

**DRAFT REMEDIAL INVESTIGATION WORK PLAN
FORMER AMERICAN LINEN SUPPLY LAUNDRY FACILITY
822 SENECA STREET
BUFFALO, NEW YORK**

By:

**Haley & Aldrich of New York
Rochester, New York**

On behalf of:

**AmeriPride Services, Inc.
Minneapolis, Minnesota**

For:

**New York State Department of Environmental Conservation
Buffalo, New York**

**File No. 37319-020
6 January 2011**

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6 January 2011
File No. 37319-020

New York State Department of Environmental Conservation
Region 9 Division of Environmental Remediation
270 Michigan Avenue
Buffalo, New York 14203

Attention: Mr. Jaspal S. Walia

Subject: Draft Remedial Investigation Work Plan
Former American Linen Supply Laundry Facility
822 Seneca Street
Buffalo, New York

Dear Mr. Walia:

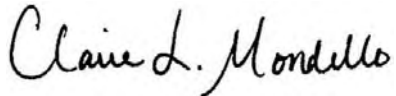
On behalf of the Site owner, AmeriPride Services, Inc. (formerly American Linen Supply Company), Haley & Aldrich of New York (Haley & Aldrich) is submitting herewith the Draft Remedial Investigation Work Plan (RIWP) for the above referenced Site (the "Site"). The Site owner is submitting a NYSDEC Brownfield Cleanup Program Application concurrent with this RIWP.

The RIWP has been developed in accordance with the NYSDEC 6 NYCRR Part 375 Brownfield Cleanup Regulations that became effective in December 2006, the "Technical Guidance for Site Investigation and Remediation" (DER-10 dated May 2010) and other relevant NYSDEC technical and administrative guidance.

If you have any questions or comments regarding this document, please do not hesitate to contact us.

Sincerely yours,

HALEY & ALDRICH OF NEW YORK



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1. INTRODUCTION

AmeriPride Services, Inc. is requesting acceptance of the former American Linen Supply Company located at 822 Seneca Street in the City of Buffalo, Erie County, New York (the “Site”) into the Brownfield Site Cleanup Program (BCP). This document comprises a Remedial Investigation Work Plan (RIWP) to be implemented at the Site and is being submitted to the New York State Department of Environmental Conservation (NYSDEC) along with a completed Brownfield Cleanup Program Application (under separate cover) as recommended by the NYSDEC in the BCP-pre-application meeting held on August 5, 2010.

This Draft RIWP includes a summary of site history, a summary of previous environmental assessments and investigations, a description of the site geologic and hydrogeologic setting, a summary of subsurface features and sensitive receptors, and a plan of action for further delineation of areas of concern identified previously by others.

1.1 Site Description

The Site is located at 822 Seneca Street in the City of Buffalo, Erie County, New York. The Site is identified on the City of Buffalo tax maps as the parcel with section 122.27, block 1, lot 4, and is approximately 2.91 acres. The Site is located on the west side of Lord Street and bound to the north by Seymour Street and the south by Seneca Street, and is approximately one mile north of the Buffalo River. A site location map is included as Figure 1. Maps showing the Site property boundaries and historical Site features are included as Figures 2 and 3.

AmeriPride Services, Inc. (formerly American Linen Supply Company) has owned this property since approximately 1978, and since 2005, the Site has been unoccupied. The parcel is currently developed with a vacant industrial building. The Site is located in an urban area of mixed industrial, commercial land use. The Site is currently zoned for light industrial use. It is anticipated that future development of the Site would be commercial and/or industrial in nature; however, there are no specific Site redevelopment plans as of the date of this Draft RIWP.

1.2 Site History

According to a Phase I Environmental Site Assessment Report by C.T. Male Associates, P.C., dated December 2004, the Site building was first developed in 1910. Prior to 1910, the Site is indicated to have been occupied by residential and commercial properties. Between 1910 and 1978, the Site appeared to be used as a book binding and printing facility.

Coverall Service and Supply Co., (Coverall) a uniform cleaning facility, reportedly first occupied the Site in 1978. The facility was used for dry cleaning operations until 1985. Available records indicate that dry-cleaning with tetrachloroethylene (PCE) was conducted at the Site between 1978 and 1985; use and/or storage of PCE were not reported after 1985. The laundry operations occupied the first floor of the Site building as well as portions of the basement. Thorner Sydney Press occupied the second floor of the Site building as well as portions of the basement until 1997. According to a purchase agreement dated 1977, Thorner Sydney Press’ lease agreement was initiated in 1965.

In April 2004, laundering operations ceased at the Site building. It was used as a laundry depot from April 2004 to spring 2005 and then as a fleet vehicle maintenance shop until July 2005. Operations moved out of the building at the end of July 2005, and it has been vacant since.

1.3 Purpose

The Draft RIWP has been developed to achieve the following BCP objectives:

- To define the nature and extent of contamination on the Site.
- To identify if residual contaminant source areas are present on the Site.
- To determine whether remedial action is needed to protect human health and the environment.
- To produce data of sufficient quantity and quality to support the remediation of the Site, if warranted.

This Draft RIWP was developed in general accordance with the NYSDEC's Division of Environmental Remediation Technical Guidance for Site Investigation and Remediation (DER-10), dated May 2010.

Specifically, this Draft RIWP provides a summary of environmental conditions including the following information:

- Relevant information from existing environmental reports and previously conducted Site investigations.
- Technical overview and findings from previous reports
- Planned investigation activities as outlined in Section 2 for the Draft RIWP (including soil, soil vapor, and groundwater investigations)
- Site base mapping, supporting figures presenting sampling results/data, groundwater contour mapping and locations of planned investigational activities.
- Field Sampling Plan (FSP)
- Quality Assurance Project Plan (QAPP)
- Site specific Health & Safety Plan (HASP)
- Community Air Monitoring Plan (CAMP)
- Citizen Participation Plan (CPP)

References used in assessment of this Site and for development of this work plan are identified in the References section at the end of this document.

1.4 Summary of Previous Investigations and Assessments

In accordance with the DER-10, this Draft RIWP incorporates a summary of the previous Environmental Site Assessments and Site Investigations, which provide the basis for identifying the areas of concern (AOCs) and the principal constituents of concern (COCs) on the Site. AOC locations are shown on Figure 3.

1.4.1 Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment prepared by C.T. Male Associates, P.C., dated December 2004, identified the following recognized environmental conditions in connection with the Site:

- The Site has been used since 1910 for commercial purposes including a printing facility, a dry cleaning facility and a commercial industrial laundering facility. Each of those facilities stored and utilized a variety of chemical and petroleum products.
- Several disposal features were noted within the Site building including floor drains, troughs, sumps and pits. The troughs and pits were reportedly installed for Coverall for

wastewater collection and disposal. Although the floor drains and sumps were reported to discharge to a pit (pit No.1) located in the basement of the building at the time, and ultimately to the municipal sanitary sewer system, the discharge location of these drainage features prior to the installation of the pits is not known.

- Six underground storage tanks (USTs) were located at the Site; four of the six USTs have been closed-in-place, and two have been removed. Limited tank closure documentation exists.

The tanks include:

1. a removed 10,000 gallon gasoline storage tank
2. a removed 1,000 gallon alcohol storage tank
3. a closed in-place 20,000 gallon diesel storage tank
4. a closed in-place 20,000 gallon No.6 oil tank
5. a closed in-place 1,500 gallon waste oil tank
6. a closed in-place 5,000 gallon heating oil tank located within a vault beneath the sidewalk on the east side of the building along Lord Street.

Fire Department records also indicated a 6,000 gallon storage tank in a vault off the boiler room in 1964, and further noted that this tank may have leaked due to the presence of fuel oil coming up through a tile drain in the “boiler room.” It cannot be determined based on available documentation where the location of the boiler room was in 1964. It is possible that the “6000-gallon” and “5000-gallon” heating oil tank described above are the same and that the tank was incorrectly described in the 1964 letter.

The Phase I report concluded that further assessment would be necessary to determine if the use of the tanks and associated piping had an impact to the quality of soils or groundwater at the Site. Subsurface investigations conducted subsequently by ENSR International are summarized in sections 1.4.2, 1.4.3, and 1.4.4 below. Additional investigations to further evaluate the USTs will be conducted as part of this Remedial Investigation.

- During the Phase I site visit, staining was noted in several locations including within the existing boiler room, in an elevator room, near drums and containers, and near the hydraulic lifts. Staining was also noted within the basement of the Site building. C.T. Male Associates recommended that a further assessment would be necessary to determine the extent of the staining and to determine potential impacts to soil or groundwater at the Site. As part of Phase II investigations described below, wipe sampling for PCBs was conducted in some of the stained areas mentioned above.

1.4.2 Initial Phase II Subsurface Investigations

Initial Phase II investigations were conducted by ENSR International during August 2005. The investigations included a total of 28 soil borings and four solid surface wipe samples for PCB analysis. The investigation locations are presented on Figures 3.

Phase II Scope of Work:

Soil borings were advanced to depths ranging from 6 feet (ft) to 20 ft below ground surface (bgs). At locations that were accessible to vehicles, soil borings were advanced using a direct-push rig (i.e., Geoprobe). In the basement of the building, soil borings were advanced using hand-held

hammer-drill type equipment. Soils were continuously logged in the field, and screened with a photoionization detector (PID) for the presence of volatile organic compounds. Soil classifications, PID responses, and additional subsurface information were recorded on soil boring logs. Soil boring logs are included in Appendix A.

Soil samples were collected from each soil boring location, based on field observations and/or PID responses, and submitted for laboratory analysis. The rationale for sample collection at a given sample location was presented the Phase II memorandum ENSR International, dated October 2005 (Appendix A). Samples were analyzed for one or more of the following: Target Compound List (TCL) volatile organic compounds (VOCs), Polycyclic Aromatic Hydrocarbons (PAHs), Resource Conservation and Recovery Act (RCRA) 8 metals (arsenic, barium, cadmium, chromium, lead, selenium, silver and mercury), and polychlorinated biphenyls (PCBs).

The analytical results for the soil samples collected during the subsurface investigation are summarized on Table I.

In addition to subsurface soil investigation activities, wipe samples for PCB analysis were also collected at the four locations depicted on Figure 3, including two transformer pads, the floor adjacent to a bank of PCB capacitors, and an area in the basement where a pool of oil was observed adjacent to an elevator shaft. Wipe sampling consisted of wiping a 100 cm² area with a hexane saturated gauze pad and submitting the gauze for PCB analysis.

Phase II Findings:

Analytical data collected during the Phase II investigation indicated that Site soils contain concentrations of chlorinated VOCs (PCE and TCE), PAHs, and arsenic, cadmium, chromium, lead, silver and mercury in excess of NYSDEC TAGM 4046 standards, which were the regulatory comparison standards at that time. Based on the findings of the Phase II Investigation, the following four potential areas of concern (AOCs) were identified:

- **AOC-1** - vicinity of SB-2 (PAHs) located at the west end of the former (removed) 10,000 gallon gasoline UST,
- **AOC-2** – vicinity of SB-13 (PCE, TCE, chromium) adjacent to the Site catch basin near Seneca Street,
- **AOC-3** – vicinity of SB-7 and SB-8 (PCE, TCE, PAHs, mercury) adjacent to the former 1,500 gallon waste oil UST area, and
- **AOC-4** – General area underlying the southwestern half of the building. Impacts identified in the soils underlying the on-slab (central) portion of the building include VOCs, PAHs and metals. VOCs and/or metals were also identified in soils underlying the western portion of the basement.

