

# LAUREL ENVIRONMENTAL ASSOCIATES, LTD.

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July 2, 2010

Girish Desai, P.E. NYSDEC – Region One Division of Environmental Remediation 50 Circle Road Stony Brook, New York 11970

Re: Supplemental Phase I Remedial Investigation Work Plan

Fashion Cleaners, NYSDEC Site Code # 130170 641 East Park Avenue, Long Beach, New York 11561

**LEA** Project # 08-408

Dear Mr. Desai,

Laurel Environmental Associates, Ltd. (LEA) has prepared the following Supplemental Remedial Investigation (RI) Work Plan, based upon NYSDEC and NYSDOH comments, to further delineate the extent of Tetrachloroethene (PCE or PERC) contamination in soil and groundwater at and near the Fashion Cleaners Site. All of the proposed work below will be conducted in accordance with all applicable criteria of the approved Health and Safety Plan, Sampling and Analysis Plan, Quality Assurance/Quality Control and Community Air Monitoring Program prepared by EnviroTrac Ltd. (ETL) as part of the Phase I RI/FS Work Plan dated October 30, 2008.

#### **Dry Cleaning Equipment Removal:**

The Fashion Cleaners tenant recently vacated the Site and the space is currently unoccupied. **LEA** is coordinating removal of the dry cleaning machine and steam/press stations. The removal work will be documented and conducted by an experienced and licensed contractor and all materials and wastes will be handled and disposed of in accordance with Local, State and Federal rule. The NYSDEC will be alerted at least 48 hours prior to commencing the work.

Removal of the dry cleaning equipment will allow for the investigation of subsurface soils in areas that were previously inaccessible. Also, the work will require partial removal of the storefront, which will enable access of a track-mounted Geoprobe® machine into the building for deeper and additional subsurface contaminant delineation discussed below.

#### **Additional Soil Sampling:**

A total of five (5) additional soil borings (SB-19 through SB-23) will be conducted at locations north and south of the dry cleaning machinery room. This will enable further evaluation of soil quality beneath the Site through field screening and laboratory analysis of vadose zone soil samples. A model 6610DT or 420M Geoprobe® unit, or equivalent, will be used to conduct continuous sampling at each of the locations as depicted on Figure 3.0 to a final target depth corresponding to the minimum elevation of the water table. The borings will be conducted two (2) hours after low tide in the nearby saltwater canal to allow for the water table to subside.

Continuous sections of soil samples will be screened in the field immediately upon retrieval to evaluate the relative presence of VOCs using a portable photo-ionization detector (PID). Upon screening, soil samples will be expeditiously placed into appropriate laboratory containers to minimize the potential for volatilization of contaminants from the matrix. Two (2) samples will be submitted from each soil boring location to the laboratory for analysis of TCL VOCs including: 1) the 0 to 2 foot interval; 2.) the 2 to 4 foot interval, stopping 6 inches above the water table. If conditions encountered suggest that VOC contamination is present in the vadose zone, an additional boring will be conducted as necessary 5 feet to the south of the boring (at SB-19 and SB-20) or 5 feet to the north of the boring (at SB-22 and SB-23).

At completion, the soil borings will be properly sealed to prevent a conduit for potential downward migration of contaminants and/or soil vapor intrusion in the future. Soil boring procedures are provided in the Sampling and Analysis Plan prepared by ETL in the Phase I RI/FS Work Plan dated October 30, 2008.

A summary of the analyses that will be performed is presented in Table I. Samples will be analyzed by Long Island Analytical Laboratories, Inc. (LIALS) of Holbrook, New York. LIALS is a NYSDOH, ELAP approved laboratory and will be required to maintain this certification throughout the Supplemental RI. Per NYSDEC requirements, soil samples collected for VOC analysis shall be preserved with methanol via USEPA Method 5035.

Samples will be collected and handled under proper chain of custody protocol. The chain of custody form will record the sample and container type, identification, a description, date and time of sampling, sampler name, method of transport and analysis requested.

## **Waste Characterization Soil Sampling:**

A continuous soil boring will be advanced below the dry cleaning machinery slab (once the equipment is removed) with the Geoprobe. The boring will extend from grade to the final anticipated remedial excavation depth of 5 feet below grade. Soils from the column will be composited and analyzed at LIALS for full TCLP/RCRA parameters as necessary to obtain disposal approval from a licensed facility.

#### **Fuel Oil UST Closure:**

On June 8, 2010, *LEA* investigated the potential presence of an underground storage tank (UST) in the southwest corner of the Site building. The overlying concrete slab was penetrated and soils were removed by hand until the top of a 550-gallon steel tank was discovered 1 foot below the ground surface. The bung for the feed and return was removed from the tank for inspection and the tank was found to contain only 1 inch of bottom-lying fuel oil sludges. No water was present within the tank and there were no obvious holes or significant pitting in the tank's structure. There is no evidence that the tank has released any product to surrounding soils or groundwater.

