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June 26, 2007 (ECI 01-2300-3057)

Mr. Mark Drews Wisconsin Department of Natural Resources 141 Northwest Barstow Street, Room 180 Waukesha, Wisconsin 53188



RE:

Site Investigation Status Update, Proposed Workplan and Cost Estimate, Express Cleaners,

3941 North Main Street, Racine, Wisconsin; WDNR BRRTS #02-52-547631

Dear Mr. Drews:

During March and April 2007, Northern Environmental Technologies, Incorporated (Northern Environmental) initiated the soil and groundwater sampling plan proposed in the March 14, 2007 Wisconsin Department of Natural Resources (WDNR) approved site investigation workplan for Express Cleaners, 3941 North Main Street, Racine, Wisconsin (the Site). We are providing a brief update of the site investigation, and requesting approval and funding for additional work at the Site.

#### SOIL AND GROUNDWATER SAMPLING SUMMARY

In accordance with the site investigation workplan, Northern Environmental documented the installation of nine boreholes (B4 through B12), four water table monitoring wells (MW1 through MW4), one piezometer (PZ1), and two temporary monitoring wells (TW1 and TW2) on March 27, 28, and 29, 2007. The site layout with borehole and well locations are shown in Figure 1.

Soils encountered at the Site consisted of approximately 4 to 6 feet of silty sand fill and/or sand dune deposits underlain by silty clay till. Groundwater elevation measurements are summarized on Table 1. Groundwater was encountered in the water table monitoring wells approximately 2 to 4 feet below grade (fbg). Groundwater within the piezometer was at approximately 18 fbg. Groundwater generally flows north-northwest across the Site. Aquifer testing indicated a relatively high hydraulic conductivity in the water table wells screened in silty sand and very low hydraulic conductivity in the piezometer screened within silty clay till. Measured groundwater elevations in the MW1/PZ1 well nest indicates a downward vertical gradient of groundwater. However, the low hydraulic conductivity of the silty clay till limits significant downward migration of contaminants.

#### **Soil Sampling Results**

Soil sample field screening and laboratory analysis results are summarized in Table 2. Based on field screening and laboratory results, released chlorinated volatile organic compounds (CVOCs) likely originated from multiple source areas. The primary source areas appear to be tetrachloroethene (PCE) surface spillage along the east side of the Express Cleaners unit (former solvent storage area) and spillage/leakage from the former dry cleaning machine. Spillage/leakage within the building likely migrated into soil through cracks or seams in the concrete floor. Dry cleaning solvents spilled outside likely drained east across the asphalt pavement and into surface soil along the eastern Site boundary. Breakdown products of PCE (trichloroethene, cis 1,2-dichloroethene) were also detected in the soil samples. The greatest breakdown product concentrations were found along the eastern property boundary (B9). Breakdown products were also

detected at elevated concentrations beneath the Site building. The presence of breakdown product concentrations suggests released PCE occurred throughout the history of dry cleaning activities at the Site.

Soil contamination extends up to 14 fbg (8 feet into silty clay till) in the source area, but does not appear to extend more than a few feet into silty clay till away from the source area. The vertical extent of released CVOCs in soil has been determined. However, the horizontal extent of CVOCs in soil has not been determined and likely extends off site to the north and east.

### **Groundwater Sampling Results**

Groundwater sampling results are summarized in Table 3. CVOCs in groundwater are present beneath Express Cleaners (TW1 and TW2) and north and east of the Site building (MW1, MW2, and MW3). Breakdown products of PCE (trichloroethene and cis 1,2-dichloroethene) were also detected in groundwater. Elevated concentrations of breakdown products in groundwater suggests that PCE releases occurred throughout the history of dry cleaning activities at the Site.

The upgradient (southeastern) extent of contamination in groundwater (MW4) has been defined. However, CVOC-contaminated shallow groundwater likely extends off site to the north and east. CVOCs were not detected in groundwater from the deeper silty clay till aquifer (PZ1). The extremely low hydraulic conductivity of the silty clay till is limiting the downward migration of contaminants in groundwater. Therefore, the vertical extent of CVOCs in groundwater has been defined.

## **PROPOSED WORKPLAN**

The WDNR requires that the vertical and horizontal extent of CVOCs in soil and groundwater be defined. Additionally, an assessment of potential CVOC vapor migration should be completed to determine if there is a risk of infiltration of CVOC vapors into the Site building. The proposed work plan consists of the following tasks.

Task 1.0	Additional Site Investigation
Task 2.0	Data Analysis and Interpretation
Task 3.0	Project Management

Project assumptions and tasks are described below.

# **Task 1.0 Additional Site Investigation**

The goal of the site investigation is to define the vertical and lateral extent of CVOCs in soil and groundwater. This information is essential for determining the risk to human health and the environment and evaluating the necessity of interim actions or a remedial action program. The field investigation will be performed according to section NR 716.11, Wisconsin Administrative Code (s. NR 716.11, Wis. Adm. Code).

## Subtask 1.1 Vapor Intrusion Assessment

We propose to collect two sub-slab air samples from beneath Express Cleaners and one sub-slab air sample from beneath the vacant unit immediately next to Express Cleaners in the Site building. The proposed air sample locations are shown in Figure 2. The air sampling points will be constructed by drilling a ¾-inch diameter hole through the concrete floor. A ¼-inch diameter nylon tube will be placed in the hole and sealed with a non-volatile organic compound (VOC)-containing sealant. The tubing will be equipped with a valve to seal the tubing at the surface and allow for sample collection. Approximately 1 day after installation, air "grab" samples will be collected from each location using a 1-liter Summa canister. The air samples will be analyzed for VOCs using Method TO-15.