PCBs were not detected in the wipe samples collected, except for the sample collected from the floor near the elevator shaft. PCBs were detected at 4.1 ug/100 cm². This detection is less than the US EPA Spill Cleanup Level of 10 ug/100 cm² (Table III).

1.4.3 Supplemental Phase II

To further evaluate the nature and extent of soil impacts within the AOCs identified in the initial Phase II Investigation, ENSR International conducted a supplemental Phase II Investigation during November and December 2005. This investigation included the collection of additional soil samples within each of the four AOCs, and from locations upgradient of the AOCs; and a

groundwater investigation to identify depth to groundwater and determine whether groundwater was impacted by the COCs previously detected in the soil. General procedures and results are summarized below for each media.

1.4.3.1 Soil Investigation

During this soil investigation 19 supplemental soil borings were advanced at locations depicted on Figure 3. Soil borings were advanced to depths ranging from 14 feet (ft) to 20 ft bgs. One or more soil samples were collected from each soil boring location, based on field observations and/or PID responses, and submitted for laboratory analysis. Soil samples were analyzed for one or more of the following compounds: TCL VOCs, TCL SVOCs, and RCRA 8 metals.

Analytical results for soil samples collected during the supplemental investigation are summarized in Table I and compared to the Soil Cleanup Objectives (SCOs) in 6 NYCRR Part 375 Environmental Remediation Program (December 2006) for commercial land use and protection of groundwater.

Analytical results for the supplemental soil investigation indicated that one or more VOCs were detected in many of the soil samples:

- In most samples, VOCs were detected at concentrations below SCOs.
- Results for samples SB-40 (12-14'), SB-40 (14-16'), and SB-46 (2-3') indicated concentrations of chlorinated VOCs above their respective protection of groundwater SCOs. In addition, acetone was detected in sample SB-48 (1.5-2') at 0.066 mg/kg which slightly exceeded its protection of groundwater SCO.

PAHs were also detected in many of the soil samples. However, PAHs were detected at concentrations exceeding commercial SCOs in only one sample (SB-46).

One or more RCRA 8 metals including arsenic, barium, cadmium, chromium, lead and nickel were detected in each of the supplemental soil samples. Concentrations of metals detected did not exceed SCOs.

1.4.3.2 Groundwater Investigation

To evaluate groundwater quality across the Site, six soil borings were completed as overburden groundwater monitoring wells (see Figure 3 for locations).

Groundwater samples were submitted for laboratory analysis for TCL VOCs, TCL SVOCs and RCRA 8 Metals. The analytical results for groundwater samples are summarized on Table II and compared to the water quality standards presented in the NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 (TOGS):

Analytical results for the groundwater investigation indicated the following:

- VOCs including PCE, TCE, cis-1,2-dichloroethene (cis-1,2-DCE) and/or vinyl chloride (VC) were reported in groundwater samples collected from monitoring wells MW-3 and MW-4 at concentrations that exceeded groundwater quality standards established for these compounds in excess of TOGS.

- Concentrations (or estimated concentrations) of other VOCs detected in MW-3 and MW-4, and in the samples from other wells were below their respective water quality standards.
- Bis(2-ethylhexyl)phthalate was reported at an estimated concentration (5 ug/L) equal to the TOGS criteria. This compound may be a laboratory artifact (compound was detected in blanks associated with many soil samples collected during the supplemental investigation).
- With the exception of phenanthrene, which was detected at estimated concentrations well below TOGS criteria in groundwater samples collected from MW-2 and MW-5, SVOCs were not detected in groundwater samples.
- Barium was detected in groundwater samples collected from all wells at the Site, at levels well below TOGS criteria.
- Chromium and lead were detected in the groundwater sample collected from MW-4 at concentrations below TOGS criteria.
- Other RCRA metals were not detected above laboratory detection limits in the water samples collected.

1.4.4 Site Wide Groundwater Monitoring

In June 2009, samples were collected from the six onsite wells. Results were generally consistent with the previous event conducted in 2005, with the exception of an increase in PCE and VC concentrations in MW-5 (Table II).

1.4.5 Summary of Soil and Groundwater Investigations

1.4.5.1 Summary of Soil Analytical Results

- *PCE*: Analytical results for soil indicate that the highest concentrations of PCE have been detected in samples collected from soil borings SB-13 and SB-40 (AOC-2), soil boring SB-7 (AOC-3) and soil borings SB-21, SB-24, SB-28, and SB-46 (AOC-4). The distribution of soil borings and sample results suggest multiple potential PCE source areas, including the Site drainage feature near Seneca Street in AOC-2, and the former 1,500-gallon waste oil UST in AOC-3. In AOC-4, sources of soil impact by chlorinated VOCs appear to include the trough drain in the former washroom area on the main floor and the cistern-structures (Pit-2 and Pit-1) in the basement.
- *Mercury*: Total mercury was detected at concentrations slightly exceeding the protection of groundwater SCOs in samples collected from soil borings SB- 20, SB-22 and SB-23 (AOC-4).
- *PAHs*: One or more PAHs were detected at concentrations in exceedance of commercial and protection of groundwater SCOs in several of the AOC-4 soil borings.

Analytical data suggest that PAH impacts may be limited to the shallow soils (i.e. – within 5 feet of ground surface); PAHs were not detected above laboratory

reporting limits in the vast majority of samples collected below 5 feet bgs. These data suggest that the PAHs are a result of urban soil fill and not related to a specific source of petroleum, ash, or other common product or waste material known to contain PAHs.

1.4.5.2 Summary of Groundwater Analytical Results

Concentrations of PCE, and its breakdown products TCE, cis-1,2-DCE and/or VC exceeding water quality standards, have been detected in groundwater samples collected from monitoring wells MW-3, MW-4, and MW-5, which are located on the southern half of the Site, during the two groundwater sampling events (2005 and 2009) (see Figure 3). Lack of detections of chlorinated VOCs in the central and northern wells (MW-1 and MW-2) indicate that groundwater upgradient from the suspected potential source area has not been impacted.

1.5 Physical Setting

The Site incorporates approximately 2.9 acres of fairly level land situated in the City of Buffalo, Erie County, New York. According to the United States Geological Survey (USGS) Topographic Map, the Site lies at approximately 590 feet above Mean Sea Level.

1.5.1 Geologic Setting

The Site is generally flat and is situated approximately one mile north of the Buffalo River. The unconsolidated geologic materials (soil) encountered at the Site range in thickness from approximately 15 to greater than 20 feet thick.

According to the March 2007 supplemental Phase II report, soils observed during investigation activities consist of fill materials overlying native soil. The fill materials, which pre-date industrial activity at the Site, include gravel, sand, silt, and clay, and varying amounts of anthropogenic materials such as brick fragments, wood fragments, clinker, glass, plastic, etc. It is noted that the boring logs provided in the Phase II did not identify specific soil strata or fill contents; therefore the extent of fill across the Site cannot be defined. Under the fill, the native soils consist of lacustrine silt and clay deposited in proglacial lakes during late Wisconsinan glaciation. At many locations (i.e., SB-31, SB-32, SB-38, SB-47, SB-48, SB-49 and SB-50), a basal unit of fine to medium sand was observed that may represent a basal till or lacustrine sand.

The Site is situated in the Central Lowlands Physiographic Province, characterized by nearly flat-lying rocks of Devonian, Silurian and Ordovician Age. Bedrock underlying the Site is mapped as middle Devonian Onondaga Limestone.

1.5.2 Hydrogeologic Setting

Subsurface investigation activities conducted at the Site indicate that the uppermost groundwater bearing unit is situated at or near the interface between the soil and bedrock. Groundwater elevation data suggest that groundwater flows toward the south with an interpreted hydraulic gradient of 0.05 feet per foot (ft/ft). This southward flow direction is consistent with the expectation that groundwater may be locally controlled by the Buffalo River, which is located less than one mile south of the Site. Additional discussions regarding the previous groundwater investigation are presented in the previous investigation reports included in Appendix A.

1.5.3 Subsurface Features

Six underground storage tanks (USTs) were formerly used at the Site; four of the six USTs have each been closed-in-place and two have been removed (refer to Figure 3 and Section 1.4.1 above). The closed in-place tanks are reportedly located as follows:

- Three of the tanks are located on the south side of the Site just west of the Site building, two of which were reported to be connected to a fuel dispensing shed.
- The fourth tank was reportedly used for heating oil and is located on the eastern side of the Site building beneath the sidewalk adjacent to Lord Street.

In addition to the USTs, a drainage catch basin is located on the south side of the Site along Seneca Street. This catch basin will be removed during demolition activities.

1.5.4 Sensitive Receptors

No sensitive ecological receptors such as wetlands have been identified adjacent to or near the project area. There are residential areas located immediately to the north, west and south of the Site (see Figure 4). There are no drinking water wells in the area.

2. REMEDIAL INVESTIGATION

The work described in this Draft RIWP will be conducted in accordance with 6 NYCRR Part 375 - Brownfield Cleanup Regulations, and in general conformance with the NYSDEC DER-10 (Technical Guidance for Investigation and Remediation). The RI work will also comply with the quality assurance project plan (QAPP) and field sampling plan (FSP) appended to this Draft RIWP. The investigation process will involve sampling of soil/fill, native soil, soil vapor and groundwater sampling. Exploration and testing locations may be modified during the field program based on observations made in the field.

The analytical data obtained during the RI will be compared to the commercial and protection of groundwater SCOs assuming that the future land use will be commercial or industrial or a combination of these uses. Various site redevelopment alternatives are currently being considered.

2.1 Purpose and Objectives

The purpose of this Draft RIWP is to define the nature and extent of contamination on the Site; to determine whether contamination is present that warrants remedial action; and to provide data of sufficient quantity and quality to support development of a Remedial Action Alternatives Analysis, if remedial action is warranted for the Site. This Draft RIWP was developed to meet the following specific objectives:

- Abate and demolish the Site building to allow Remedial Investigation within the building footprint
- Define the nature and extent of the historical fill at the Site
- Delineate the extent of potential sources of residual contaminants within AOCs 1, 2, 3 and 4 identified in previous assessments and investigations
- Further delineate the extent of COCs in groundwater at the Site
- Evaluate the potential for soil vapor impacts related to Site COCs and the potential for soil vapor to migrate via preferred pathways, if present.

2.2 Site Preparation for Remediation Investigation

Site preparation activities include the abatement and demolition of the existing building, removal of portions of the existing building slab located above the basement areas of the building, and removal of a subsurface drainage structure. Removal will facilitate remedial investigation activities. During demolition activities, the contractor will perform community air monitoring in accordance with the NYSDOH generic Community Air Monitoring Plan (CAMP) for particulates. During removal of the drainage structure, community air monitoring will include particulates and VOCs.

Site preparation work oversight and management is being conducted by Asbestos and Environmental Consulting Corporation (AECC) of East Syracuse, NY; their work scope is described below. Haley & Aldrich will provide environmental monitoring during site preparation activities that involve excavation and management of subsurface soil materials.

2.2.1 Abatement

Prior to building demolition, hazardous materials within the building, including PCB and mercury-containing electrical equipment, asbestos-containing materials, lead-based paint, and remaining drums will be removed and miscellaneous waste (drums, etc.) will be managed or disposed of in accordance with state and federal regulations and AECC's Site-specific

specifications. The superstructure will be abated of hazardous materials including loose and flaking lead paint, asbestos, PCBs, and demolished to the building slab (see Section 2.2.2). Lead paint that is adhered to surfaces and is not loose or flaking will not be removed prior to demolition.