As discussed with the NCDH and NYSDEC, the tank will be abandoned in place in accordance with NCDH protocol, as removal from inside the building could cause a dangerous condition.

#### **Completion of Lithology Soil Investigation:**

The previous lithology boring that was extended to 70 feet below grade will be continued in the vertical dimension until the Gardiners Clay or 100 feet below grade is reached, whichever occurs first. Lithology information gathered during the investigation will provide valuable data that will be used to design the vertical groundwater profiling discussed below.

## **Vertical Groundwater Profiling:**

After completion of the lithology soil investigation, vertical groundwater profiling will be conducted to the north of the dry cleaning machinery. Samples will be discretely collected using Geoprobe's SP-16 stainless steel sampler from the following intervals; 30 - 34 feet, 40 - 45 feet, 50 - 54 feet, 60 - 64 feet, 70 - 74 feet, and 80 - 84 feet below grade. However, the deepest sample interval will ultimately be determined when the depth of the Gardiners Clay is confirmed. Samples will be drawn from depth with a peristaltic pump and dedicate tubing. Purge water will be placed into DOT 55-gallon liquid drums where the contents will be characterized as necessary and disposed of at an approved facility.

Given the nature of the sampling method, each sample interval will be collected from a separate, but nearby boring – typically within 2 feet of each other. Upon collection of each sample, the borehole will be filled in using bottom-up pressure grouting to prevent downward migration of contaminants through the borehole.

#### **Additional Groundwater Monitoring Wells:**

There are currently eleven (11) small-diameter monitoring wells at the Site. Two (2) additional PVC monitoring wells will be installed at greater depth to screen to the top of the clay layer found at the site; one (1) within the building and one (1) in the rear courtyard. The wells will be designated MW-02 (20-30) and MW-01 (20-30), respectively. Please refer to Figure 4.0 for proposed monitoring well locations.

The wells will be installed using direct-push methods and a model 6610DT or model 420M portable Geoprobe® unit, or equivalent. As soil borings have already been conducted at each proposed well location, no soil profiles will be collected prior to drilling the wells. The monitoring wells will be constructed of 2-inch Schedule-40 PVC well screen flush threaded into Schedule-40, PVC riser pipe of the same diameter. 1-inch Schedule-40 well material may be substituted if conditions require. The size of the screen will be No. 10 slot (0.010 inch). As requested by NYSDEC, the screened area will be 10 feet long, set at the 20 to 30 foot interval. The base of each well will be equipped with threaded bottom plugs, while the top of each well will be equipped with a vented, non-threaded cap and bolt-down manhole cover set in concrete. Procedures for monitoring well installation are provided in the ETL Phase I RI/FS Work Plan Sampling and Analysis Plan dated October 30, 2008; however the use of direct push technology will eliminate drilling cuttings during monitoring well installation.

Following completion of the well installations, the top of casing will be surveyed, the wells will be developed and a round of groundwater samples will be collected and sent to the laboratory for analysis.

A summary of the analyses that will be performed is presented in Table I. Samples will be analyzed by LIALS.

Samples will be collected and handled under proper chain of custody protocol. The chain of custody form will record the sample and container type, identification, a description, date and time of sampling, sampler name, method of transport and analysis requested.

#### **Project Schedule:**

Removal of the dry cleaning machinery commenced on July 1, 2010. Pending NYSDEC approval of this Work Plan, the Supplemental Phase I RI is anticipated to commence on or about July 12, 2010. The IRM Workplan as may be modified by the data received will commence on or about July 19, 2010. The extent of the interior soil excavation will be upon the results of the analysis of the borings to determine the extent of the vadose zone contamination. Abandonment of the 550-gallon fuel oil UST is anticipated to be completed by July 7, 2010. Installation of additional monitoring wells, completion of lithology and vertical profiling is slated for the week of July 26, 2010.

#### **Report of Findings:**

**LEA** will prepare a report based on a review of validated laboratory data and field data, and plans to issue this Supplemental Phase I RI report in September, 2010.

Should you have any questions or comments, please feel free to contact us.

Respectfully Submitted,

Laurel Environmental Associates, Ltd.