#### Subtask 1.2 Obtain off-Site Access

Before drilling additional soil boreholes, Northern Environmental will petition neighboring property owners for permission to install and sample the boreholes and monitoring wells. Access agreements will be prepared as necessary. A waste oil underground storage tank (UST) formerly was present on the adjacent property to the north (Figure 1). Since soil sampling for VOCs was not completed near the UST nor required by the WDNR before closing this matter, additional negotiations for the access agreement may be required to address the potential of discovering contaminants associated with the UST. An on-site meeting with the adjacent property owners may be required before obtaining an access agreement.

## Subtask 1.3 Drill and Sample Soil Exploration Boreholes

Ten soil boreholes will be advanced and sampled to investigate the horizontal extent of CVOCs in soil. Proposed borehole locations are shown in Figure 2. The boreholes will be advanced to approximately 12 fbg using direct-push (e.g., GeoProbe<sup>®</sup>) soil sampling methods. Due to limited access and to minimize property damage, the two boreholes within the vegetable garden area will be completed using a cart-mounted GeoProbe<sup>®</sup>. In addition, four near-surface composite soil samples (i.e., less than 1 fbg) will be collected from the vegetable garden area east of the Site using hand tools to assess if released CVOCs are present in root zone used to grow vegetable crops.

Soil samples will be collected continuously from each borehole. Soil sample field screening, descriptions, and laboratory analysis will be conducted using the methods outlined in the March 14, 2007 workplan submitted to the WDNR. Up to two soil samples (one shallow [0 to 4 fbg] and one deep [above/near the groundwater table]) collected from each borehole will be laboratory analyzed to confirm the field screening results and to evaluate CVOC concentration and extent. Soil samples will be analyzed for VOCs using Environmental Protection Agency (EPA) Method 8260.

#### Subtask 1.4 Monitoring Well Construction

The proposed locations for five additional 2-inch diameter groundwater monitoring wells are illustrated in Figure 2. Data from the GeoProbe® boreholes and shallow soil sampling completed in Subtask 1.3 will be used to determine the final well locations. The wells will be constructed using standard hollow-stem auger techniques and will intercept the shallow water table. It is anticipated the wells will be completed to 13 fbg with 10 feet of screened interval. The monitoring wells will be constructed, surveyed, developed, and sampled using the methods described in the March 14, 2007 workplan submitted to the WDNR.

Before sampling, groundwater elevations will be measured in all groundwater monitoring wells and the piezometer. Measurements of pH, temperature, dissolved oxygen, oxidation reduction potential, and conductivity will be collected at the flow cell during well purging using a YSI multimeter. The groundwater samples will be laboratory analyzed for VOCs using EPA Method 8260B.

#### Task 2.0 Data Analysis and Interpretation

Data collected during the previous tasks will be compiled and analyzed to determine if the extent of contamination has been defined. Analytical results from the soil, groundwater, and vapor sampling will be reviewed, tabulated, and incorporated into a comprehensive site investigation report.

If additional investigative work is necessary to define the extent of the CVOC release, the work will be discussed with the Ehrlich Family Limited Partnership and the WDNR. Any additional work will be performed at the unit costs included in this proposal. No additional work beyond the scope presented in this workplan will be conducted without the approval of the Ehrlich Family Limited Partnership and the WDNR.

#### **Task 3.0 Project Management**

Project management activities include bidding the drilling and laboratory services, invoicing, budget tracking, subcontractor invoice review, subcontractor coordination and client and regulatory correspondence.

### PROJECT SCHEDULE AND PROBABLE PROJECT COSTS

The field component of the investigation will be started within 2 weeks of receiving WDNR approval of this workplan. The monitoring wells will be developed and sampled within a week of their installation. If the extent of contamination is defined, the site investigation report will be completed within 6 weeks of obtaining the groundwater sampling laboratory reports.

The probable cost to perform the additional site investigation is \$18,628.50 and is itemized on the attached WDNR forms. Based on the above estimated consultant fee and commodity costs, total site investigation costs are estimated to be \$40,181.50.

We appreciate your consideration of this request. Please contact us if you have any questions or comments.