2.2.2 Dewatering

Prior to abatement of the basement of the building, dewatering will be required to remove water that has accumulated over time, and routine dewatering during and after abatement may be required until the basement can be backfilled.

It is anticipated that the source of the water in the basement is from infiltrating groundwater. Sampling of the basement water was conducted in October 2010 and November 2010 to facilitate planning for discharge. The results are summarized in Table IV.

Currently, AECC plans to discharge dewatering effluent to the Buffalo Sewer Authority under a temporary discharge permit. Approval is pending.

2.2.3 Reuse and Disposal of Building Materials

During building demolition, building materials including concrete and brick will be segregated for either disposal and/or potential reuse onsite as fill material. Brick and concrete materials coated with paint and materials that appear to be contaminated (e.g., staining is observed) will be segregated, staged on and beneath poly-sheeting, characterized for disposal in accordance with disposal facility requirements, and transported off site for disposal.

Building debris free of coatings and that do not otherwise appear contaminated will be segregated into 1,000 cubic yard piles. Each pile will be sampled and analyzed as follows based on the “Recommended Number of Soil Samples for Soil Imported to or Exported from a Site” included in DER-10:

- TCL VOCs: Two (2) discrete samples per 1000 cubic yards of material
- TCL SVOCs, RCRA 8 Metals, PCBs, Pesticides: One (1) composite sample per 1000 cubic yards of material.

If the results meet the commercial SCOs, the pile may be reused onsite for backfill of the existing basement, subsurface features, and for Site grading. For piles where the results do not meet the SCOs, they will be characterized and disposed at a NYSDEC-permitted disposal facility.

2.2.4 Management of the Building Slab

Currently, project plans call for a majority of the building slab to remain in place; the slab above basement areas of the building will be removed. In order to evaluate soils beneath the building slab in the AOC-4, the former dry cleaning operations (see Figure 3), portions of the building slab in that area will be removed to facilitate installation of test pits and/or soil borings (see Section 2.4.1).

2.2.5 Removal of Subsurface Drainage Feature and Other Potential Source Features

A subsurface drainage feature, located to the immediate west of the tanks, will be removed as part of building demolition activities. In addition as part of slab removal, other subsurface features

may be encountered and subsequently removed by the contractor. Haley & Aldrich will observe removal activities and provide oversight and soil screening using a PID to evaluate potential impacts to the surrounding soil.

If evidence of localized potential impacts is encountered such as elevated PID readings, oil saturated soil, or significant odors, the following procedures will be conducted:

- The contractor will assist with additional excavation to visually evaluate the extent of impacted soil. Excavated soil will be placed on and under poly-sheeting for temporary staging.
- A sample will be collected for laboratory analysis of both the potentially impacted soil and the soil remaining in-place. Haley & Aldrich will coordinate with the NYSDEC to develop the target analyte list.
- If laboratory results indicate concentrations of compounds are detected in excess of the applicable SCOs, the soil will be removed from the Site to an appropriate disposal facility.
- If laboratory results indicate that concentrations of compounds are not detected in excess of the applicable SCOs, the soil will be used to backfill the excavation.

If excavation and visual assessment indicate that the impacts may be wide-spread, samples of impacted material will be collected as described above, and the material will be replaced in the excavation and additional assessment and/or remediation if necessary will be conducted as part of future work.

2.3 Scope of Remedial Investigations

Remedial investigations will begin after building demolition is complete. Explorations will include installation of soil borings, test pits, and groundwater monitoring wells within the previously identified AOCs and other areas of the Site that have not been previously investigated. In addition, soil vapor sampling and analysis will be conducted in the western portion of the Site. The type, location, and rationale for each exploration are detailed in the sections below. Installation of soil borings, groundwater monitoring wells, test pits, and soil gas sampling points will be completed in accordance with sections 2.4 through 2.6 below and the standard procedures included in Appendix B. Laboratory analyses to be conducted are summarized in the Sampling and Analysis Plan included as Table V.

2.3.1 AOC-1

AOC-1 was defined as a result of the detection of PAHs in soil and the potential for a release to have occurred from a former 10,000-gallon underground gasoline storage tank. In previous investigations, PAHs were detected in shallow soil samples in AOC-1 at concentrations that slightly exceed protection of groundwater and/or commercial SCOs. Previous investigation results did not indicate gasoline impacts in soil; however, groundwater investigation is necessary to further evaluate this AOC.

Additional investigation is proposed as follows:

2.3.1.1 Potential Gasoline UST Impacts Evaluation

At least one soil boring, SB-101, will be completed in AOC-1 downgradient of the former UST location (see Figure 5). SB-101 will be advanced to the top of bedrock. If evidence of petroleum impacts is observed, additional borings may be installed to delineate the extent impacts in the area. At least one boring (SB-101) in this area will be completed as a 2-inch diameter groundwater monitoring well. Note that the location of the monitoring well may be installed in SB-101 or in another more appropriate location if SB-101 will not produce a viable well or one appropriate for investigation purposes. Groundwater sampling and analysis is discussed in section 2.6.4.

A soil sample(s) will be collected from the location with the highest PID reading and/or evidence of petroleum impact including staining and petroleum odor. Soil samples will be analyzed for TCL and STARS lists VOCs using EPA Method 8260, and TCL and STARS¹ lists SVOCs using EPA Method 8270. For vertical delineation purposes soil samples may be collected at the bottom of the exploration or at the water table.

2.3.1.2 Urban Fill Evaluation

Based on the existing analytical data, which does not indicate gasoline impacts to soil in AOC-1, it is anticipated that the presence of PAHs in shallow soil is attributable to the nature of the historic urban fill. To obtain information regarding the nature and extent of historic urban fill in this area, additional characterization, sampling and laboratory analysis of shallow fill will be conducted in at least one location in AOC-1 in conjunction with further investigation at depth in the vicinity of the former gasoline UST described above. Soil/fill samples will be analyzed for the target compound list semi-volatile organic compounds (TCL SVOCs) using EPA Method 8270 (this analysis is inclusive of PAHs), target analyte list (TAL) metals using EPA Method 6010. If evidence of volatile organic compounds are present (including PID readings above background and odor), TCL volatile organic compounds (VOCs) and STARS¹ list VOCs (petroleum-related VOCs) will also be analyzed using EPA Method 8260.

2.3.2 AOC-2/AOC-3

Areas AOC-2 and AOC-3 were defined as a result of the detection of dry cleaner solvent-related chlorinated VOCs (CVOCs) in soil and groundwater. It is anticipated that the CVOCs are associated with the former waste oil UST and/or drainage structure located in that area. Although existing data do not indicate petroleum impacts near the former abandoned USTs, assessment of groundwater and deeper soil is necessary to further evaluate these areas of concern. Since AOC-2 and AOC-3 are in close proximity to one another (see Figure 5), these two areas are combined for discussion of remedial investigations in their vicinity.

Additional investigation is proposed as follows:

2.3.2.1 Soil Investigation

At least two soil borings will be advanced to the top of bedrock in AOC-2/3 (SB-102 and SB-105). Soil samples will be collected from the location with the highest PID readings and analyzed for TCL VOCs using EPA Method 8260. For vertical delineation purposes

¹ NYSDEC Division of Construction Management, Bureau of Spill Prevention and Response, Spill Technology and Remediation Series (STARS) Memo#1 Petroleum Contaminated Soil Guidance Policy, August 1992

soil samples may be collected at the bottom of the exploration or at the water table. Saturated soil samples will not be collected for laboratory analysis.

Additional soil investigation will be completed in the area using test pits and/or soil borings (if needed to achieve sufficient vertical impact delineation). Soil samples will be collected for laboratory analysis from the locations with the highest PID readings and/or from areas where evidence of petroleum impact is observed during drilling, if any, and will be analyzed for TCL and STARS lists VOCs using EPA Method 8260, and TCL and STARS lists SVOCs using EPA Method 8270. For vertical delineation purposes, soil samples may be also be analyzed from the bottom of the exploration or at the vadose/saturated zone interface.

If visual evidence of impacts is observed during test pit explorations, then the procedure described in Section 2.2.5 will be followed.

To assess potential impacts related to the closed in-place USTs, test pits will be conducted at the locations shown on Figure 5 (TP-UST-1 through TP-UST-9). In general, test pits will be advanced around each in-place UST to a depth below the tanks as determined in the field. If it is not practicable to advance a test pit to the applicable depth, a soil boring will be installed. If evidence of contamination is identified, a sample will be collected from that location, and if necessary additional soil borings will be advanced in the impacted areas and analyzed as follows:

- *Soil around the Fuel Oil, Heating Oil, and Diesel Tanks:* TCL and STARS lists VOCs using EPA Method 8260, and TCL and STARS lists SVOCs using EPA Method 8270.
- *Soil around the Waste Oil Tank:* TCL and STARS lists VOCs using EPA Method 8260, and TCL and STARS lists SVOCs using EPA Method 8270; TAL Metals via EPA Methods 6010/7471, and PCBs via EPA method 8082.

2.3.2.2 Groundwater Investigation

Groundwater monitoring wells MW-3 and MW-4 were previously installed and sampled in this area; analytical results are summarized in Table II. Two additional overburden groundwater monitoring wells, MW-102 and MW-105 will be installed to assess the approximate western limit of CVOC migration in groundwater. Groundwater samples will be analyzed for PCE, TCE, cis-DCE, vinyl chloride, and benzene, toluene, ethylbenzene, and xylene (BTEX) using EPA Method 8260B (see Table V).

2.3.2.3 Soil Vapor

A total of four soil vapor points will also be installed and sampled in this area to evaluate whether soil vapor has been impacted by CVOCs. Two points will be installed between the sanitary sewer and the adjacent residence and garage, and two points will be installed near or within the sanitary sewer pipe trench to assess whether it is acting as a preferred vapor migration pathway (see Figure 5). Soil vapor samples will be analyzed for VOCs using method TO-15.

2.3.3 AOC-4

AOC-4 was defined based on historical facility operations, and the results of previous investigation results indicating that total CVOCs were detected in soil at concentrations up to 98.5 mg/kg (Table I). In addition to CVOCs detected in soil and groundwater samples, elevated concentrations of PAHs (greater than commercial SCOs) were also identified in some of the soil samples collected from the area (see Table I).

Groundwater monitoring wells MW-5 and MW-6 were previously installed in AOC-4; results indicated that concentrations of CVOCs were detected above TOGS criteria. Groundwater monitoring results are summarized in Table II.

2.3.3.1 Soil Investigation

Additional soil investigation will be completed in AOC-4 using test pits and soil borings (if needed to achieve sufficient vertical impact delineation). At least one sample of shallow soil/fill from this area will be collected for laboratory analysis to better understand the nature of the historic urban soil/fill. The extent of historic urban soil/fill will be assessed visually during explorations in the area. Soil/fill samples will be analyzed for TCL SVOCs using EPA Method 8270 and TAL metals using EPA Method 6010. If evidence of VOC impacts are present (including PID readings above background and odor), TCL VOCs will also be analyzed using EPA Method 8260.

At least three soil borings (SB-103, SB-104, 106) to be subsequently installed as overburden/bedrock monitoring wells (see below) will be installed to the top of bedrock. Soil samples will be collected from the locations with the highest PID readings and analyzed for TCL VOCs using EPA Method 8260. For vertical delineation purposes soil samples may be collected at the bottom of the exploration or at the water table. Saturated soil samples will not be collected for laboratory analysis.

