

13 January 2011

Elizabeth Palmer Fisher Brothers Management 299 Park Avenue, Suite 42 New York, NY 10171

Re: Preliminary Findings Limited Phase II Environmental Site Investigation 105-107 Washington Street (Lot 4) and 111-121 Washington Street (Lot 12) New York, New York Langan Project No. 001948405

Dear Ms. Palmer:

As requested, Langan completed a preliminary Phase II Environmental Site Investigation (ESI) at the above-referenced property. The Investigation consisted of completion of tests in the area of an underground storage tank (UST) that was identified onsite based on review of New York City Department of Building (NYCDOB) records. According to New York State Department of Environmental Conservation (NYSDEC) records, the tank consists of a gasoline UST that was closed-in-place in 1997. The UST reportedly had an associated fuel pump island located directly adjacent to the east and a remote fill port line that extended west to the curbline of Washington Street.

On 11 January 2011, Langan completed a test pit on the south central portion of the property and uncovered a 4,000-gal gallon capacity UST encased in an approximate one foot thick concrete vault. Test pits were completed by Environmental Industrial Service Corp. of New Jersey (EISCO-NJ) using a Deere 35D track-mounted excavator with a 24-inch toothed bucket. The location of the UST and the extents of the completed test pits are provided on the attached Figure 1.

The concrete vault measured 8.5 feet wide, 6 feet deep, and approximately 25.5 feet long (the southern extent of the vault could not be verified without undermining the onsite construction trailer). The top of the vault was located approximately 3 feet below ground surface (bgs). Based on visual observations, the northern or western walls of the concrete vault appeared to be in good condition with no cracks observed. The remainder of the vault could not be exposed due to the presence of onsite construction trailers. A suspected fill port line with intact 3-inch piping was present on the northern end of the vault. The piping extended south over the vault

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Jorge H. Serkowstz, Ph.D. Renald D. Boyer, P.E. Richard Burrow, P.E. David J. Charette, P.W.S. Steven A. Ciambrouchini, P.G. Gerard M. Coacsa, P.E. John C. Cettl. P.J. Michael E. Cotritau, P.E. Mark T. Devaney, M.A. Daniel D. Disaria, P.E. Michael M. Goldstein Sam B. Ishak; M.C.S.E. Robert Y Koto, P.G. William G. Lothian, P.E. Michele E. O'Connor, P.E. Joseph E. Romano, P.L.S. Leonard G. Savino, P.E. Eric 8. Schwarz, P.E. MarkK, Seel, P.E., P.G. Richard R. Steiner, P.E. Michael D. Szora, C.L.A., A.S.L.A. Bryan M. Waisner, P.E. Beverly R. Williams, S.P.H.R.

Stewart H: Abrams, P.E. Ontar M: Abamman, Ph.D., P.E. Brian A, Blum, C.P.G. Paul D, Fisher, L.S. Gerard P. Fitamant, P.E. Michael J. Fewler, P.E. Vijay B. Patel Karl A. Pohnko, P.E. and continued west at the southern end of the vault. Due to physical site limitations, only the northern and western edges and the northern portion of the top of the vault were exposed.

Near the southwestern corner of the UST stained soils exhibiting strong odors were encountered at the base of the tank vault at a depth of 9 feet bgs. The stained soil extended to the bottom of the test pit (12 feet b.g.s.).

Soil Sampling

Soils observed in the test pit consisted of brown sand from the surface to 9 feet bgs (suspected to be fill sand from the vault installation) Below the brown sand is a 1-foot thick layer of fill (consisting primarily of brick demolition debris) underlain by a 1-foot thick layer of gravel and a red-brown silty sand.

A photoionization detector (PID) was used to monitor the air and soil during excavation. Soil samples were collected from the western side of the vault to be analyzed for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). SS-1 was collected from 13.5 feet to 14 feet bgs on the northern side of the western edge of the vault. Mild odors were observed during excavation activities. No PID readings were detected. Soil sample SS-2 was collected from 11.5 feet to 12 feet bgs from below the piping on the southern end of the western edge of the vault. Strong odors and stained soil were observed from 9 to 12 feet, but no PID readings were detected. Soil sample 1.

Soil samples were submitted to Accutest Laboratories of Dayton, NJ for analysis

Upon completion of the investigation, EISCO backfilled the test pits with the soil that was removed and compacted the soil with the excavator bucket as backfilling proceeded. The gravel was replaced on the surface and compacted using a vibratory compactor.

