,800	130,000
Acetone	ND	ND	ND	ND	ND	65.3	ND	ND	50	500,000
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	ND	120	500,000
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	*	*
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	*	*
Carbon Disulfide	ND	ND	ND	ND	ND	ND	ND	ND	*	*
Vinyl acetate	ND	ND	ND	ND	ND	ND	ND	ND	*	*

Notes: 1) Results from USEPA Method 8260 for Volatiles; All results in ppb (ug/kg).
2) SCOs from 6NYCRR Subpart 375-6: Remedial Program Soil Cleanup (ppb).
3) ND means compound not detected above MDL.
4) Lightly shaded results indicate concentration exceeds UUSCO.
5) Darker shaded results indicate concentration exceeds CUSCO.
6) * means no SCO determined.
7) NA means Not Applicable; -- means no analysis conducted