2.3.3.2 Groundwater Investigation

At least two of the soil borings installed to the top of bedrock will be completed as 2-inch groundwater monitoring wells MW-103 and MW-104 (see Figure 5). MW-103 will be installed to evaluate the eastern limit of dissolved CVOC migration in groundwater, and MW-104 will be installed to assess groundwater quality within the potential source area. The location of MW-104 is subject to change based on the results of the soil investigation conducted in the potential source area. Groundwater sampling and analysis is discussed in section 2.6.4.

Following installation and sampling of the overburden wells onsite, an additional bedrock monitoring well, BMW-106 (Figure 5) will be installed in this area to evaluate the nature of groundwater impacts in the bedrock groundwater and or the potential presence of dry cleaner solvent dense non-aqueous phase liquid (DNAPL). Note that the proposed location of the bedrock groundwater well is subject to change based on field observations, drilling conditions, and on the previous groundwater sampling results. Should the location of the bedrock well significantly change from what is proposed, the new location will be discussed with the NYSDEC prior to installation. Bedrock drilling procedures are included in Appendix B.

2.3.4 Site-Wide Groundwater Investigation

Groundwater samples will be collected from the pre-existing and newly installed monitoring wells. Prior to sample collection, the wells will be developed in accordance with the procedure included in Appendix B. Sampling will be conducted using Low-Flow purge and sampling methods. Laboratory analysis of the samples will consist of TCL and STARS lists VOCs via EPA Method 8260, STARS list SVOCs via EPA Method 8270, and TAL metals by EPA Method 6010.

If results from the groundwater investigation indicate that potential offsite migration of groundwater constituents, additional drilling activities may be considered and reviewed with the NYSDEC. If additional drilling is deemed necessary, an addendum to this RIWP will be prepared to discuss the work.

2.3.5 Site-Wide Historic Urban Fill Characterization

Characterization and logging of soil in all soil borings and test pits will be done during installation of the explorations described above. In addition, 5-10 test pits will be conducted on the north side of the property specifically to characterize the nature and extent of historic fill at the Site.

To evaluate the quality of the fill across the Site, one sample of the fill will be collected from each of 5 locations as follows (Figure 5):

- the northeast corner of the Site
- the north central side of the Site
- the northwest corner of the Site
- AOC-4 (southeast corner of the Site)
- AOC-2/AOC-3

The fill samples will be analyzed for some or all of the following: Total Petroleum Hydrocarbons (TPH) via EPA Method 8015, TCL VOCs via EPA Method 8260, TCL Semi-Volatile Organic Compounds (SVOCs) via EPA Method 8270, TAL Metals via EPA Methods 6010/7471, PCBs via EPA method 8082, and Pesticides via EPA Method 8081.

Samples will be analyzed according to the following frequency per the May 2010 NYSDEC DER-10 Guidance:

- 5 Samples – TPH
- 5 Samples – Priority Pollutant Metals
- 5 Samples – PAHs
- 2 Samples – PCBs
- 5 Samples – Screening for VOCs using a photoionization detector (PID). If screening results are more than 5x background, analyze for VOCs via EPA Method 8260B.

If fill is not encountered in the test pits, sampling and analytical testing will not be conducted.

2.4 Soil Investigation Procedures

Although Site-specific cleanup goals have not been defined, for comparison purposes, chemical analytical results for soil will be compared to the 6 NYCRR Part 375 restricted SCOs for commercial use and the protection of groundwater. The soil investigation activities under this work plan will be conducted in accordance with the FSP (Appendix B) and as described below.

2.4.1 Test Pit Explorations

Overall, test pit explorations will be conducted in accordance with the standard procedures in Appendix B. Test pits will be advanced to refusal, the top of the water table, or to a practical depth limited by excavation stability and reach of equipment. Soils will be characterized and screened for VOCs using a photoionization detector (PID); evidence of contamination (e.g. odor, staining, ash, cinders, slag, etc.) will be documented on log forms along with soil characterization information and observations. Soil samples may be collected for laboratory analysis. Typically, samples will be collected from the location with the strongest evidence of contaminant impact, or if no evidence of impact is observed, one sample from immediately above the water table may be collected and submitted for applicable analysis.

2.4.2 Soil Boring Explorations

Overall, soil boring explorations will be conducted as summarized below and in accordance with the standard procedures in Appendix B. Soil borings will be advanced to the top of bedrock utilizing direct-push (macro-core sampling) and/or conventional hollow stem auger and continuous soil sampling methods. Soils will be characterized and screened continuously for VOCs using a photoionization detector (PID); any evidence of contamination (e.g. odor, staining, ash, cinders, slag, etc.) will be documented. Soil characterization and observations will be documented on log forms. Typically, samples will be collected from the location with the strongest evidence of contaminant impact, or if no evidence of impact is observed, one sample from immediately above the water table may be collected and submitted for applicable analysis.

2.5 Soil Vapor Investigation Procedures

Soil vapor point installation and sampling will be conducted in general conformance with the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York dated October 2006 (NYSDOH Guidance), and in accordance with the FSP included in Appendix B. The procedures are summarized in the sections below.

2.5.1 Soil Vapor Point Installation Procedure

Soil vapor points will be installed at the approximate locations as shown on Figure 5 and listed below:

- **SV-101 and 102:** Between the adjacent residence and garage and the sanitary sewer line located in the western portion of the site
- **SV-103 and SV-104:** Near or within the sanitary sewer pipe trench

Soil vapor probes will be installed to a depth corresponding to subsurface features such as the sewer line and/or building footing foundations or to depth of 1 foot above groundwater as determined in the field. The probes will be backfilled using a porous, inert backfill material (e.g., glass beads, washed #1 crushed stone, etc.) allowing a sampling zone of 1 to 2 feet in length, and

sealed at the ground surface to prevent any inflow from ambient surface air. In order to prevent short circuiting of ambient air into the sub-surface, the surface seal design for each point will either include, depending on conditions determined in the field:

- a 18-inch diameter surface seal of hydrated bentonite clay mounded around the soil gas probe at the ground surface, with an overlying layer of poly sheeting (a minimum of three feet in diameter), and an additional bentonite clay seal atop the poly sheeting around the soil vapor probe; or
- a permanent concrete roadway box installed around each point.

2.5.2 Soil Vapor Sampling Procedure

Soil vapor sampling will be conducted in general conformance with the NYSDOH Guidance.

The samples will be collected at least 24 hours after installation of the probes. Prior to sampling, the soil vapor probes will be briefly evacuated to purge any stagnant vapors within the probe (the purge volume will approximate one borehole volume). In addition, during the purging process, helium will be released around the probe at the ground surface, and vapor samples will be collected from the installed probe and analyzed for helium to assess potential short-circuiting and ensure that the surface seal is intact.

The soil vapor samples will be collected in dedicated, laboratory-supplied “batch certified clean” stainless steel Summa canisters at rates no greater than 0.2 L/min, with an average target fill-time of approximately 2 hours per canister.

Samples will be analyzed by an ELAP certified laboratory for VOCs using EPA Method TO-15. The target compound list will be consistent with the NYSDOH air sampling guidance and with the compounds detected in soil and groundwater at the site.

2.6 Groundwater Monitoring Well Installation

Groundwater monitoring wells will be installed using procedures generally consistent with the NYSDEC recommended practice as described below and in Appendix B. The procedures will be modified if necessary based on field conditions. Typical flush-mount and above-grade overburden monitoring well installation details are presented on the attached FSP (Appendix B).

2.6.1 Overburden Well Installation

The monitoring wells will be completed as follows: A 2-inch diameter, 10-foot length (or other length not longer than 15 ft or as determined by field conditions) of PVC, 10-slot (0.010 inch) well screen attached to a riser section will be installed to the top of weathered bedrock (or top of bedrock, absent a weathered zone) and to straddle the water table. Sufficient solid riser pipe will be used to complete the well at ground surface or as a stick-up casing approximately 2 to 3 feet above ground surface.

The well construction will include installation of a sand filter pack around the well screen extending approximately 2 feet above the top of the screen, a (hydrated) bentonite-pellet seal approximately 2 feet thick above the sand pack, and bentonite/cement grout to ground surface, as well as a protective, lockable, flush-mounted or stick-up casing.

2.6.2 Bedrock Well Installation

The bedrock well will be installed according to the procedures included in Appendix B. Well screening will be determined based on field conditions.

2.6.3 Well Development

Wells will be developed following installation to remove any fines yielded by the formation during drilling, and then further development by surging or over-pumping to reduce well-water turbidity.

Upon the completion of a well, it will be developed to provide sufficient communication with the formation to yield representative data. Three development techniques, including mechanical surging with a rubber surge block, over-pumping using a submersible pump, and bailing have been identified for use at the discretion of the field personnel.

The amount of water removed during development will be recorded. Development will continue until the development water is relatively free of sediment, exhibiting a turbidity of 50 NTU or as close to 50 NTU as practical and at least 10 well volumes of water has been removed. Some wells may never reach the target level of 50 NTU.

The development water will be contained in 55-gallon drums and analyzed and staged on site until appropriate disposal options are determined.

2.6.4 Groundwater Sampling Procedure

One complete round of groundwater sampling will be conducted a minimum of two weeks after completion of development activities. The groundwater sampling event will include water-level monitoring, and sample collection at each well.

One sample from each well for laboratory analysis plus necessary QA/QC samples (refer to the QAPP in Appendix C). The wells will be purged prior to sampling using low-flow purging methods and a bladder pump. Refer to Table V for the Sampling & Analysis Plan, and to Appendix D for the procedure utilized for low-flow groundwater sampling. The following groundwater quality parameters will be monitored during the purge using a flow-through cell: pH, temperature, oxidation/reduction potential (ORP), dissolved oxygen (DO), turbidity, and conductivity. Groundwater samples will be collected once groundwater quality parameters stabilize. The flow-through cell will be disconnected before collecting a sample. Disposable bladders and tubing will be replaced at each well location.

2.7 Investigation Derived Waste Management

It is anticipated that drums of soil cuttings and groundwater will be generated during site characterization activities. In addition, wastes such as used personal protective equipment (PPE) will be generated during sampling and drilling activities. Used PPE and other non-hazardous materials will be disposed of in municipal trash dumpsters on-site. Drums of soil cuttings and liquid waste will be removed from the Site and properly disposed of by a contracted waste broker. To the extent practicable, soils determined through sampling to be impacted by F-listed hazardous materials, if any, will be managed under the “contained-in” Policy (NYSDEC TAGM 3028) as approved by the NYSDEC.

3. REMEDIAL INVESTIGATION SUPPORTING PLANS

3.1 Quality Assurance Project Plan

The Quality Assurance Project Plan (QAPP) included as Appendix C is a stand-alone document that outlines the scope of the quality assurance and quality control (QA/QC) activities to be performed in support of the RIWP.

The QAPP documents procedures regarding the accuracy and precision of data collection during the RI and data interpretation periods. The QAPP identifies procedures for sample collection to mitigate the potential for cross-contamination, as well as analytical requirements necessary to assure compliance with USEPA SW-846 methodology. The QAPP has been prepared in accordance with USEPA's Requirements for Quality Assurance Project Plans for Environmental Data Operations (EPA QAIR-5); the EPA Region 1\CERCLA Quality Assurance Manual, and NYSDEC's May 2010 DER-10 Technical Guidance for Site Investigation and Remediation.

3.2 Health & Safety Plan

A site specific Health & Safety Plan (HASP) has been prepared in accordance with 40 CFR 300.150 of the NCP and 29 CFR 1910.120 for the proposed RIWP activities. A copy of the HASP is included as Appendix D of this Work Plan. The HASP covers on-site investigation activities. A member of the field team will be designated to serve as the on-site Health and Safety Officer throughout the field program. This person will report directly to the Project Manager and the Health and Safety Coordinator. The HASP will be subject to revision as necessary, based on new information that is discovered during the field investigation.

