

GEOTECHNICAL, ENVIRONMENTAL & CONSTRUCTION MATERIALS CONSULTANTS

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Revised July 8, 2020

Wisconsin Department of Natural Resources 141 NW Barstow Street Waukesha, WI 53188

Attention: Ms. Shanna Laube-Anderson

Subject: Change Order No. 3 - Proposed Additional Site Investigation

and Cost Estimate

Martinizing Dry Cleaning Site

1730 State Street Racine, Wisconsin

Proposal No. 1EP-1904012

BRRTS No. 02-52-549890/FID No. 252251010

Dear Ms. Laube-Anderson:

Giles Engineering Associates, Inc. (Giles) has prepared this Change Order #3 which includes a scope of services and cost estimate on behalf of BMP Realty LLC, owner of the Martinizing Racine property (the "Site"), located at 1730 State Street, in Racine, Wisconsin. Based on our previous correspondence and dialog, it is our understanding that the Wisconsin Department of Natural Resources (WDNR) has requested that additional site investigation (SI) work be completed to determine the vertical extent of contamination near soil boring GP-1/MW-2. In addition, up to four quarterly groundwater sampling events are required to establish the groundwater contaminant trends.

BACKGROUND

The Site operated as a gasoline filling station in the early 1930s to 1970. In 1970, the Site became a self-service coin laundromat and a dry cleaning facility. Dry cleaning operations were performed at the Site until approximately 2004. Currently, the former dry cleaning portion of the building Site is leased and occupied a cell phone store. The south portion of the building continues to operate as a laundromat. Site Plan illustrating the current building is included as Figure 1.

The results of the initial environmental investigation (2007) and the SI (2010) have shown that low-level petroleum volatile organic compounds (PVOCs) and elevated concentrations of chlorinated VOCs (CVOCs) were detected in the soil and groundwater at the Site. The petroleum impacts are inferred to be associated with the historic use of the Site as a gasoline station, and CVOCs are associated with the former on-Site dry cleaning operation. The extent of groundwater impacts are shown on Figure 2 and soil impacts are shown on Figure 3.

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The detected PVOCs in soil are generally present on the western portion of the Site at concentrations below the WDNR NR 720 residual contaminant levels (RCLs). CVOCs were detected in soil at levels exceeding the RCLs for protection of groundwater. The distribution of the CVOCs generally appears to be beneath the building and in the paved area immediately northwest of the building. The highest soil concentrations exceed the WDNR landfill standard for Contaminated-Out, Non-Hazardous Material and are located immediately north and west of the service door on the north side of the building. Soil results are summarized in Table 1.

The direction of groundwater flow has been generally to the south or southwest across the Site. However, a "mounded" groundwater condition was noted during groundwater sampling events performed in August and December of 2010, with the high point being monitoring well MW-2, located on the north side of the building.

PVOCs were detected in the groundwater on the west portion of the Site. The detected concentration of benzene exceeded its NR 140 Preventative Action Limit (PAL) or Enforcement Standard (ES) in a groundwater grab sample from temporary well TW-1 in February 2010 and during the two quarterly groundwater sampling events in 2010 in wells MW-6 and MW-7.

Groundwater samples collected from monitoring wells located within the building (MW-1) and to the north, west, and south of the building (MW-2, MW-3, MW-4, MW-7, and MW-8) contained concentrations of CVOCs above their respective NR 140 ES or PAL. Groundwater results are summarized in Table 2.

Sub-slab vapor samples were collected from inside the on-Site building from vapor points VP-1 and VP-2. Vapor point VP-1 was located near the dry cleaning machine, and VP-2 was located in the other unit. Both soil vapor samples contained PCE above the Vapor Risk Screening Level for large commercial/industrial properties. The locations of the sampling points are shown on Figure 4 and the soil gas analytical results are summarized in Table 3.

At this time, it is our understanding that additional SI activities are necessary to determine the vertical extent of contamination near soil boring GP-1/MW-2. In addition, the WDNR has requested that we establish the current groundwater contaminant trends, the extent of groundwater contamination to the north, west and east, and a vapor intrusion assessment for the property to the north. The additional SI activities will be completed prior to bidding the remediation phase of this project.

PROPOSED SCOPE OF SERVICES

- Prepare this Change Order #3 to provide a description of the proposed soil, soil gas, and groundwater sampling services and associated costs for WDNR review and approval.
- Establish top of casing elevations for the existing groundwater monitoring well network, wells MW-1 through MW-8, and gauge the groundwater elevations in each of the wells.
- Re-develop existing wells MW-1 through MW-8. The wells were last sampled in 2010; therefore, redevelopment is necessary to ensure representative groundwater samples are



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collected. Development water will be temporarily stored on-Site until Giles can arrange proper disposal.

