BENCHMARK

ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

September 19, 2008

Mr. Jaspal Walia, P.E. New York State Department of Environmental Conservation 270 Michigan Avenue Buffalo, New York 14203-2999 RECEIVED

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NYSDEC REG 9

FOIL UNREL

Re: 3773 Lake Shore Road, Blasdell, NY Area A – Underground Storage Tank Remedial Measures Summary Report

Dear Mr. Walia:

In accordance with our December 19, 2007 Remedial Work Plan, Benchmark Environmental Engineering and Science, PLLC (Benchmark) has completed remedial activities associated with the underground storage tank (UST) and impacted soil/fill in Area "A" of the subject Site (see Figure 1), including removal of miscellaneous empty drums. This report has been prepared to document the associated excavation, disposal, and backfill activities, and present confirmatory sampling laboratory analytical results. Specifically, this report provides:

- A summary of UST and drum removal, excavation, disposal, and backfill activities
- Confirmatory sampling analytical results
- Waste disposal records
- Photographs of the remedial work
- Conclusions

UST AND SOIL/FILL REMOVAL

UST removal activities were undertaken on September 2, 2008. The removal work was performed by Benchmark's designated subcontractor, AAA Environmental, Inc. of Rochester, New York. Benchmark's geologist, Mr. Thomas Behrendt, was on-site to observe the removal activities. Attachment 1 includes photo documentation of the remedial activities.

Soil/fill overlying the majority of the UST had previously been removed and staged adjacent to the excavation. Accordingly, removal work was initiated by lifting the UST from the excavation and staging it on poly sheeting. Benchmark personnel measured the UST dimensions at approximately 13 feet in length and 4 feet in diameter. The excavated tank was cut open and approximately 5 cubic yards of sand

were removed and staged on poly sheeting near the excavation. The tank was subsequently cleaned in preparation for off-site steel scrap recycling. No liquids or sludges were present.

Following tank removal, AAA Environmental initiated excavation of impacted soil/fill surrounding the UST using a hydraulic track excavator. The impacted soil/fill was excavated until the sidewalls and bottom of the excavation no longer exhibited visual or olfactory evidence of contamination, and PID scans did not detect any volatile organic compounds (VOCs) exceeding background concentrations (i.e., 0.0 ppm).

During soil/fill excavation, a 15-inch diameter vitrified clay pipe (VCP) was encountered running in a north-south direction approximately 3 feet beneath the bottom of the UST. Based on facility utility drawings, this pipe was identified as a facility storm sewer. The pipe was not installed on bedding material, nor did Benchmark personnel observed any breaks, leaks or other indications of openings in the piping. However, because impacted soil/fill appeared to extend beneath the sewer it was necessary to remove an approximate 12-foot section of the VCP piping to facilitate the excavation work. (This section was later replaced with a new length of 15-inch PVC piping as described below).

The final excavation area measured approximately 22.5 feet in length by 11 feet wide at grade, and tapered inward to a depth of approximately 10.5 feet below ground surface (fbgs) (see Figure 2). Approximately 50 cubic yards of impacted soil/fill was stockpiled on poly sheeting with the sand removed from the UST, separate from the clean overlying soil/fill material previously removed. Other than a small amount of storm water from the removed pipe section, the excavation remained dry throughout the period.

CONFIRMATORY SAMPLING

Confirmatory soil samples were collected from the four sidewalls of the excavation (identified as North Wall, South Wall, East Wall, and West Wall) and the bottom of the excavation (identified as Bottom) following completion of the excavation work. Sidewall samples were collected by scraping the bucket of the excavator across the excavation wall. The Bottom sample was collected from the base of the excavation, characterized as native sandy clay soils, at a depth of approximately 10.5 fbgs. Dedicated stainless steel spoons and sample pans were used to transfer the confirmatory soil samples to the appropriate laboratory provided glass containers. The samples were cooled to 4°C in the field and transported, under chain of custody command to Test America, Inc. located in Amherst, New York for analysis of toluene in accordance with USEPA SW-846 Method 8021.