Groundwater Sampling

A groundwater sample was collected from an existing piezometer location in the sidewalk near the northwest corner of the property. The location of the piezometer is shown on Figure 1. The groundwater sample was submitted to Accutest Laboratories for analysis for VOCs and SVOCs.

CONCLUSIONS

Based on observations made during the Phase II ESI activities, Langan has prepared a preliminary cost estimate for the removal of the UST and related impacted soil. As the extent of impacts to south and east and below the tank was limited due to access constraints, the area of impacted soil can not be determined and estimates based on our visual observations are provided.



ltem	<u>Cost</u>
UST Removal, Closure, and Documentation (assuming the UST contained 4,000 gallons of gasoline and water mix)	\$35,000
Impacted Soil (assumes 350 cubic yards of petroleum-impacted soil with impacts isolated to a five foot zone located in the southwest corner of the site)	\$35,000
Treatment of Impacted Groundwater during Site Dewatering	\$40,000
Groundwater Investigation, NYSDEC/NYCOER Submission and Coordination	<u>\$40,000</u>
Total	\$150,000

In order to provide a more refined cost estimate, completion of additional test pits or test borings in conjunction with subsequent geotechnical investigation activities (and once full site access is available) can be conducted. Alternatively, removal of impacted soil can be conducted during tank removal activities based on visual observations and field measurements.

Due to the presence of impacted soils at depth, impacts to underlying groundwater are anticipated. As such, costs associated with installation of monitoring wells and completion of two rounds of groundwater sampling is provided. Although construction dewatering volumes cannot be estimated at this time, budgetary costs for installation and operation of a treatment system to treat impacted groundwater are provided.

If you have any questions, please do not hesitate to contact us to discuss in more detail.

Sincerely, Langan Engineering and Environmental Services, Inc., PC

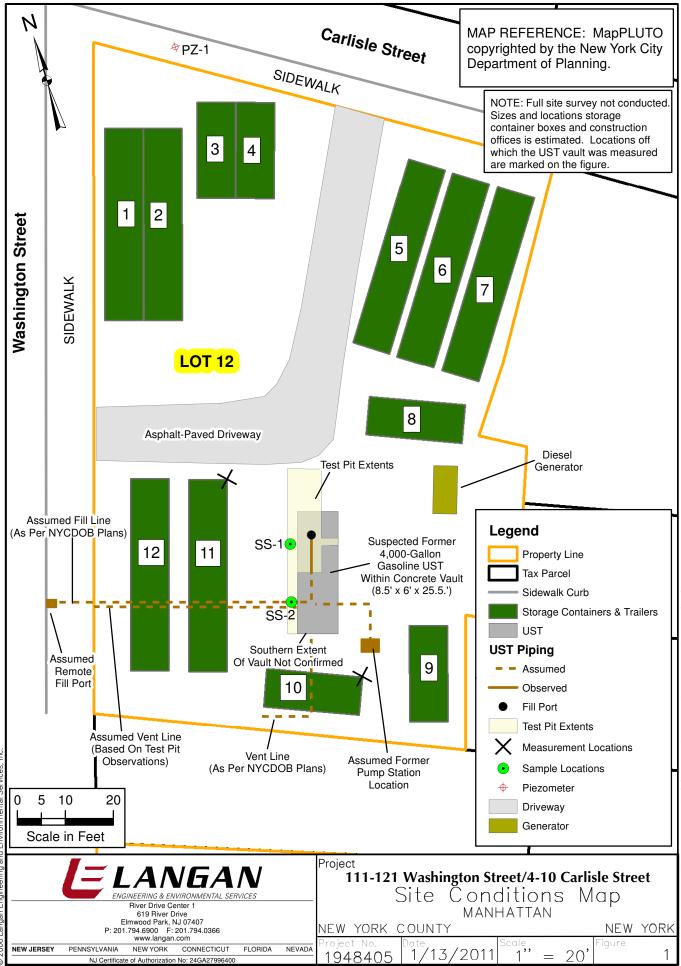
Marshall E. King, P. Project Engineer

Steven A. Ciambruschini, P.G. Senior Associate / Vice President

MK:kn Attachment: Figure 1 – Site Conditions Map

NJ Certificate of Authorization No. 24GA27996400 \\langan.com\\data\EP\\data4\1948401\Engineering Data\Environmental\Reports\Phase II\Preliminary Findings (2012-01-13).docx





\\Langan.com\data\EP\data4\1948401\ArcGIS\ArcMap_Documents\Environmenta\\Figure 4 - Site Conditions Map.