3.3 Community Air Monitoring Plan

The NYSDOH Generic Community Air Monitoring Plan (CAMP) has been included as Appendix E. The CAMP describes required VOC vapor and/or particulate monitoring that will be conducted during demolition and intrusive site investigation activities. The intent of this CAMP is to provide for a measure of protection of the downwind communities from potential airborne releases of constituents of concern during RI activities. As such, this CAMP specifies the potential air emissions, air monitoring procedures, and monitoring schedule.

3.4 Citizen Participation Plan

In accordance with NYSDEC's Brownfield Cleanup Program guidance, a Citizen Participation Plan (CPP) is required for the Site investigative activities. The CPP, included as Appendix F, meets the requirements of NYSDEC DER-23 and DER-10 guidance.

4. PROJECT SCHEDULE

Based upon current knowledge of the site the following remedial investigation schedule, subject to change, is proposed. A minimum of 5-day notice will be provided to NYSDEC in advance of field sampling.

<i>January 2011</i>	<i>Submit Brownfield Application</i>
<i>January 2011</i>	<i>Submittal of Draft Remedial Investigation Work Plan (RIWP)</i>
<i>January 2011</i>	<i>Public Notice completed</i>
<i>First Quarter 2011</i>	<i>Acceptance into Brownfield Program, Execution of Brownfield Cleanup Agreement</i>
<i>First Quarter 2011</i>	<i>Final Remedial Investigation Work Plan is approved by DEC Abatement / demolition of site structures begins</i>
<i>Second Quarter 2011</i>	<i>Additional remedial investigation field works commences</i>
<i>Fourth Quarter 2011</i>	<i>Drafts Remedial Investigation Report Submitted to NYSDEC</i>

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4. New York State Department of Environmental Conservation, (as revised June 1998) Division of Water Technical and Operational Guidance Series (1.1.1), Ambient Water Quality Standards and Guidance Values and Effluent Limitations.
5. New York State Department of Environmental Conservation, (2007). Guidance for the Development of Quality Assurance Plans and Data Usability Summary Reports (DUSR), September 2007.
6. New York State Department of Environmental Conservation (undated), DER-23 Citizen Participation Handbook for Remedial Programs, Division of Environmental Remediation.
7. "Phase I Environmental Site Assessment, AmeriPride Services, Inc. Site, 7 and 8 Lord Street, City of Buffalo, Erie County, New York," dated 8 December 2004. Prepared by C.T. Male Associates, P.C.
8. "Phase II Technical Memorandum," dated 19 October 2005. Prepared by ENSR Corporation.
9. "Supplemental Phase II Investigation Report," dated 21 March 2007. Prepared by ENSR Corporation.
10. Letter Regarding "Groundwater Monitoring – June 2009," dated 23 July 2009. Prepared by Delta Environmental.

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TABLE 1 - SUMMARY OF SOIL QUALITY DATA
FORMER AMERICAN LINEN SUPPLY COMPANY FACILITY
BUFFALO, NEW YORK
37319-020

Refer to the Notes and Abbreviations on Page 4

SAMPLE DESIGNATION SAMPLE DEPTH (FT BGS) AREA OF CONCERN (AOC) SAMPLING DATE SAMPLED BY MATRIX UNITS	NYSDEC 6 NYCRR Part 375 Commercial mg/kg	NYSDEC 6 NYCRR Part 375 Protection of Groundwater mg/kg	SB-44 17-17.5 ft AOC-3 12/7/2005 ENSR Soil mg/kg	SB-45 12.5-14 ft AOC-4 12/8/2005 ENSR Soil mg/kg	SB-45 18-20 ft AOC-4 12/8/2005 ENSR Soil mg/kg	SB-46 2-3 ft AOC-4 12/2/2005 ENSR Soil mg/kg	SB-46 16-17 ft AOC-4 12/2/2005 ENSR Soil mg/kg	SB-47 16-17 ft AOC-4 12/2/2005 ENSR Soil mg/kg	SB-47 19-20 ft AOC-4 12/2/2005 ENSR Soil mg/kg	SB-48 1.5-2 ft AOC-4 12/2/2005 ENSR Soil mg/kg	SB-48 14-15 ft AOC-4 12/2/2005 ENSR Soil mg/kg	SB-49 12.5-13 ft -- 12/2/2005 ENSR Soil mg/kg	SB-49 16-17 ft -- 12/2/2005 ENSR Soil mg/kg	SB-50 12-16 ft AOC-4 12/1/2005 ENSR Soil mg/kg	SB-50 17-19 ft AOC-4 12/1/2005 ENSR Soil mg/kg
Volatile Organic Compounds															
1,1-Dichloroethene	500	0.33	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)
1,2-Dichlorobenzene	500	1.1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
cis-1,2-Dichloroethene	500	0.25	ND (0.006)	ND (0.006)	ND (0.006)	2.9 DJ	0.011	ND (0.006)	ND (0.006)	0.002 J	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)
trans-1,2-Dichloroethene	500	0.19	ND (0.006)	ND (0.006)	ND (0.006)	0.006	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)
1,4-Dichlorobenzene	130	1.8	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2-Butanone	NA	NA	ND (0.028)	ND (0.03)	ND (0.032)	ND (0.03)	ND (0.032)	ND (0.03)	ND (0.028)	0.01 J	ND (0.031)	ND (0.032)	ND (0.032)	ND (0.03)	ND (0.028)
Acetone	500	0.05	ND (0.028)	0.034	ND (0.032)	ND (0.03)	0.033	ND (0.03)	ND (0.028)	0.066	ND (0.031)	ND (0.032)	ND (0.032)	ND (0.03)	ND (0.028)
Carbon Disulfide	NA	NA	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)
Carbon tetrachloride	22	0.76	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Chlorobenzene	500	1.1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Chloroform	350	0.37	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dichlorofluoromethane	NA	NA	ND (0.006)	ND (0.006)	ND (0.006)	0.002 J	0.002 J	0.002 J	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)
Ethylbenzene	390	1	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)
Isopropylbenzene	NA	NA	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)
Methylcyclohexane	NA	NA	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	0.001 J
Methylene Chloride	500	0.05	0.005 J	0.017	0.006	0.006	0.006	ND (0.006)	ND (0.006)	0.007	0.006	ND (0.006)	ND (0.006)	0.007	0.008
Tetrachloroethane	150	1.3	ND (0.006)	ND (0.006)	ND (0.006)	44 D	0.002 J	ND (0.006)	0.006	ND (0.006)	ND (0.006)	0.002 J	ND (0.006)	ND (0.006)	ND (0.006)
Toluene	500	0.7	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)
Trichloroethene	200	0.47	ND (0.006)	ND (0.006)	ND (0.006)	3.6 DJ	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)	ND (0.006)
Vinyl Chloride	13	0.02	ND (0.011)	ND (0.012)	ND (0.013)	ND (0.012)	0.013	ND (0.012)	ND (0.011)	ND (0.012)	ND (0.012)	ND (0.013)	ND (0.013)	ND (0.012)	ND (0.011)
Xylene (mixed)	500	1.6	ND (0.017)	ND (0.018)	ND (0.02)	ND (0.018)	ND (0.019)	ND (0.018)	ND (0.017)	ND (0.018)	ND (0.018)	ND (0.019)	ND (0.019)	0.004 J	ND (0.017)
Semi-Volatile Organic Compounds															
2-methylnaphthalene	NA	NA	ND (0.37)	ND (0.39)	ND (0.44)	5.1 J	ND (0.44)	ND (0.43)	ND (0.36)	0.24 J	ND (0.41)	ND (0.43)	ND (0.42)	ND (0.42)	ND (0.38)
Acenaphthene	500	98	ND (0.37)	ND (0.39)	ND (0.44)	13	ND (0.44)	ND (0.43)	ND (0.36)	0.44 J	ND (0.41)	ND (0.43)	ND (0.42)	0.028 J	0.022 J
Acenaphthylene	500	107	ND (0.37)	ND (0.39)	ND (0.44)	2.7 J	ND (0.44)	ND (0.43)	ND (0.36)	ND (2)	ND (0.41)	ND (0.43)	ND (0.42)	ND (0.42)	ND (0.38)
Anthracene	500	1000	ND (0.37)	ND (0.39)	ND (0.44)	28	ND (0.44)	ND (0.43)	ND (0.36)	0.73 J	ND (0.41)	ND (0.43)	ND (0.42)	0.053 J	0.042 J
Benzo(a)anthracene	5.6	1	ND (0.37)	ND (0.39)	ND (0.44)	33	ND (0.44)	ND (0.43)	ND (0.36)	0.96 J	ND (0.41)	ND (0.43)	ND (0.42)	0.12 J	0.12 J
Benzo(a)pyrene	1	22	ND (0.37)	ND (0.39)	ND (0.44)	29	ND (0.44)	ND (0.43)	ND (0.36)	0.63 J	ND (0.41)	ND (0.43)	ND (0.42)	0.098 J	0.09 J
Benzo(b)fluoranthene	5.6	1.7	ND (0.37)	ND (0.39)	ND (0.44)	42	ND (0.44)	ND (0.43)	ND (0.36)	0.76 J	ND (0.41)	ND (0.43)	ND (0.42)	0.11 J	0.11 J
Benzo(g,h,i)perylene	500	1000	ND (0.37)	ND (0.39)	ND (0.44)	18	ND (0.44)	ND (0.43)	ND (0.36)	0.39 J	ND (0.41)	ND (0.43)	ND (0.42)	0.073 J	0.064 J
Benzo(k)fluoranthene	56	1.7	ND (0.37)	ND (0.39)	ND (0.44)	45	ND (0.44)	ND (0.43)	ND (0.36)	0.28 J	ND (0.41)	ND (0.43)	ND (0.42)	0.051 J	0.05 J
Bis(2-ethylhexyl) phthalate	NA	NA	0.014 BJ	0.059 J	0.083 J	ND (8.2)	ND (0.44)	0.04 BJ	0.025 BJ	ND (2)	0.052 BJ	ND (0.43)	0.2 BJ	0.37 BJ	ND (0.38)
Butylbenzylphthalate	NA	NA	ND (0.37)	ND (0.39)	ND (0.44)	ND (8.2)	ND (0.44)	ND (0.43)	ND (0.36)	ND (2)	ND (0.41)	ND (0.43)	ND (0.42)	0.052 J	ND (0.38)
Chrysene	56	1	ND (0.37)	ND (0.39)	ND (0.44)	28	ND (0.44)	ND (0.43)	ND (0.36)	0.69 J	ND (0.41)	ND (0.43)	ND (0.42)	0.11 J	0.094 J
Dibenz(a,h)anthracene	0.56	1000	ND (0.37)	ND (0.39)	ND (0.44)	5.2 J	ND (0.44)	ND (0.43)	ND (0.36)	ND (2)	ND (0.41)	ND (0.43)	ND (0.42)	0.022 J	ND (0.38)
Dibenzofuran	NA	NA	ND (0.37)	ND (0.39)	ND (0.44)	13	ND (0.44)	ND (0.43)	ND (0.36)	0.29 J	ND (0.41)	ND (0.43)	ND (0.42)	ND (0.42)	ND (0.38)
Di-n-butyl phthalate	NA	NA	ND (0.37)	ND (0.39)	ND (0.44)	ND (8.2)	ND (0.44)	ND (0.43)	ND (0.36)	ND (2)	ND (0.41)	ND (0.43)	ND (0.42)	0.14 BJ	0.029 BJ
Di-n-octyl phthalate	NA	NA	ND (0.37)	ND (0.39)	ND (0.44)	ND (8.2)	ND (0.44)	ND (0.43)	ND (0.36)	ND (2)	ND (0.41)	ND (0.43)	ND (0.42)	ND (0.42)	ND (0.38)
Fluoranthene	500	1000	ND (0.37)	ND (0.39)	ND (0.44)	94	ND (0.44)	ND (0.43)	ND (0.36)	2.7	ND (0.41)	ND (0.43)	ND (0.42)	0.29 J	0.24 J
Fluorene	500	386	ND (0.37)	ND (0.39)	ND (0.44)	19	ND (0.44)	ND (0.43)	ND (0.36)	0.63 J	ND (0.41)	ND (0.43)	ND (0.42)	ND (0.42)	ND (0.38)
Indeno(1,2,3-cd)pyrene	5.6	8.2	ND (0.37)	ND (0.39)	ND (0.44)	14	ND (0.44)	ND (0.43)	ND (0.36)	0.31 J	ND (0.41)	ND (0.43)	ND (0.42)	0.052 J	0.052 J
Naphthalene	500	12	ND (0.37)	ND (0.39)	ND (0.44)	10	ND (0.44)	ND (0.43)	ND (0.36)	0.29 J	ND (0.41)	ND (0.43)	ND (0.42)	ND (0.42)	ND (0.38)
Phenanthrene	500	1000	ND (0.37)	ND (0.39)	ND (0.44)	110	ND (0.44)	ND (0.43)	ND (0.36)	3.9	ND (0.41)	ND (0.43)	ND (0.42)	0.25 J	0.2 J
Pyrene	500	1000	ND (0.37)	ND (0.39)	ND (0.44)	66	ND (0.44)	ND (0.43)	ND (0.36)	2.1	ND (0.41)	0.023 J	ND (0.42)	0.26 J	0.21 J
Metals															
Arsenic	16	16	ND (2.3)	7.1	3.7	9.3	11	4.1	ND (2.3)	5.6	4.9	3.3	3.3	5.1	ND (2.3)
Barium	400	820	60.1	101 E	124 E	397 E	153 E	126 E	75.7 E	112 E	85.9 E	101 E	106 E	83.1 E	61.4 E
Cadmium	9.3	7.5	ND (0.23)	ND (0.22)	ND (0.28)	0.61	0.75	0.6	0.27	0.65	0.48	0.59	0.5	0.64	ND (0.23)
Chromium, trivalent ¹	1500	-	6.8	15.4	17.3	19.6	22.3	16.6	6.4	17.1	17.9	18.5	16.3	17.3	8.3
Lead	1000	450	6.3	13.5 N*	13.9 N*	381	13.5	14.9	5	15.1	13.1	14.5	11.5	17.3	11
Selenium	1500	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Silver	1500	8.3	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Total Mercury	2.8	0.73	ND (0.019)	ND (0.021)	ND (0.021)	0.164	ND (0.024)	ND (0.02)	ND (0.018)	0.23	ND (0.022)	ND (0.021)	ND (0.021)	0.026	0.021
PCBs/Pestacides															
Aroclor 1016	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1221	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1232	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1242	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1248	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1254	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1260	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Polychlorinated Biphenyls	1	3.2	-	-	-	-	-	-	-	-	-	-	-	-	-