Table 1 summarizes the soil analytical results for the confirmatory samples. Detected toluene concentrations are listed and compared to NYSDEC Technical Assistance and Guidance Memorandum (TAGM) HWR-94-4046 Recommended Soil Cleanup Objectives (RSCOs). Attachment 2 includes a copy of the laboratory analytical data package. As indicated on Table 1, toluene concentrations were generally reported as not detectable or at levels well below the TAGM RSCO (i.e., 1.5 mg/kg) in each of the confirmatory samples.

IMPACTED SOIL AND DRUM DISPOSAL

On September 5, 2008, the staged impacted soil/fill and sand pile from the UST excavation was loaded into dump trailers provided by Waste Management, and transported to the Waste Management Model City (Subtitle C) Landfill for disposal. The 12-foot section of VCP was also disposed at the Model City facility. Concurrently, two soil/fill piles, intermingled with empty 55-gallon drums, were excavated to native soil. The drums were segregated, crushed and shipped off-site for steel scrap recycling with the UST. The soil/fill material intermingled with the drums was shipped off-site to Waste Management's Model City with the impacted soil/fill and sand from the UST removal. Attachment 3 includes a copy of scale tonnage receipts. A total of 81.44 tons of soil/fill and sand were disposed.

BACKFILL AND RESTORATION

On September 5, 2008, Benchmark and AAA Environmental replaced the removed VCP piping with a new length of 15-inch diameter PVC storm water pipe. The new section was coupled to the existing storm water pipe with Fernco adaptors. Backfill activities were also completed at this time. Crushed concrete backfill, furnished by Swift River Associates under NYSDEC Beneficial Use Determination 278-9-15, was initially used to carefully surround the new section of pipe. The remainder of the excavation was backfilled with approximately 35 cubic yards of this same material and soil previously overlying the UST. Per our December 19 Work Plan, Benchmark had previously collected four samples of the soil/fill that was overlying the UST for analysis of toluene (see analytical data in Attachment 2). Since this material exhibited non-detectable toluene concentrations, it was deemed acceptable for reuse as backfill material in the excavation. Backfill material was placed into the excavation, compacted in 2-foot lifts using the excavator, and smoothed with the excavator bucket to match final grade and minimize settling.

CONCLUSIONS

Based on the field observations/measurements and the confirmatory analytical results, removal of the UST, drums and impacted soil/fill in Area A of the Site have been completed in accordance with the requirements of the December 2007 NYSDEC-approved Remedial Work Plan. We therefore trust that the remedial measures described herein satisfy the NYSDEC's concerns relative to the underground storage tank Area A.



Please contact us if you have any questions or require additional information.

Sincerely,

Benchmark Environmental Engineering & Science, PLLC

Thomas H. Forbes, P.E.

Project Manager

c: J. Snyder

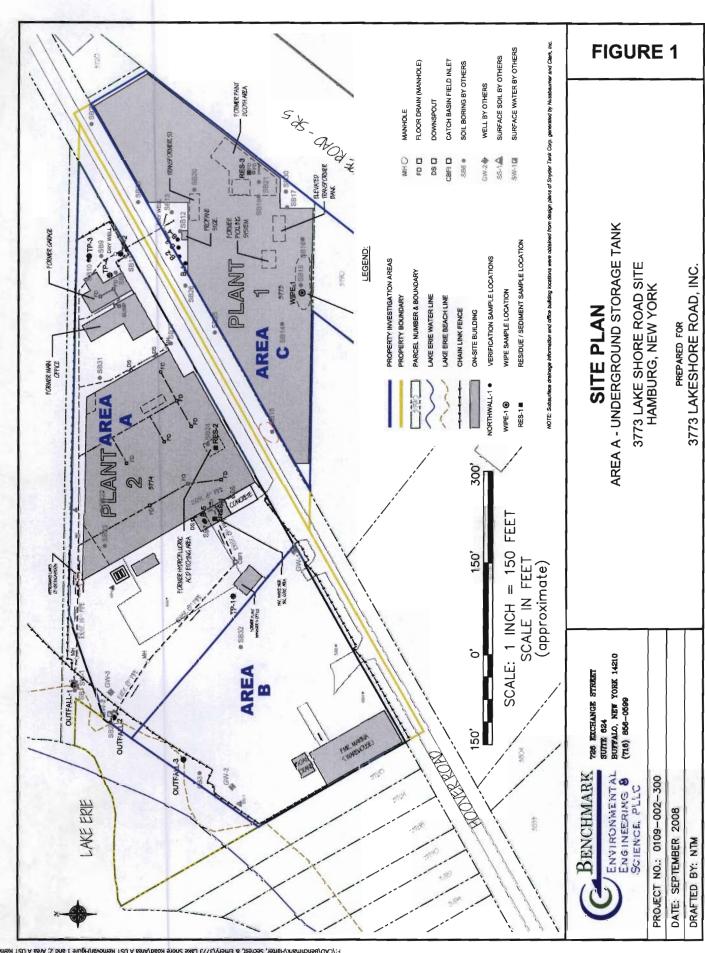
N. Katz, Esq.