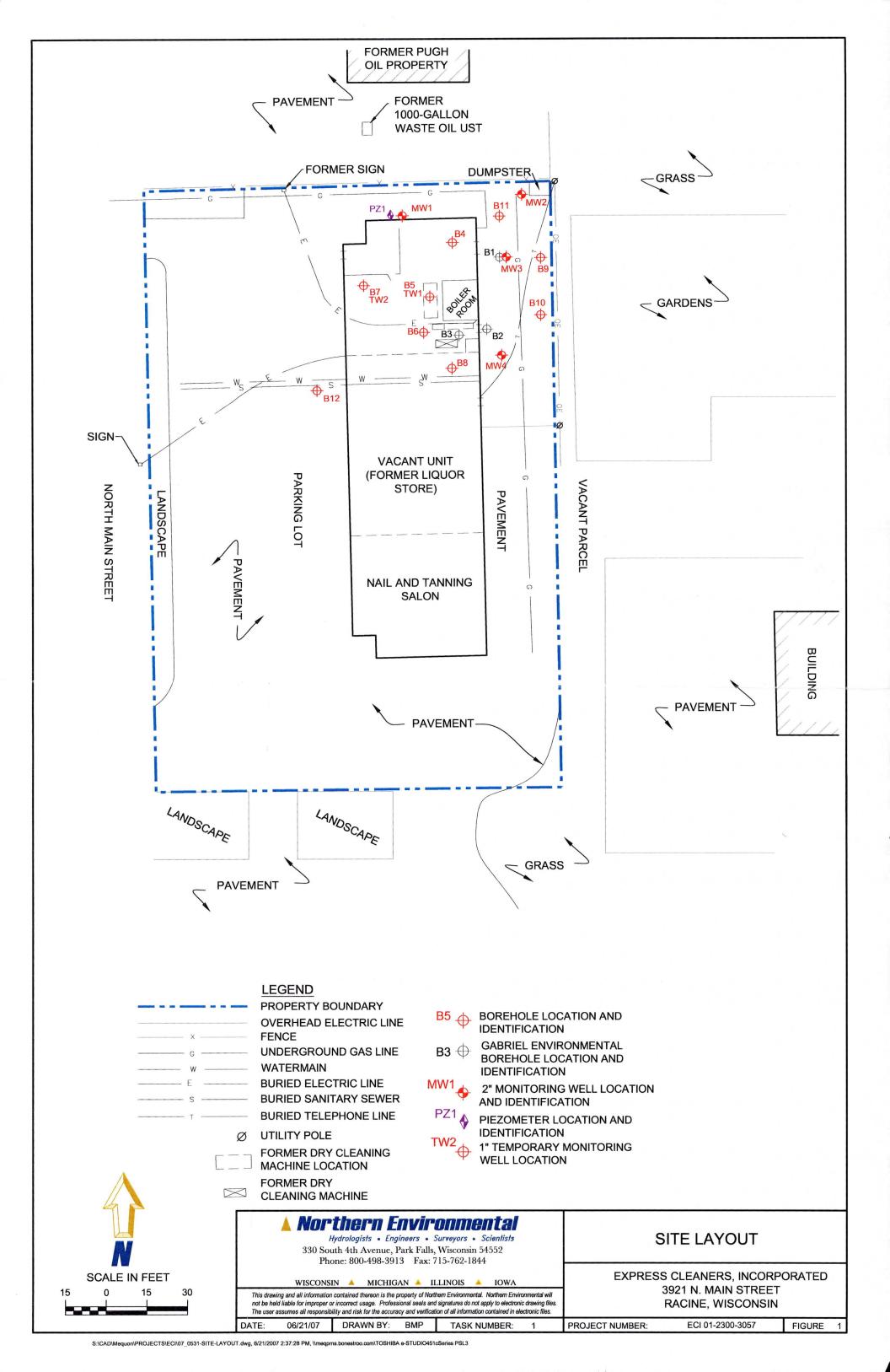
Sincerely,

Northern Environmental Technologies, Incorporated

Christopher C. Hatfield, PG Registered Geologist

CCH/lmh Enclosures

c: Mr. Skip Glor, DeWitt, Ross & Stevens, S.C.