Scott A. Yanuck

Principal

Enclosures: Table I, Supplemental Phase I RI Sampling and Analytical Summary

Figure 1.0, Site Location Figure 2.0, Site Layout

Figure 3.0, Proposed Supplemental Phase I RI Soil Boring Locations Figure 4.0, Proposed Supplemental Phase I RI Monitoring Well Locations

cc: Mr. Theodore Firetog, Law Offices of Theodore W. Firetog

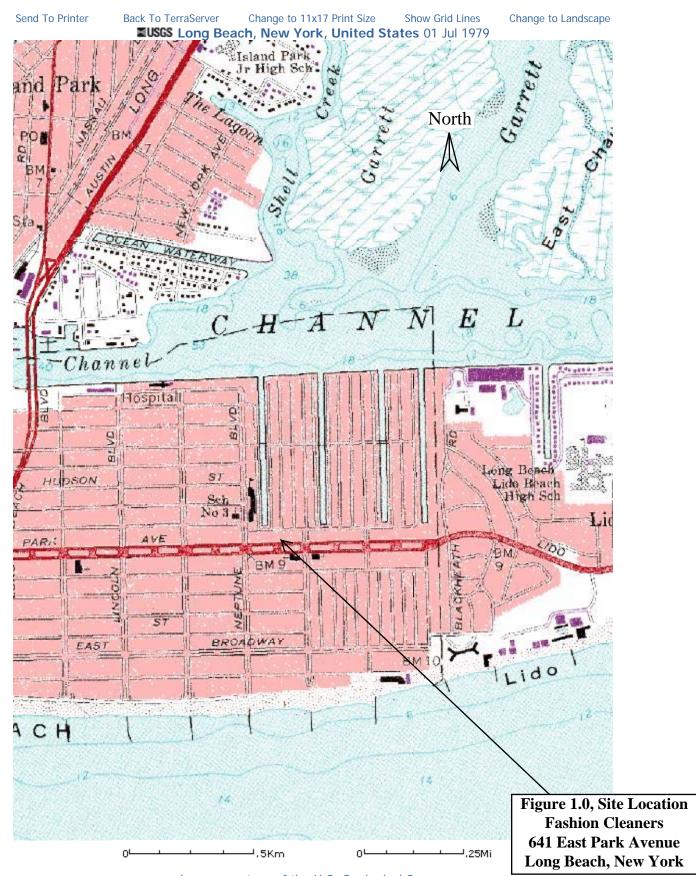
Mr. Walter Parish, NYSDEC

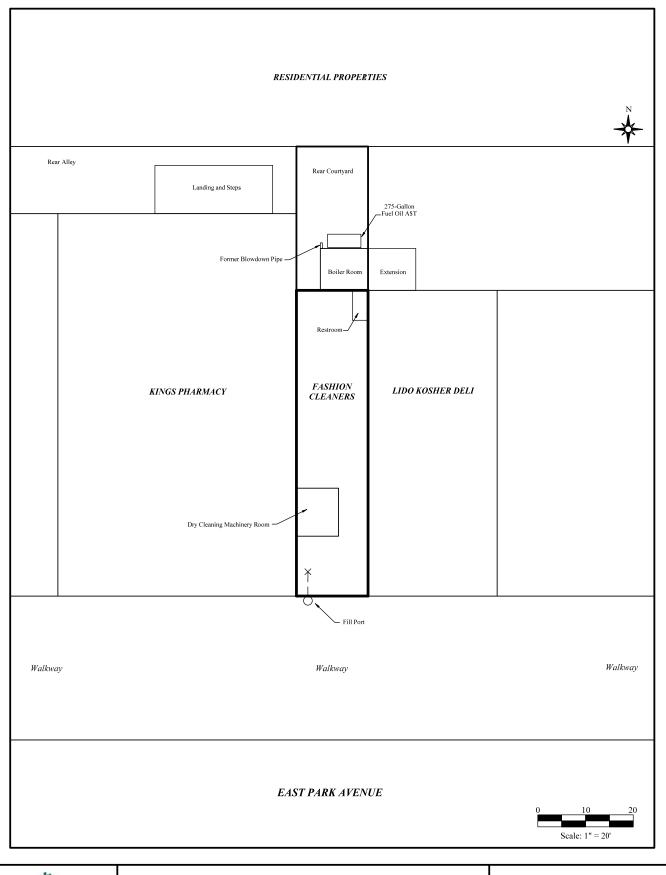
Mr. Joseph DeFranco, NCDH

Mr. Michael Wayne, Cougar Management & Realty Services, Inc.