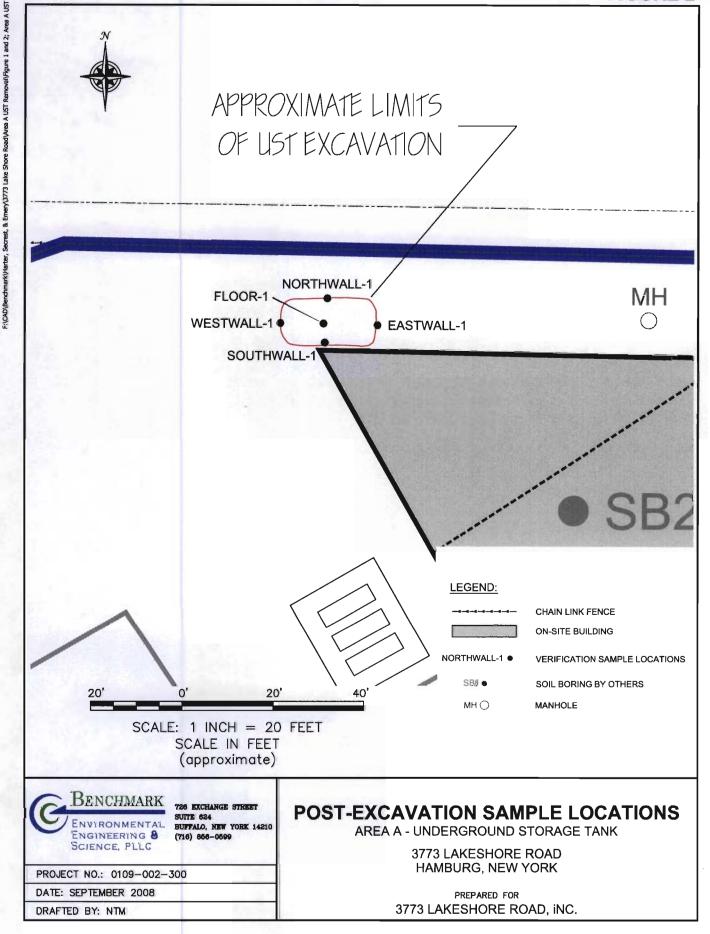
C. Slater, Esq.

Att.



FIGURES





TABLES



TABLE 1

CONFIRMATORY ANALYTICAL RESULTS

3773 LAKE SHORE ROAD HAMBURG, NEW YORK

Parameter	Northwall #1	Southwall #1	Westwali #1	Eastwail #1	Bottom #1	TAGM 4046 (ug/kg)
Volatile Organic	Compound (ug/	/kg)				
Toluene	300	0.69	ND	14	ND	1500

ATTACHMENT 1

SITE PHOTOGRAPHS



Client Name:

Site Location:

3773 Lake Shore Road

Project No.:

0109 - 001 - 101

Harter, Secrest & Emery

Photo No.

Date

09/02/08

Direction Photo Taken:

South

Description:

Toluene Tank removal, tank is 13 feet long x 4 feet wide.



Photo No.

Date

2

09/02/08

Direction Photo Taken:

South

Description:

Placing Toluene tank onto poly.





Client Name:

Site Location:

3773 Lake Shore Road

Project No.:

Harter, Secrest & Emery

Photo No.

0109 - 001 - 101

3

09/02/08

Date

Direction Photo Taken:

North

Description:

Removing tank contents.



Photo No.

Date

4

09/02/08

Direction Photo Taken:

North

Description:

Empty tank on poly next to covered pile of excavated soil/fill.