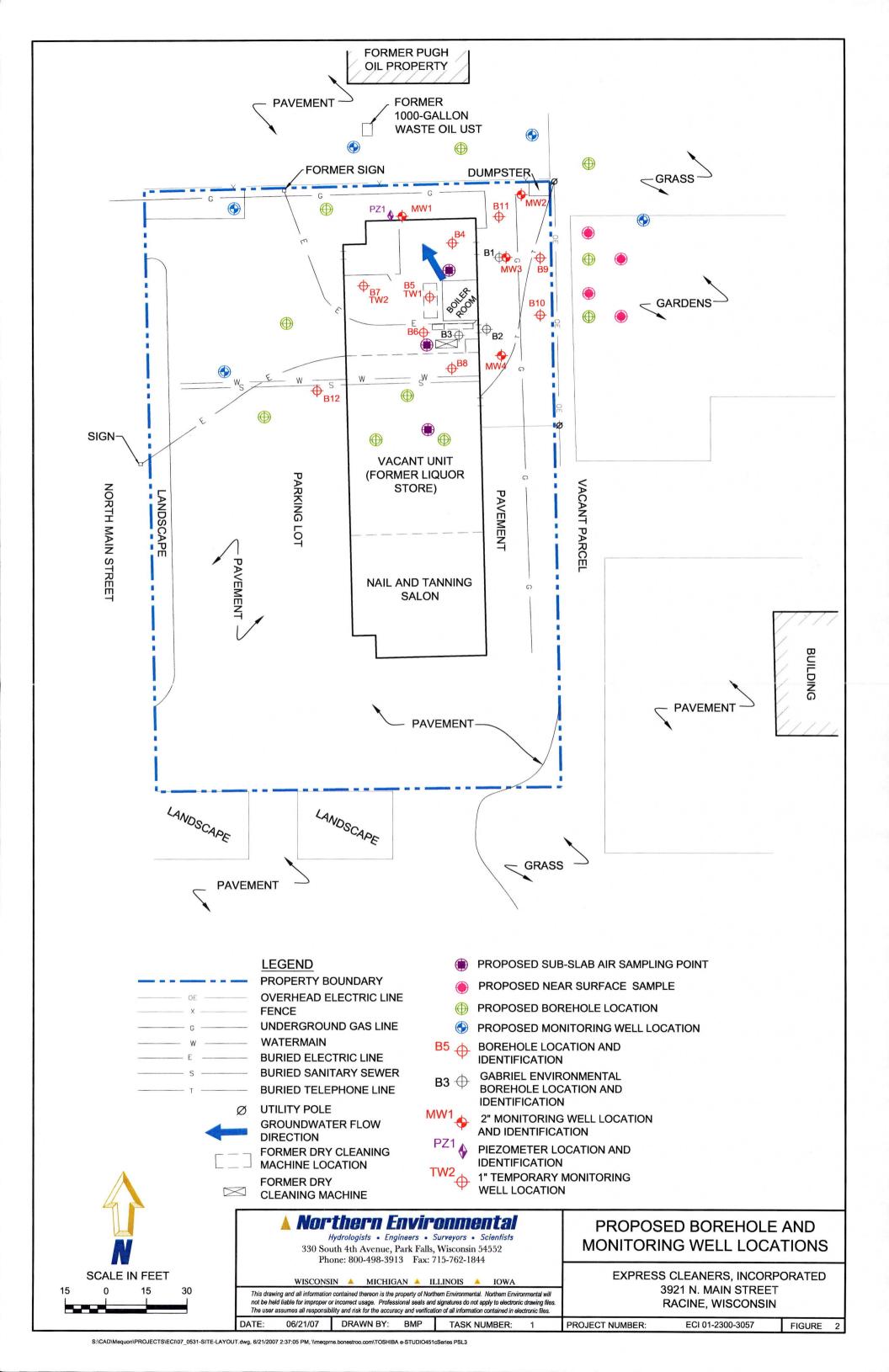


Table 1 Water Level Data, Express Cleaners, Racine, Wisconsin

Well ID	Ground Surface Elevation (feet)	Reference Point Elevation * (feet)	Depth to Water (Feet Below Reference Point)	Water Table Elevation (feet)	
MW1	615.00	614.51	04/05/07 04/27/07	3.02 2.72	611.49 611.79
MW2	614.44	613.79	04/05/07 04/27/07	1.90 1.88	611.89 611.91
MW3	614.90	614.33	04/05/07 04/27/07	2.49 2.07	611.84 612.26
MW4	614.69	614.28	04/05/07 04/27/07	2.31 1.90	611.97 612.38
PZ1	615.01	614.23	04/05/07 04/27/07	27.66 17.70	586.57 596.53
TW1	615.60	615.48	04/05/07 04/27/07	4.00 3.81	611.48 611.67
TW2	615.60	615.49	04/05/07 04/27/07	4.22 4.19	611.27 611.30

Note:

Benchmark is south coupling of fire hydrant located on northeast corner of North Main Street and 3-Mile Road

Table 2 Soil Sample Field Screening and Laboratory Analytical Results, Express Cleaners, Racine, Wisconsin