NOTES & ABBREVIATIONS:
NA = Not Applicable/No Standard or Value
ND = Not Detected above laboratory detection limits. Number in parenthesis is the laboratory detection limit.
NR = Not reported in report tables. Analyte was either not detected above laboratory detection limit or not sampled.
J = Value estimated below detection limit
E = Value estimated due to dilution
D = Diluted
N* = Spike sample recovery and sipek or duplicate analysis not within quality control limits
B = Detected in the Method Blank
* SB-100 is a duplicate of SB-42 (19-20 ft)
-- = No Area of Concern was identified.
- = Not Analyzed
1. Bold analytes exceed the Protection of Groundwater SCOs
2. Bold and shaded analytes exceed the Commercial SCOs.

TABLE II - SUMMARY OF GROUNDWATER QUALITY DATA
FORMER AMERICAN LINEN SUPPLY COMPANY FACILITY
BUFFALO, NEW YORK
37319-020

SAMPLE DESIGNATION WELL SCREEN DEPTH	NYS Ambient Water Quality	MW-1 7.11 - 16.69 ft. --		MW-2 9.31 - 18.69 ft. --		MW-3 7.31 - 16.89 ft. AOC-2		MW-4 7.31 - 16.69 ft. AOC-3		MW-5 10.11 - 19.0 ft. AOC-4		MW-6 NR AOC-4
SAMPLING DATE	Standards and	12/14/2005	6/9/2009	12/14/2005	6/9/2009	12/14/2005	6/9/2009	12/14/2005	6/9/2009	12/14/2005	6/9/2009	12/14/2005
SAMPLED BY	Guidance	ENSR	Delta	ENSR	Delta	ENSR	Delta	ENSR	Delta	ENSR	Delta	ENSR
MATRIX	TOGS 1.1.1	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
UNITS	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Volatile Organic Compounds												
1,2,4-Trichlorobenzene	5	ND (5)	NR	ND (5)	NR	ND (5)	NR	ND (5)	NR	ND (5)	NR	ND (5)
Acetone	50	2.9 J	ND	11 J	ND	ND (25)	ND	ND (25)	ND	10 J	ND	ND (25)
Carbon Disulfide	NA	0.65 J	ND	1.3 J	ND	ND (5)	ND	ND (5)	ND	1.2 J	ND	ND (5)
cis-1,2-Dichloroethene	5	ND (5)	ND	ND (5)	ND	94 D	42	66	180	ND (5)	70	ND (5)
Dichlorodifluoromethane	5	ND (5)	ND	ND (5)	ND	0.68 J	ND	ND (5)	ND	ND (5)	ND	ND (5)
Methyl tert butyl ether	10	2.2 J	6.5	ND (5)	ND	0.52 J	ND	0.88 J	ND	ND (5)	ND	ND (5)
Tetrachloroethene	5	ND (5)	ND	ND (5)	ND	ND (5)	ND	140 D	92	0.91 J	ND	ND (5)
trans-1,2-Dichloroethene	5	ND (5)	ND	ND (5)	ND	3.6 DJ	1.7	0.9 J	3.2	ND (5)	ND	ND (5)
Trichloroethene	5	ND (5)	ND	ND (5)	ND	0.73 J	ND	87	96	ND (5)	ND	ND (5)
Vinyl Chloride	2	ND (5)	ND	ND (5)	ND	26 D	25	ND (5)	1.1	ND (5)	16	ND (5)
Metals												
Barium	1000	52.2	-	85.1	-	51	-	106	-	216	-	104
Chromium, trivalent ¹	50	ND (4)	-	ND (4)	-	ND (4)	-	6.5	-	ND (4)	-	ND (4)
Lead	25	ND (5)	-	ND (5)	-	ND (5)	-	9.6	-	ND (5)	-	ND (5)
Semivolatile Organic Compounds												
Bis(2-ethylhexyl)phthalate	5	ND (9)	-	5 J	-	ND (10)	-	ND (10)	-	ND (9)	-	ND (10)
Phenanthrene	50	ND (9)	-	0.5 J	-	ND (10)	-	ND (10)	-	1 J	-	ND (10)

NOTES & ABBREVIATIONS:

NA = Not Applicable/No Standard or Value

ND = Not Detected above laboratory detection limits. Number in parenthesis is the laboratory detection limit.

NR = Not reported in report tables. Analyte was either not detected above laboratory detection limit or not sampled.

-- = No Area of Concern was identified.

- = Not Sampled

1. Bold analytes exceed the Standards and Guidance Criteria

2. Only detected compounds/analytes are shown.

TABLE III - SUMMARY OF WIPE SAMPLE DATA
 FORMER AMERICAN LINEN SUPPLY COMPANY FACILITY
 BUFFALO, NEW YORK
 37319-020

SAMPLE DESIGNATION	WIPE-1	WIPE-2	WIPE-3	WIPE-4
LOCATION	South Transformer	North Transformer	Floor Near Capacitors	Floor Near Elevator
SAMPLING DATE	8/22/2005	8/22/2005	8/26/2005	8/26/2005
SAMPLED BY	ENSR	ENSR	ENSR	ENSR
MATRIX	Wipe	Wipe	Wipe	Wipe
UNITS	ug/100 cm ²	ug/100 cm ²	ug/100 cm ²	ug/100 cm ²
Aroclor 1016	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Aroclor 1221	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Aroclor 1232	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Aroclor 1242	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Aroclor 1248	ND (0.5)	ND (0.5)	ND (0.5)	2.2
Aroclor 1254	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Aroclor 1260	ND (0.5)	ND (0.5)	ND (0.5)	1.9
Total Polychlorinated Biphenyls	ND	ND	ND	4.1

NOTES & ABBREVIATIONS:

ND = Not Detected above laboratory detection limits. Number in parenthesis is the laboratory detection limit.

TABLE IV - BASEMENT WATER QUALITY DATA
FORMER AMERICAN LINEN SUPPLY COMPANY FACILITY
BUFFALO, NEW YORK
37319-020

SAMPLE DESIGNATION	NYS Ambient Water Quality Standards and Guidance	NYS Groundwater Effluent Limitations	WATER-1	WATER-2	WATER-3	WATER-1	WATER-2
SAMPLING DATE			10/11/2010	10/11/2010	10/11/2010	11/4/2010	11/4/2010
SAMPLED BY			AECC	AECC	AECC	AECC	AECC
MATRIX	TOGS 1.1.1		Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
UNITS	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
General Chemistry							
Total Phosphorus	20	NA	--	--	--	0.0701 BJ	0.0755 BJ
Volatile Organic Compounds	NA	NA	ND	ND	ND	--	--
Metals							
Aluminum	NA	2000	190 J	118 J	205	--	--
Antimony	3	6	ND (20)	ND (20)	17.9 J	--	--
Barium	1000	2000	47.8	74.1	41.3	--	--
Cadmium	5	10	1	0.7 J	0.9 J	--	--
Calcium	NA	NA	73800	69100	66000	--	--
Total Chromium	50	100	5.1 B	2.9 BJ	3.8 BJ	--	--
Cobalt	NA	NA	0.7 J	ND (4)	0.9 J	--	--
Copper	200	1000	25.3	12.1	15.9	--	--
Iron	300	600	1300	523	1390	--	--
Lead	25	50	17.7	11	45.1	--	--
Magnesium	35000	35000	22200	20500	21200	--	--
Manganese	300	600	64	40.3	111	--	--
Nickel	100	200	8.7 J	6.9 J	7.7 J	--	--
Potassium	NA	NA	18100	17000	18500	--	--
Sodium	20000	NA	127000	120000	140000	--	--
Vandium	NA	NA	2.6 J	1.4 J	3.1 J	--	--
Zinc	2000	5000	124	109	272	--	--
Semivolatile Organic Compounds							
Benzo(a)anthracene	NA	NA	0.38 J	ND (4.8)	0.47 J	--	--
Benzo(b)pyrene	ND	ND	0.49 J	ND (4.8)	ND (5)	--	--
Benzo(b)fluoranthene	0.002	0.002	0.56 J	ND (4.8)	0.54 J	--	--
Benzo(g,h,i)perylene	NA	NA	0.48 J	ND (4.8)	ND (5)	--	--
Bis(2-ethylhexyl) phthalate	5	5	4.2 J	ND (4.8)	ND (5)	--	--
Butyl benzyl phthalate	50	50	1.1 J	ND (4.8)	0.5 J	--	--
Chrysene	0.002	0.002	0.33 J	ND (4.8)	0.35 J	--	--
Diethyl phthalate	50	50	ND (4.9)	1 J	ND (5)	--	--
Di-n-butyl phthalate	50	50	0.42 BJ	0.91 BJ	0.57 BJ	--	--
Fluoranthene	50	50	0.5 J	ND (4.8)	0.65 J	--	--
Pyrene	50	50	0.5 J	ND (4.8)	0.52 J	--	--