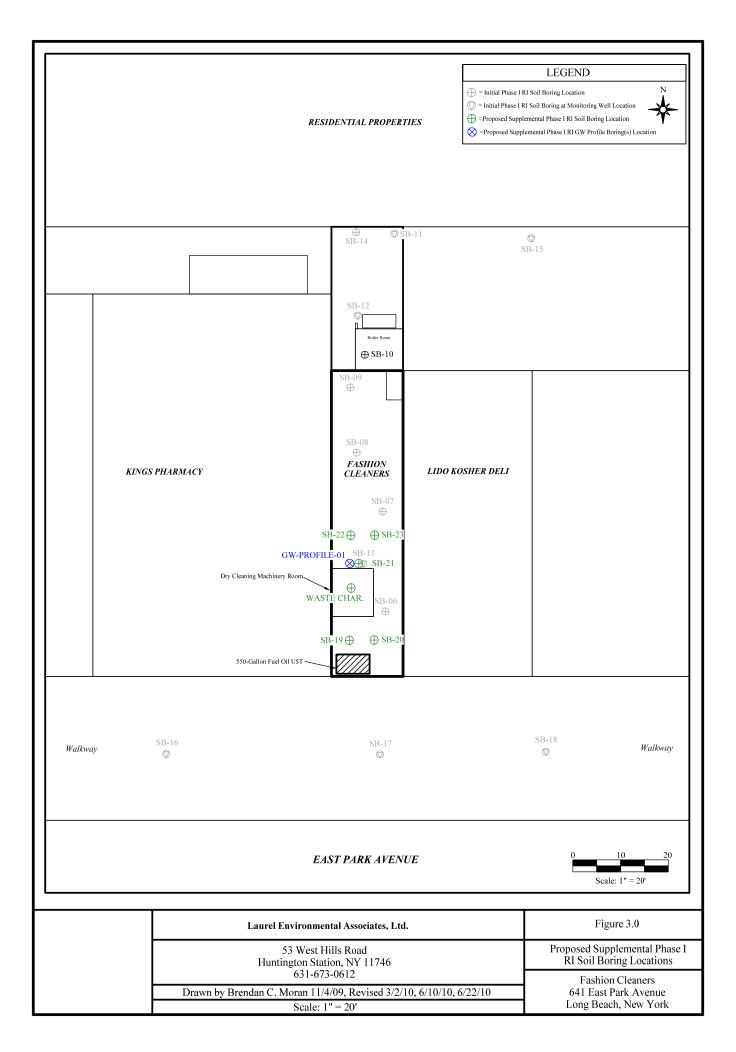
Mr. Arnold Rabinor, Lido Realty Company

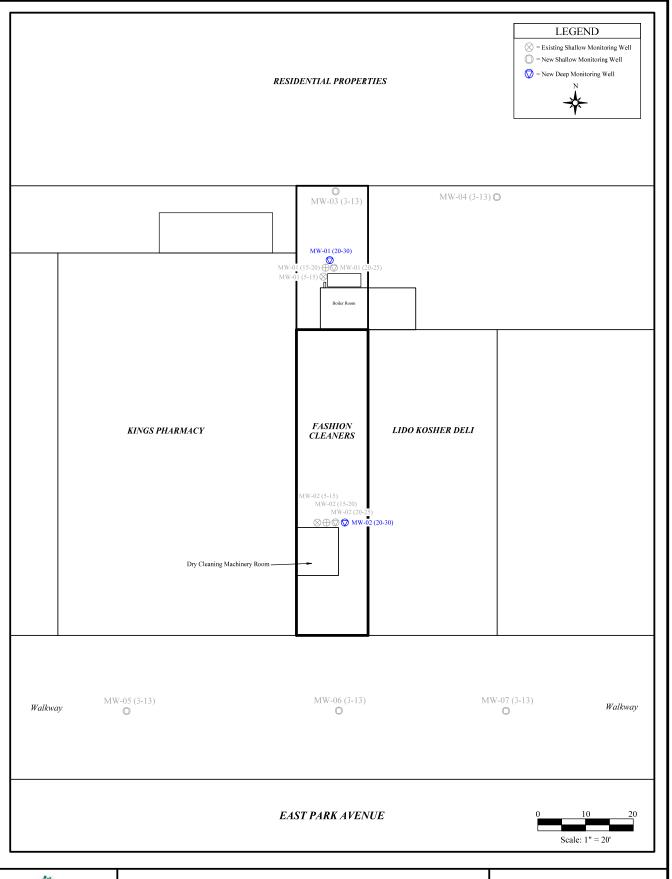
Mr. Steven Karpinski, NYSDOH





Laurel ENVIRONMENTAL ASSOCIATES, LITD	Laurel Environmental Associates, Ltd.	Figure 2.0
	53 West Hills Road Huntington Station, NY 11746 631-673-0612	Site Layout
		Fashion Cleaners 641 East Park Avenue Long Beach, New York
	Drawn by Brendan C. Moran 12/10/08, Revised 5/20/09	
	Scale: As Shown	





"W. W	Laurel Environmental Associates, Ltd.	Figure 4.0
Laurel ENVIRONMENTAL ASSOCIATES, LTD	53 West Hills Road Huntington Station, NY 11746	Supplemental Phase I RI Proposed Monitoring Well Locations
	631-673-0612	Fashion Cleaners 641 East Park Avenue Long Beach, New York
	Drawn by Brendan C. Moran 12/10/08, Revised 5/20/09, 3/3/10	
	Scale: 1" = 20'	