Borehole Number	Sample Number U.S. Envi	Date Sampled	Sample Depth (feet)	Rae Systems Meter	Thermo Instruments		thene	2- hene	then	thene	Carl per 1)	ي ج	
PZ1	U.S. Envi			Parts Per Billion Meter	Meter	Description	cis-1,2- Dichloroethene	trans-1,2- Dichloroethene	Tetrachloroethene	Trichloroethene (TCE)	Total Organic Carbon (milligrams per kilogram)	Bulk Density	
PZ1		ronmental Pro	tection Agency	Site-Specific Soil	Screening Levels for Soil to	Groundwater	680	1200	130	150	To	<u>ě</u>	
	PZ1-1	03/27/07	1-3	6703	1	Silty sand, Eolian deposits	<25	<25	370	<25	-	-	
	PZ1-2 PZ1-3	03/27/07 03/27/07	3.5-5.5 6-8	4831 5648	1	Silty sand, Eolian deposits Silty clay, till		:		-	-		
	PZ1-4	03/27/07	8.5-10.5	5123	1	Silty clay, till	_	_		-	-		
	PZ1-5	03/27/07	11-13	3958	0	Silty clay, till	-			-		-	
	PZ1-6	03/27/07	13.5-15.5	3869	1	Silty clay, till	-	-	-	-	-	-	
	PZ1-7	03/27/07	16-18	4326 5260	0	Silty clay, till Silty clay, till	-	-	-	-	•	-	
	PZ1-8 PZ1-9	03/27/07 03/27/07	18.5-20.5 21-23	1846	0	Silty clay, till	<25	<25	<25	<25		:	
	PZ1-10	03/27/07	23.5-25.5	1891	0	Silty clay, till	-	-	-	-	-	-	
	PZ1-11 PZ1-12	03/27/07 03/27/07	26-28 28-30	1935 1897	0 0	Silty clay, till Silty clay, till	-		-	-	-	:	
MW1	MW1-1 MW1-2	03/27/07 03/27/07	1-3 3.5-5.5	2925 1748	1.5 . 3	Silty sand, Eolian deposits Silty sand, Eolian deposits	<25	- <25	- 420	- <25	-	-	
	MW1-2	03/27/07	6-8	1369	0	Silty clay, till	- 23	- 23	430	-23		[	
	MW1-4	03/27/07	8.5-10.5	2193	0	Silty clay, till	-	-	-	-	-	-	
	MW1-5 MW1-6	03/27/07 03/27/07	11-13 13.5-15.5	1989 1884	0 0	Silty clay, till Silty clay, till	- <25	- <25	- <25	- <25	-	:	
MW2	MW2-1 MW2-2	03/27/07 03/27/07	1-3 3.5-5.5	9989 1709	4	Silty sand, Eolian deposits Silty sand, Eolian deposits	38 "J"	<25	1740	58 "J" -	-	:	
	MW2-3	03/27/07	6-8	2401	2	Silty clay, till	-	-	-	-	-	-	
	MW2-4	03/27/07	8.5-10.5	1492	1	Silty clay, till	-	-	-	-	-	-	
	MW2-5 MW2-6	03/27/07	11-13 13.5-15.5	2317 2147	2 1	Silty clay, till	- <25	- <25	- <25	- <25	-	٠ .	
	M W Z-0	03/27/07	13.3-13.3	214/	1	Silty clay, till	-23	-25	~23	~43	•		
MW3	MW3-1	03/27/07	1-3	32,000	10	Silty sand, Eolian deposits	124	<25	8400	113	-	-	
	MW3-2	03/27/07	3.5-5.5	27,000	5	Silty sand, Eolian deposits	-	-	•	-	-	-	
	MW3-3 MW3-4	03/27/07 03/27/07	6-8 8.5-10.5	2713 2221	2	Silty clay, till Silty clay, till	:	:	-	-	-	:	
	MW3-5	03/27/07	11-13	1436	0	Silty clay, till		-		•	-	-	
	MW3-6	03/27/07	13.5-15.5	1605	1	Silty clay, till	<25	<25	41 "J"	<25	-	-	
MW4	MW4-1	03/27/07	1-3	1955	3	Silty sand, Eolian deposits	<25	<25	<25	<25	_	_	
	MW4-2	03/27/07	3.5-5.5	1424	2	Silty sand, Eolian deposits	-	-	-	•		-	
	MW4-3	03/27/07	6-8	1087	3	Silty clay, till	-	-			-	-	
Ì	MW4-4 MW4-5	03/27/07 03/27/07	8.5-10.5 11-13	1102 1677	2 3	Silty clay, till Silty clay, till	<25	<25	<25	<25	-	i :	
	MW4-6	03/27/07	13.5-15.5	1097	2	Silty clay, till	-	-	-	-	-	-	
B4	B4-1	03/28/07	0-2	144,000	146	Silty sand, Eolian deposits	_		_		_		
2.	B4-2	03/28/07	2-4	199,000	451	Silty sand, Eolian deposits	<2500	<2500	270,000	<2500		-	
	B4-3	03/28/07	4-6	164,000	110	Silty sand, Eolian deposits	<2500	<2500	138,000	<2500	-	-	
	B4-4	03/28/07	6-8 8-10	147,000	126	Silty sand, Eolian deposits	-	-	-	-	-	-	
	B4-5 B4-6	03/28/07 03/28/07	10-12	3159 9086	1 13	Silty clay, till Silty clay, till							
	B4-7	03/28/07	12-14	4266	1	Silty clay, till	-	-	-	-		-	
	B4-8	03/28/07	14-16	9877	5	Silty clay, till	<25	<25	270	<25	-	-	
В5	B5-1	03/28/07	0-2	103,000	71	Silty sand, Fill	-		-	•	-		
	B5-2	03/28/07	2-4	185,000	88	Silty sand, Fill	<2500	<2500	66,000	<2500	-	-	
1	B5-3 B5-4	03/28/07 03/28/07	4-6 6-8	22,000 79,000	14 47	Silty sand, Eolian deposits Silty sand, Eolian deposits	:						
1	B5-5	03/28/07	8-10	2919	1	Silty clay, till	-		-			-	
	B5-6	03/28/07	10-12	7106	4	Silty clay, till	1390	27.2 "J"	305	33 "J"	-	-	
	B5-7 B5-8	03/28/07 03/28/07	12-14 14-16	4607 4560	3 2	Silty clay, till Silty clay, till	:	-	-	-		-	
D6	DC:	02/20/27		100.000	71	CHA							
В6	B6-1 B6-2	03/28/07 03/28/07	0-2 2-4	109,000 199,000	71 338	Silty sand, Fill Silty sand, Fill	<2500	<2500	136,000	<2500	-	-	
	B6-3	03/28/07	4-6	40,000	32	Silty sand, Eolian deposits	-	-	-	-	-	-	
	B6-4 B6-5	03/28/07 03/28/07	6-8 8-10	45,000 4316	103 5	Silty sand, Eolian deposits Silty clay, till	:			-		-	
	B6-6	03/28/07	10-12	5539	5	Silty clay, till	-	:		-	-	-	
	B6-7 B6-8	03/28/07 03/28/07	12-14 14-16	6324 4915	6 5	Silty clay, till Silty clay, till	<25	<25	174	<25 -	-	-	
	-			-		··						<u> </u>	
В7	B7-1 B7-2	03/28/07 03/28/07	0-2 2-4	4925 37,800	16 55	Silty sand, Eolian deposits Silty sand, Eolian deposits	108	- <25	10,200	- 87	-		
-	B7-3	03/28/07	4-6	6168	13	Silty sand, Eolian deposits			-	<u> </u>	-	-	
	B7-4	03/28/07	6-8	28,000	45	Silty sand, Eolian deposits	870	<25	77,000	650	•	-	
-	B7-5 B7-6	03/28/07 03/28/07	8-10 10-12	4704 4311	9 4	Silty clay, till Silty clay, till	-			-		-	
	B7-7 B7-8	03/28/07	12-14 14-16	2647 4350	5 4	Silty clay, till Silty clay, till	- <25	- <25	<25	- <25	<u>.</u> .		
	<i></i>	33.20101		,,,,,			-2.5	-20		23			
В8	B8-1	03/28/07	0-2	2045	1	Silty sand, fill	- 25	- 25	67	- <25	4200	- 14'	
	B8-2 B8-3	03/28/07 03/28/07	2-4 4-6	3083 3248	1	Silty sand, fill Silty sand, Eolian deposits	<25 <25	<25 <25	67 <25	<25 <25	4200 -	14'	
	B8-4	03/28/07	6-8	3239	1	Silty sand, Eolian deposits	-	-	-	-			
	B8-5	03/28/07	8-10	2941	0	Silty sand, silty clay, till	-	-	-	-	•	-	
	B8-6 B8-7	03/28/07 03/28/07	10-12 12-14	3152 2633	1 2	Silty sand, silty clay, till Silty clay, till	-	:		-		_	
	B8-8	03/28/07	12-14 14-16	4112	2	Silty clay, till	<25	<25	<25	<25	-		