NOTES & ABBREVIATIONS:
NA = Not Applicable/No Standard or Value
ND = Not Detected above laboratory detection limits.
Number in parenthesis is the laboratory detection limit.
B = Analyte detected in the Method Blank.
J = Result estimated below the laboratory reporting limit.
-- = Not Analyzed
1. Bold analytes exceed the Standards and Guidance Criteria
2. Only detected compounds/analytes are shown

TABLE V - SAMPLING AND ANALYSIS PLAN
 FORMER AMERICAN LINEN SUPPLY COMPANY FACILITY
 BUFFALO, NEW YORK
 37319-020

Soil Boring/Monitoring Well Sampling

Sample ID	Matrix	Sample Depth (Feet b.g.s)	Drilling Method	Soil Sampling Method	GW Sample Method	Analytical Method	Purpose
SB-101	Soil	TBD per field screening	GeoProbe or Hollow Stem Auger	PID Screening/Grab	N/A	TCL VOCs by EPA 8260B, and STARS VOCs list.	To evaluate soil impacts associated with the former gasoline UST.
SB-102						TCL VOCs by EPA 8260B	To evaluate potential soil impacts from chlorinated solvents.
SB-103							
SB-104							
SB-105							
SB-106							
MW-1	Groundwater	8-13 Feet	Installed in December 2005	None - Previously Sampled (December 2005)	Obtain Water Level, Low Flow Methods	TCL/STARS VOCs via EPA Method 8260, STARS SVOCs EPA Method 8270, and TAL metals by EPA Method 6010.	Evaluate groundwater flow direction, Estimate impacts to on-site groundwater
MW-2							
MW-3							
MW-4							
MW-5							
MW-6							
MW-101		TBD per water table depth	GeoProbe or Hollow Stem Auger	PID Screening/Grab		Evaluate groundwater flow direction and the nature and extent of groundwater impacts near the former gasoline UST.	
MW-102						Evaluate groundwater flow direction and the nature and extent of groundwater impacts near the western corner of the Site.	
MW-103						Evaluate groundwater flow direction and the nature and extent of groundwater impacts in the former dry cleaning area of the Site building.	
MW-104						Evaluate groundwater flow direction and the nature and extent of groundwater impacts near the southern corner of the Site.	
MW-105						Evaluate groundwater flow direction and the nature and extent of groundwater impacts on the southwest side of the Site.	
BMW-106			GeoProbe or Hollow Stem Auger & Rock Coring			Evaluate potential groundwater impacts in bedrock in the vicinity of the inferred source area.	

Refer to Notes and Abbreviations on Page 4

Haley & Aldrich of New York

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TABLE V - SAMPLING AND ANALYSIS PLAN
 FORMER AMERICAN LINEN SUPPLY COMPANY FACILITY
 BUFFALO, NEW YORK
 37319-020

Soil Vapor Sampling

Sample ID	Matrix	Sample Depth	Drilling Method	Sampling Method	Analytical Method	Purpose
SV-101	Soil Vapor	48 inches below ground surface or 1 foot above groundwater	Soil Vapor Probe (GeoProbe or Hammer Drill)	2-hour Summa Canisters.	TCL VOCs by EPA Method TO-15	Estimate soil vapor impacts along the property boundary and potentially at residence.
SV-102						Evaluate the sewer line as a potential vapor conduit.
SV-103						
SV-104						

Refer to Notes and Abbreviations on Page 4

TABLE V - SAMPLING AND ANALYSIS PLAN
FORMER AMERICAN LINEN SUPPLY COMPANY FACILITY
BUFFALO, NEW YORK
37319-020

Soil Boring/Test Pits

Sample ID	Matrix	Sample Depth (Feet b.g.s)	Sampling Method and Description	Analytical Method	Purpose
TP-1	Soil	TBD per field screening	Test pits will be advanced using an excavator and will be screened using a PID. If warranted, grab samples will be collected. If test pitting is impracticable or delineation of vertical impact is necessary, soil borings will be advanced using a GeoProbe or Hollow Stem Auger in lieu of a test pit.	If evidence of VOC impacts are present (including PID readings greater than 5 times background and odor), TCL VOCs will also be analyzed using EPA Method 8260	To evaluate potential soil impacts associated with the former closed in-place waste oil UST
TP-2					To evaluate potential soil impacts associated with the former closed in-place diesel and fuel oil USTs
TP-3					
TP-4					
TP-5					
TP-6					
TP-7					
TP-8					
TP-9					
TP-10					
TP-11					To evaluate potential soil impacts associated with the former heating oil tank.
Dry Cleaning Area	Soil	TBD per field screening	Multiple test pits/soil borings will be advanced in the Dry Cleaning Area shown on Figure 5	If evidence of VOC impacts are present (including PID readings greater than 5 times background and odor), TCL VOCs will also be analyzed using EPA Method 8260 One sample from this area will be analyze for fill characterization purposes as described below.	To evaluate potential soil impacts associated with the former dry cleaning operations.
			Test pits will be advanced using an excavator and will be screened using a PID. If warranted, grab samples will be collected. If test pitting is impracticable or delineation of vertical impact is necessary, soil borings will be advanced using a GeoProbe or Hollow Stem Auger in lieu of a test pit.		
Fill Characterization Extent	Soil	Samples will not be collected in this area except were noted below	Up to 10 test pits will be advanced in the Fill Characterization Area shown on Figure 5 Test pits will be advanced using an excavator and will be screened using a PID.	If evidence of VOC impacts are present (including PID readings greater than 5 times background and odor), TCL VOCs will also be analyzed using EPA Method 8260 Three samples from this area will be analyze for fill characterization purposes as described below.	To evaluate the extent of fill on the north side of the Site.
Fill Characterization Nature	Soil	To be collected from historic fill layer	Analytical testing will be conducted for samples from 5 locations onsite as shown on Figure 5. Three will be collected from the Fill Characterization Test Pitting Area, one will be collected from the Dry Cleaning Area, and one will be collected from an area just northeast of the former waste oil tank. Test pits will be advanced using an excavator and will be screened using a PID.	The fill samples will be analyzed for any or all of the following: TCL VOCs via EPA Method 8260, PAHs via EPA Method 8270, TPH via Method 8015, Priority Pollutant Metals via EPA Methods 6010/7471, and PCBs via EPA method 8082. Refer to Note 5 below for additional information. If fill is not encountered in the test pits, sampling and analytical testing will not be conducted.	To evaluate the nature of fill on the Site.

Refer to Notes and Abbreviations on Page 4

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TABLE V - SAMPLING AND ANALYSIS PLAN
 FORMER AMERICAN LINEN SUPPLY COMPANY FACILITY
 BUFFALO, NEW YORK
 37319-020

Notes & Abbreviations:

PID: Photoionization Detector

VOCs: Volatile Organic Compounds

SVOCs: Semi-volatile Organic Compounds

PCBs: Polychlorinated Biphenyls

TAL: Target Analyte List

TCL: Target Compound List

STARS: Spill Technology and Remediation Series

1. Wells to be drilled will be continuously sampled during drilling using a PID. Soil samples will be collected per screening results as described in the RI Work Plan.

2. Sample depth for Soil and Groundwater Sampling refers to groundwater screen depth only. Refer to note 1 regarding soil sampling.

3. Water levels will be collected from all wells during the groundwater sampling event.

4. Soil vapor sampling will be completed in accordance with the New York State Department of Health Guidance for Evaluating Soil Vapor

Intrusion in the State of New York dated October 2006.

5. Fill Sample Distribution

A total of 5 fill samples will be collected and will be analysed as follows (*Per the May 2010 NYSDEC DER-10 Guidance*) :

- 5 Samples - TPH via EPA Method 8015

- 5 Samples - Priority Pollutant Metals via EPA Methods 6010/7471

- 5 Samples - PAHs via EPA Method 8270C

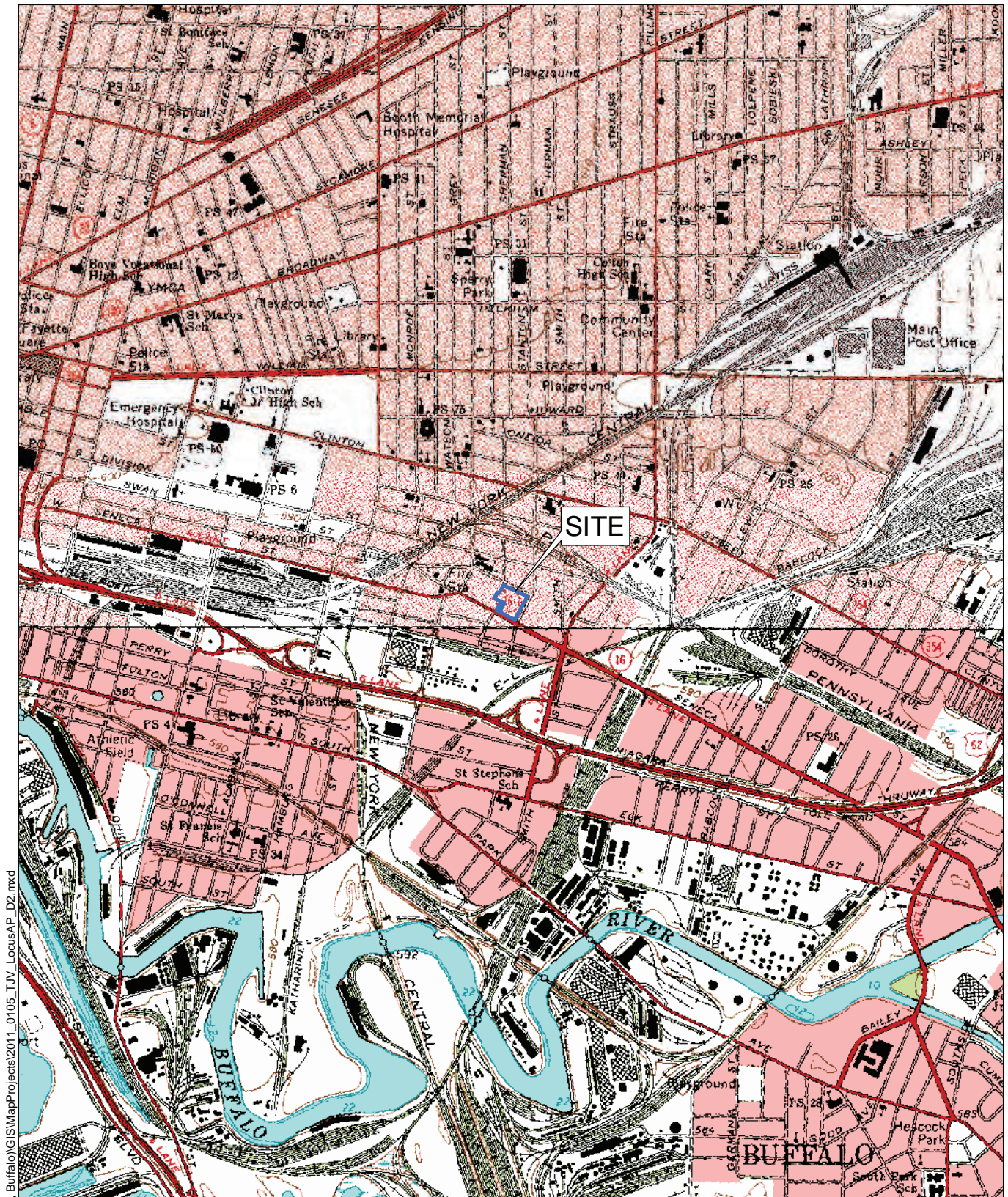
- 2 Samples - PCBs via EPA Method 8081

- 5 Samples - Screening for VOCs using a photoionization detector (PID). If screening results are more than 5x background, analyse for VOCs via EPA Method 8260B.