Client Name:

Site Location:

3773 Lake Shore Road

Project No.:

0109 - 001 - 101

Harter, Secrest & Emery

Photo No.

Date

5

09/02/08

Direction Photo Taken:

North

Description:

Tank excavation, bottom of excavation ~10.5 fbgs at bottom 15-inch drain line flowing north to south.



Photo No.

Date

6

09/05/08

Direction Photo Taken:

West

Description:

Disposal of excavated soil/fill.



Prepared By: TAB



Client Name:

Site Location:

3773 Lake Shore Road

Project No.:

0109 - 001 - 101

Harter, Secrest & Emery

Photo No.

Date

09/05/08

Direction Photo Taken:

West

Description:

Removal of drum of northern drum and soil pile.



Photo No.

Date

8

09/05/08

Direction Photo Taken:

West

Description:

Removal of southern drum and soil pile.



Prepared By: _____TAB



Client Name:

Site Location:

3773 Lake Shore Road

Project No.:

0109 - 001 - 101

Harter, Secrest & Emery

Photo No.

Date

9

09/05/08

Direction Photo Taken:

South

Description:

Northern drum pile after removal.



Photo No.

Date

10

09/05/08

Direction Photo Taken:

South

Description:

Southern drumpile after removal.





Client Name:

Site Location:

3773 Lake Shore Road

Project No.: 0109 - 001 - 101

Harter, Secrest & Emery

Photo No.

Date

11

09/05/08

Direction Photo Taken:

North

Description:

Toluene tank excavation backfilled.



. ATTACHMENT 2

LABORATORY ANALYTICAL DATA

Rept: AN1246	A8A47204	Reporting Limit	10	66-138 66-141
	TOL-4 A08-A472 08/26/2008	Sample Value	ND	58 * 55 *
	A8A47203	Reporting Limit	11	171-99 171-99
	TOL-3 A08-A472 08/26/2008	Sample Value	QN.	80 75
k eshore Rd. site TOLUENE	A8A47202	Reporting Limit	11	66-138 66-141
Benchmark Benchmark - 3773 Lakeshore Rd. site METHOD 8021 - TOLUENE	TOL-2 A08-A472 08/26/2008	Sample Value	QN	78 80 80
Benc	A8A47201	Reporting Limit	11	66-138 66-141
	TOL-1 A08-A472 08/26/2008	Sample Value	QN	82
**		Units	UG/KG	**
Date: 09/02/2008 Time: 10:23:56	Client ID Job No Lab ID Sample Date	Analyte	Toluene	p-Bromofluorobenzene a,a,a-Trifluorotoluene

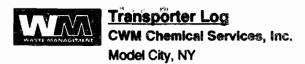
NA = Not Applicable ND = Not Detected

Date: 09/04/2008 Time: 14:03:40			Benc	Benchmark Benchmark - 3773 Lakeshore Rd. site METHOD 8021 - TOLUENE	k eshore Rd. site TOLUENE				Rept: AN1246
	,								
Client ID Job No Sample Date		BOTTOM #1 A08-A652 09/02/2008	A8A65205	EASTWALL #1 A08-A652 09/02/2008	A8A65201	NORTHWALL #1 A08-A652 09/02/2008	A8A65203	SOUTHWALL #1 A08-A652 09/02/2008	A8A65204
Analyte	Units	Sample Value	Reporting Limit	Sample	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Toluene	UG/KG	QN	0.24	14	0.20	300	2.5	0.69	0.23
p-Bromofluorobenzene a,a,a-Trifluorotoluene	ж ж_	75 67	66-138 66-141	76 79	66-138 66-141	* 0.5 * 0.6	66-138 66-141	87 07	66-138 66-141

Client ID Job No Sample Date		WESTWALL #1 A08-A652 09/02/2008	A8A65202						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Toluene	UG/KG	ND	0.23	NA		NA		NA	
p-Bromofluorobenzene a,a,a-Trifluorotoluene	**	78 71	66-138 66-141	NA AN		NA NA		NA NA	

ATTACHMENT 3

WASTE MANAGEMENT MODEL CITY SCALE TONNAGE SUMMARY



Driver's Comments

164755

Cubic Yards

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Driver's Comments

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Cubic Yards

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Driver's Comments

164758

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