Table 2 Soil Sample Field Screening and Laboratory Analytical Results, Express Cleaners, Racine, Wisconsin

				PID	Response (iui)		Detected	Volatile Orga	nic Compoun	ds (μg/kg)	<b>E</b>	Ð
Borehole Number	Sample Number	Date Sampled	Sample Depth (feet)	Rae Systems Meter Parts Per Billion Meter	Thermo Instruments Meter Parts Per Million Meter	Description	cis-1,2- Dichloroethene	trans-1,2- Dichloroethene	Tetrachloroethene	Trichloroethene (TCE)	Total Organic Carbon (milligrams per kilogram)	Bulk Density (pounds per cubic feet)
	U.S. Environmental Protection Agency Site-Specific Soil Screening Levels for Soil to Gr			Groundwater	680	1200	130	150	Tot:	nod)		
В9	B9-1 B9-2 B9-3 B9-4 B9-5 B9-6 B9-7 B9-8	03/29/07 03/29/07 03/29/07 03/29/07 03/29/07 03/29/07 03/29/07	0-2 2-4 4-6 6-8 8-10 10-12 12-14 14-16	199,000 199,000 20,000 159,000 199,000 5014 3516 3311	170 202 25 167 323 3 1	Silty sand, fill Silty sand, Eolian deposits Silty sand, Eolian deposits Silty clay, till	17,400 - - - <5000 - - <25	<2500 - - - <5000 - - <25	92,000 - - - - 770,000 - - <25	11,500 - - - <5000 - - <25		
B10	B10-1 B10-2 B10-3 B10-4 B10-5 B10-6 B10-7 B10-8	03/29/07 03/29/07 03/29/07 03/29/07 03/29/07 03/29/07 03/29/07	0-2 2-4 4-6 6-8 8-10 10-12 12-14 14-16	8315 9214 4275 3250 3074 2343 1256 2543	7 8 1 1 1 2 1	Silty sand, fill Silty sand, fill Silty sand, Eolian deposits Silty clay, till	- <2500 - - - <25 - -	- <2500 - - <25 - -	- 14,000 - - 27.5 "J" - -	- <2500 - - <25 - -		-
B11	B11-1 B11-2 B11-3 B11-4 B11-5 B11-6 B11-7 B11-8	03/29/07 03/29/07 03/29/07 03/29/07 03/29/07 03/29/07 03/29/07	0-2 2-4 4-6 6-8 8-10 10-12 12-14 14-16	82,000 115,000 9217 199,000 27,000 7464 4075 3000	68 156 8 350 17 4 3	Silty sand, fill Silty sand, Eolian deposits Silty sand, Eolian deposits Silty sand, Eolian deposits Silty clay, till	- <1250 - <1250 - - -	- <1250 - <1250 - - -	- 63,000 - 590,000 - - -	- <1250 - 2760 "J" - - -		- - - - - -
B12	B12-1 B12-2 B12-3 B12-4 B12-5 B12-6 B12-7 B12-8	03/29/07 03/29/07 03/29/07 03/29/07 03/29/07 03/29/07 03/29/07	0-2 2-4 4-6 6-8 8-10 10-12 12-14 14-16	2577 5615 1751 1479 1692 1096 1089 459	1 3 1 1 1 0 0	Silty sand, fill Silty sand, Eolian deposits Silty sand, Eolian deposits Silty clay, till	- <25 - - - <25 -	- <25 - - - <25 -	- 1370 - - - <25 -	- <25 - - - <25 -	3700 - - - - - -	- 161.7 - - - - -

Note:

PID = photoionization detector

iui = instrument units as isobutylene

μg/kg = micrograms per kilogram

< x = compound not detected to a detection limit of x

- = not laboratory analyzed

J = analyte detected between the limit of detection and the limit of quantitation

XXX = compound concentration exceeds Enviornmental Protection Agency site-specific soil screening levels for soil to groundwater

Table 3 Groundwater VOC Analytical Results, Express Cleaners, Racine, Wisconsin

			Detected \	OCs (micrograms	per liter)
Well ID	Date Sampled	Water Table Elevation (fbg)	cis-1,2-Dichloro- ethene	Tetra- chloroethene	Trichloro- ethene (TCE)
NR 140, Wis. A	Adm. Code Preventive	Action Limit	7	1	0.5
NR 140, Wis.	Adm. Code Enforcen	nent Standard	70	10	5
MW1	04/27/07	611.79	13.6 "J"	330	<4.4
MW2	04/27/07	611.91	<6.8	370	16.2
MW3	04/27/07	612.26	1100	2520	279
*	04/27/07		1090	2410	284
MW4	04/27/07	612.38	<0.68	<0.52	<0.44
PZ1	04/27/07	596.53	<0.68	<0.52	<0.44
TW1	04/27/07	611.67	310	6000	92
TW2	04/27/07	611.30	1250	5900	162