Refer to Notes and Abbreviations on Page 4

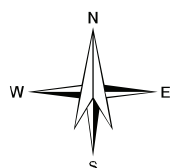
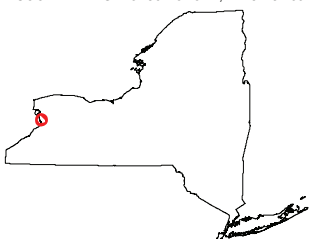
Haley & Aldrich of New York

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COORDINATES: 78° 50' 48.28" W, 42° 52' 34.00"



0 1,000 2,000
SCALE IN FEET

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BUFFALO, NEW YORK

PROJECT LOCUS

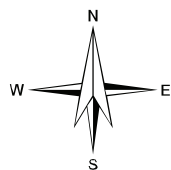
SCALE: AS SHOWN
JANUARY 2011

FIGURE 1


G:\37319 (AmeriPrideSOQ, 8 Lord Street, Buffalo)\GIS\MapProjects\2011_0105_TJV_SiteBoundaryAP_D2.mxd



 SITE BOUNDARY



NOTES:
1) AERIAL IMAGERY COURTESY
NYS GIS CLEARINGHOUSE, 2008.

0 50 100 150

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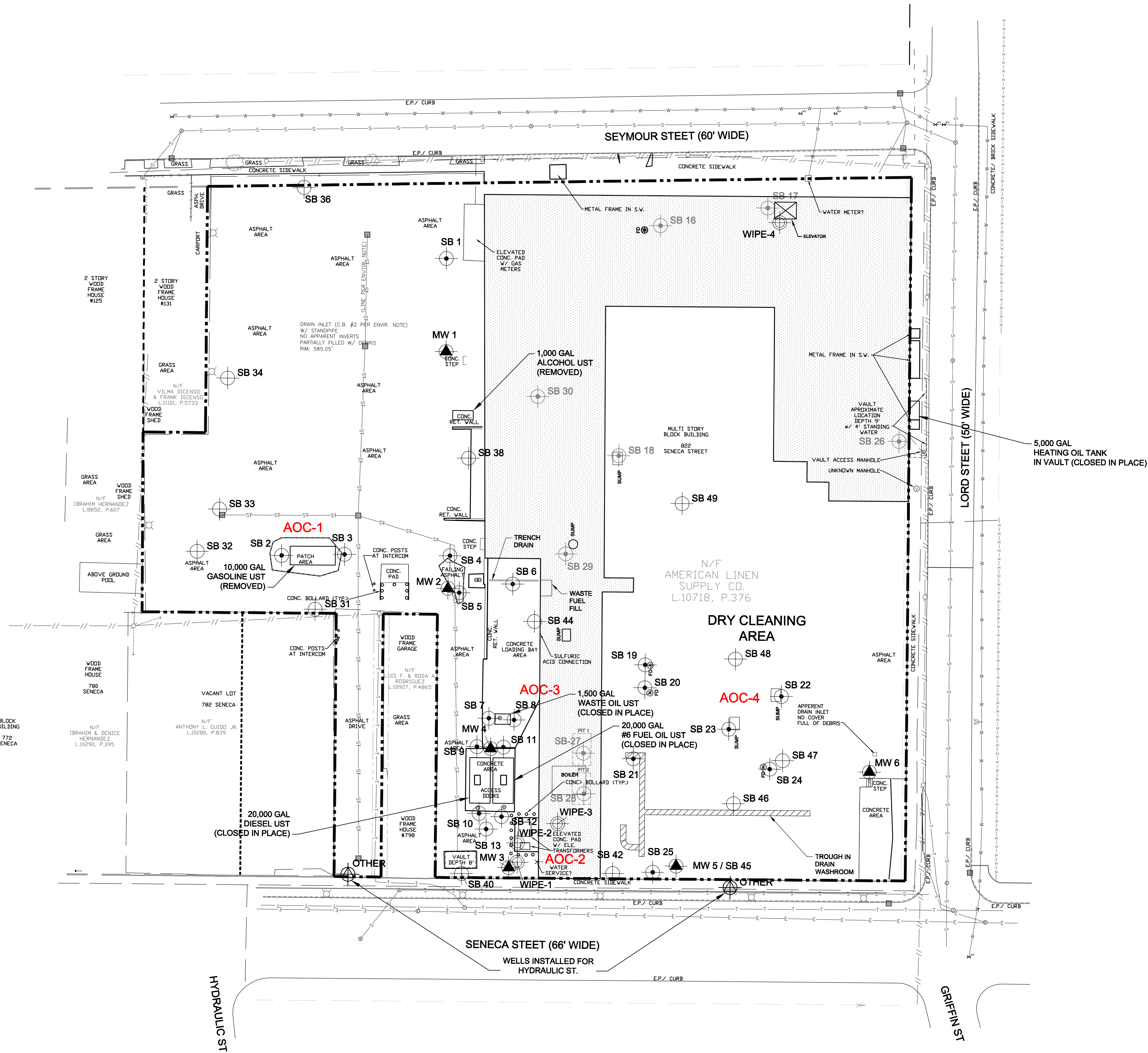
FORMER AMERICAN LINEN SUPPLY CO.
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BUFFALO, NEW YORK

AERIAL PHOTOGRAPH OF SITE AREA

SCALE: AS SHOWN
JANUARY 2011

FIGURE 2

G:\37319_AMERIPRIDE\GLOBALDRAWINGS\37319-020-002D SITE.DWG



LEGEND:

SB 30 APPROXIMATE LOCATION OF SOIL BORING INSTALLED BY ENSR IN AUGUST 2005.

SB 30 APPROXIMATE LOCATION OF SOIL BORING INSTALLED BY ENSR IN AUGUST 2005, LOCATED IN BASEMENT.

SB 31 APPROXIMATE LOCATION OF SOIL BORING INSTALLED BY ENSR IN DECEMBER 2006.

MW 5 / SB 45 APPROXIMATE LOCATION OF MONITOR WELLS INSTALLED BY ENSR IN DECEMBER 2005.

OTHER APPROXIMATE LOCATION OF MONITOR WELLS INSTALLED BY OTHERS FOR ADJACENT PROPERTY.

WIPE-2 APPROXIMATE LOCATION OF WIPE SAMPLE COLLECTED BY ENSR IN AUGUST 2005.

--- --- PROPERTY LINE

--- ST --- ST --- STORM WATER LINE

--- // --- // --- OVERHEAD ELECTRIC LINE

--- E --- E --- UNDERGROUND ELECTRIC LINE

--- S --- S --- UNDERGROUND SEWER LINE

--- T --- T --- COMMUNICATION LINE

--- W --- W --- UNDERGROUND WATER LINE

POWER POLE

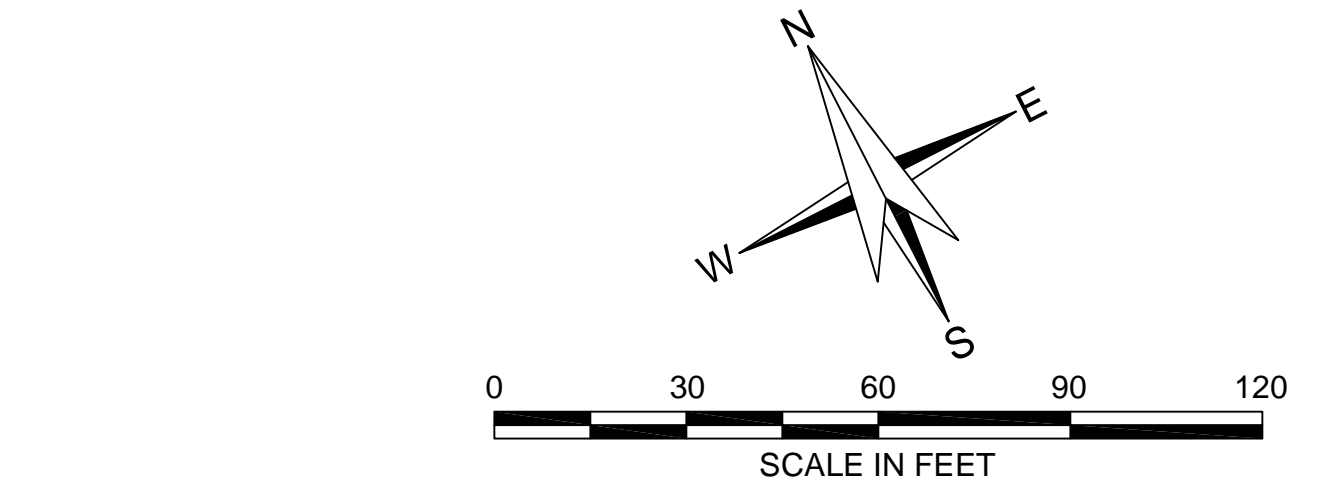
FD FLOOR DRAIN

STORM DRAIN

AOC-3 AREA OF CONCERN

APPROXIMATE LIMITS OF BASEMENT AREA

- NOTES:**
- ONSITE UTILITY LOCATIONS, TANK LOCATIONS, SOIL BORING LOCATIONS, INTERIOR WELL LOCATIONS, PROPOSED SAMPLING LOCATIONS, INTERIOR BUILDING FEATURES, AND BASEMENT DIMENSIONS ARE APPROXIMATE.
 - BASEMAP BASED ON ELECTRONIC CAD FILE ENTITLED "AMERICAN LINEN TOPO BNDY MAP.DWG" FROM HOFFMAN LAND SURVEYING & GEOMATICS OF ONTARIO, NEW YORK DATED 1 DECEMBER 2010 AND FROM ELECTRONIC IMAGES ENTITLED "BASEMENT PLAN SOIL BORING LOCATIONS" DATED 18 JANUARY 2007 AND IMAGE ENTITLED "SITE MAP SOIL BORING AND MONITORING WELL LOCATIONS" DATED 18 JANUARY 2007 FROM ENSR INTERNATIONAL.



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SITE PLAN

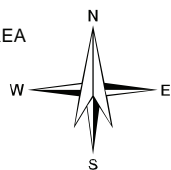
SCALE: AS SHOWN
JANUARY 2011

FIGURE 3

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-  SITE BOUNDARY
-  NRHP LISTED STRUCTURE
-  ARCHAEOLOGICALLY SENSITIVE AREA
-  TAX CREDIT QUALIFYING TRACT



- NOTES:
- 1) CULTURAL RESOURCE DATA: NYS HISTORIC PRESERVATION OFFICE, 2010.
 - 2) AERIAL IMAGERY: NYS GIS CLEARING-HOUSE, 2008.

0 250 500 750
SCALE IN FEET

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CULTURAL RESOURCES

SCALE: AS SHOWN
JANUARY 2011

FIGURE 4



1



2



3



4