#### Note:

VOCs = volatile organic compounds

fbg = feet below grade

<x = not detected above laboratory Limit of Detection of X</p>

\* = duplicate sample

XXX = exceeds Chapter NR 140, Wisconsin Administrative Code (NR 140, Wis. Adm. Code preventive action limit

XXX = exceeds NR 140, Wis. Adm. Code enforcement standard

# **DERF Site Investigation Bid Sheet** Consultant Bid Summary Form 4400-233 (R 4/04) Page 2 of 6

Consultant Name NORTHERN ENVIRONM	IENTAL TECHNOILOGIES, INC.	Applicant Name Christopher Hatfield
Bid Summary		
Drilling Costs Total =	\$5,282.50	
Analytical Costs Total =	\$3,126.00	
Consulting Costs Total =	\$8,795.00	
Misc Costs Total =	\$1,425.00	
Grand Total =	\$18,628.50	
I certify that the costs are an accurate estin adhere to s.292.65 Stats. and ch NR 169, V		the site investigation and I understand and will
Consultant Signature		Date

Please attach to these forms a written narratige specifying how the tasks outlined in these sheets will be performed.

Consultant Name:Northern Environmental Site Name: Express Cleaners BRRTS #:02-52-547631 Date:02/02/07

# **DERF Site Investigation Bid Sheet** Drilling Costs Form 4400-233 (R 4/04) Page 3 of 6

Drilling Costs			LIME OF			
l ask	Interval	Number of Borings or Wells	Number of Days	Total Number Feet Drilled	Cost/feet, Day or Well	Total Cost
Well installation and Comple	etion		**************************************			
HSA monitoring wells	<u>0</u> ft to <u>13</u> ft	5	1	65	25	\$1,625.00
TIOA MONITORING WEIS		Ŭ	•	""		Ψ1,020.00
Piezometer	<u>0</u> ft to <u>0</u> ft					
Geoprobe Wells	_0_ft to _0_ft					
	>ft					
Decontamination Costs						\$150
Mobilization Costs			1			\$325
Auger Borings (continuous s	sampling)			t iki		
	<u>0</u> ft to <u>13</u> ft	5	1	65	8.5	\$552.50
	ft to ft					
	ft toft >ft					
Desertamination Costs	"			<u> </u>		
Decontamination Costs						
Mobilization Costs			on the state of th	295.7	Bernanda in Romania de la composição de la	financia de la compansión
Auger Borings (specify split	ft to ft	val)				Para and Pa
	ft to ft					
	ft toft					
	>ft					
Decontamination Costs					I	
Mobilization Costs						
Direct Push Borings (per po	intYttee som to the second					
Seption 1 American a Septimble 12	<ft depth<="" td=""><td>AND SERVICE OF SERVICES AND SER</td><td>STEEL REPORT OF C</td><td>(1284) 6月21日   1484</td><td>per foot</td><td>E. Tongg Samman Berneton Franci</td></ft>	AND SERVICE OF SERVICES AND SER	STEEL REPORT OF C	(1284) 6月21日   1484	per foot	E. Tongg Samman Berneton Franci
Boreholes	0 ft - 12 ft	10	1	120		\$1,680.00
	depth					
	> ft depth					
Decontamination Costs						
Mobilization Costs						\$300
Well Development (if done	A STATE OF THE STA					
	Monitoring Wells					
	Piezometers			<u> </u>		
	Recovery Wells			1/87	Manager and the second	t seu simplyant
Other	<b>弄</b>					
Drums	5				40	\$200.00
Flush Mount Covers	5				150	\$750.00
Protector Pipes				ļ	ļ	
			ļ			
- v districtions						\$5 500 50
Total Drilling Costs			<u> </u>	<u> </u>		\$5,582.50

Consultant Name: Northern Environmental Site Name:Express Cleaners BRRTS #:02-52-547631 Date:02/02/07

# **DERF Site Investigation Bid Sheet** Analytical Costs Form 4400-233 (R 4/04) Page 4 of 6

Parameter	WI	Certified	Lab	Field	d Test/Fi	eld Kit		Mobile Lat		
	\$/	# 335	Method	\$/	# # **	Method		# Samples	Method	
	sample	samples	Used	sample	samples	Used	\$/Day	# Days _	Used	Total Costs
Solids Analysis	1.30	(233 )6666	- A. T. T. T. C.		ž- į				a was meeting	
VOCs	64	32	8260B							\$2,048.0
TCLP										\$0.0
RCRA Metals									<u> </u>	\$0.00
Duplicate Analyses										\$0.00
Blank Analyses							<b></b> -		<del>                                     </del>	\$0.00
Other: (Specify) TOC	-									\$0.00
Bulk Density					<u> </u>					\$0.0
Water Analysis (low flow sampl	ing assum	ed unless	otherwise	indicate	d at bottom	of this she	et)	ligacija, pogratilego		
VOCs	64		8260B		TRILING TO THE					\$320.00
Nitrate*		<u></u>	02000	<del> </del>	<u> </u>	<u> </u>	<del>                                     </del>	<del> </del>	<u> </u>	\$0.0
Dissolved Oxygen*	ļ		<u> </u>	<del></del>	ļ	<u> </u>	-			
Temperature*						<u> </u>	<u> </u>		ŀ	\$0.00
Ferrous Iron*	ļ		<u> </u>	<u> </u>		<u> </u>				\$0.00
				-		ļ	<del>                                     </del>		<del>                                     </del>	\$0.00
Sulfate*	ļ				ļ	<b>!</b>	ļ	<u> </u>		\$0.00
Sulfide*							ļ			\$0.00
ORP*	<del> </del>					<u> </u>				\$0.00
pH*						ļ				\$0.00
TOC*				ļ		ļ				\$0.00
Alkalinity*										\$0.00
Chloride*			<u> </u>							\$0.00
Spec. Conductance*										\$0.00
Ethene/Ethane/Methane*										\$0.00
Hydrogen*						<u> </u>				\$0.00
Carbon Dioxide*										\$0.00
RCRA Metals										\$0.00
Duplicate Analyses	64	1	8260B							\$64.00
Blank Analyses	64	1	8260B							\$64.00
Other: (Specify)										\$0.00
						ĺ				\$0.00
Air Analysis		- Section of the control of the cont	TAS					et takk	a alang	
VOCs	210	3	TO-15							\$630.00
TCE										\$0.00
PCE (minimum detection limit is <10 ppbv)										\$0.00
Other: (Specify)										\$0.00
										\$0.00
Waste Analyses (soil/water)								Karatan	ALCON DE	
										\$0.00
		1					Ĭ,			\$0.00
Miscellaneous (specify)										
Extraction ( )			7-11-111111		200000		in a collimated			\$0.00
_		<del> </del>	1	l	<del>                                     </del>	1	1			\$0.00
Charge for Mobile Lab (indicate	# days ar	nd daily fee						r Rich design		
Total Analytical Costs		#.XXX	100 (5004331)		The state of the s		Seminary or Secretary	men of the control of the Market	er meny , countill	\$3,126.00

<sup>\*</sup> Natural Attenuation parameters required for consideration of NA as remedy.

Consultant Name:Northern Site Name:Express Cleaners BRRTS #:02-52-547631 Date:02/02/07

# DERF Site Investigation Bid Summary Consultant Costs

Form 4400-233 (R 4/04) Page 5 of 6

				8 11			1903 St. Co				Hours/T	ask								200
		ıt		ırvey	nc	sight	Đ <sub>L</sub>	pling	pment	' Test		or	out or ions)		Ę	(a) (a) (b) (b) (b) (b) (b) (b) (b) (b) (b) (b	Oth	er (spec	cify)	
Position (specify)	Hourly Rate	Workplan Development	Access	Receptor Survey	Waste Determination	Drilling Oversight	Soil Sampling	Drilling sampling	Well Development	Hydraulic Conductivity Test	Groundwater sampling	Soil gas/vapor intrusion survey	SSRCL calculations (contained out or remedial actions)	SI Report preparation	RAOR Report preparation	Project Management				Total Costs
Professional Staff																				
Associate Geologist	\$123	0.0	0.5											1		1				\$369.00
Registered Geologist	\$88		8		1	1					1	1		2		10				\$2,552.00
Geologist	\$76	1	2			8	12	8	2					6						\$2,964.00
Graduate Geologist	\$70										8	8		8						\$1,680.00
Senior Technician	\$72	2	1											7						\$720.00
																				\$0.00
Field Staff	39 <u>1246</u> 2							Ne l												
																				\$0.00
																				\$0.00
																				\$0.00
																				\$0.00
																				\$0.00
																				\$0.00
Office Support Staff									100											
Administrative Aide	\$51	1	2											7						\$510.00
																				\$0.00
																				\$0.00
																				\$0.00
																				\$0.00
Total Consulting Costs																				\$8,795.00

Consultant Name:Northern Environmental Site Name:Express Cleaners BRRTS #:02-52-547631 Date:02/02/07

# DERF SIte Investigation Bid Summary Sheet Miscellaneous Costs

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Major Activity	Specifications	Commodity Unit (specify)	Unit Rate	Number of Units	Total Cost
IDW Disposal	Opecifications	Offic (Specify)	Will a series	Onneo	
ID TO DISPOSAL	Non-Hazardous	per drum	\$75	5	\$375
	Hazardous		·		
Mobilization		per event	\$75		\$75
Equipment Rental (list and inc	lude shipping cos	ts if applicable)			rando e de la companya de la company
Rae System PPB Meter		per day	\$125	3	\$375
Shipping fees		per event	\$150	1	\$150
Field Supplies (list)					
Water level probe		per day	\$40		\$80
Low flow sampling Equipment		per day	\$100	1	\$100
YSI Multi-Meter		per day	\$120	1	\$120
Surveying					
Survey Equipment		per day	\$100	1	\$100
Personal Protection Equipmen	nt (list)				
Sample Shipping Costs					
Summa Cannisters (3)		one shipment	\$50	1	\$50
			State Siles		
Other (specify)					
Total Miscellaneous Costs					\$1,425.00

**Reminders:** DERF does not reimburse for attorney, closure or GIS fees. Mileage and meals are also non-reimbursable. Also, costs to prepare a reimbursement application and discuss the application with the department are not reimburseable. No expedited shipping w/o prior PM approval.