- Collect one groundwater sample from each of the groundwater monitoring wells (eight samples total) to evaluate the current groundwater conditions at the Site. Groundwater samples will be collected using a peristaltic pump and low-flow sampling techniques. The groundwater samples will be submitted to a Wisconsin Licensed Analytical Laboratory for analysis of VOCs by U.S. EPA Method 8260.
- Evaluate the groundwater results from the initial groundwater sampling event. Based on the results of the initial sampling event, Giles will install up to four NR-141 variance wells, and up to two NR-141 variance piezometers to further define the extent of groundwater contamination at the Site (up to 6 new wells/piezometers total).
- Survey and develop the newly installed wells/piezometers.
- Two soil samples will be collected during the completion of each new well/piezometer and submitted to a Wisconsin licensed analytical laboratory for analysis of VOCs (possible total of 12 soil samples).
- Additionally, Giles will complete two soil borings within the on-Site building to further define
 the extent of soil impacts. Two soil samples will be collected from each interior boring and
 submitted to a Wisconsin licensed analytical laboratory for analysis of VOCs.
- Perform up to three quarterly groundwater sampling events to include the existing (8) and any newly installed (up to 6) monitoring wells/piezometers. Sampling events will include a minimum of 8 and a maximum of 14 groundwater samples per sampling event (24 to 42 samples total for three events). Groundwater will be collected using low-flow sampling techniques. The groundwater samples will be submitted to a Wisconsin Licensed Analytical Laboratory for analysis of VOCs by U.S. EPA Method 8260.
- Coordinate the transport and disposal of wastewater generated during development and from the groundwater sampling events, and soil spoils generated during the well installation.
- Install two sub-slab vapor points within the on-Site building, and one within the off-Site garage building that abuts the Site to the north. Collect one sub-slab soil gas sample from each of the three vapor points and submit the samples for laboratory analysis of VOCs.
- Coordinate with a subcontractor for the installation of a sub-slab depressurization system beneath the existing on-Site building's concrete slab. The system will likely require two separate manifolds due to the presence of a structural wall down the center of the building.
- Perform a sub-slab pressure field test after installation of the depressurization system to ensure the system is working properly, and that an adequate pressure field is established (> or = to 0.04 inches of water).
- Prepare a Supplemental Investigation Report summarizing the tasks performed, results of soil, soil gas, and groundwater chemical analyses, and provide recommendations for additional delineation, site characterization, monitoring, or remediation.



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Engineering Associates, inc.

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Proposed locations of the groundwater wells, piezometers, and soil samples included in the scope of services are shown on Figures 1 through 3. The proposed sub-slab depressurization system and locations of the two proposed sub-slab vapor points are shown on Figure 4.

COST

The estimated cost to complete referenced scope of services is **\$32,870**. The costs for soil and groundwater sampling assumes that in addition to the eight existing wells, four groundwater monitoring wells and two piezometers will be installed and sampled (total of 14 wells/piezometers in the groundwater monitoring network). The cost also assumes that the two interior soil borings will be completed the same day the additional wells/piezometers are installed. Should these wells/piezometers not be installed, the drilling costs for mobilization/demobilization costs and decontamination would still apply.

A detailed cost summary is attached as Table 4 and in the attached DERF Investigation Bid Sheet (WDNR Form 4400-233). The estimated costs have been prepared based on good-faith estimates submitted from select qualified commodity service providers based on the proposed scope of services. Due to the potential for WDNR revisions/additional to the scope of services, final compensation will be determined based on the actual lineal footage of borings drilled, waste disposal tipping and transportation fees, number of types of laboratory tests performed, and the actual costs for professional services. Also, it should be noted that the fees presented in the attached bid sheets do not include costs for expedited analytical turnaround time

If project costs are envisioned to exceed the estimated amount due to circumstances listed in NR169.21(2)(e), Giles will not incur additional costs in excess of \$3,000.00 or 5 percent of the total project amount (whichever is lower) without prior authorization from you and the WDNR. Additional communication, correspondence, or supplemental reporting is not included in the scope of services or cost estimate.

SCHEDULE

Giles anticipates 10 to 12 months from the anticipated date of authorization to proceed to complete through the completion of the proposed scope of services.



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CLOSURE

Thank you for the opportunity to offer our engineering services. Should you have any questions relating to the proposed services or if we can be of additional assistance, please do not hesitate to call.

Respectfully submitted,

GILES ENGINEERING ASSOCIATES, INC.

Kevin T. Bugel, P.G., C.P.G. Environmental Division Manager

ENCLOSURES

Figures: Figure 1 Site Plan

Figure 2 Soil Analytical Results

Figure 3 Groundwater Analytical Results

Figure 4 Proposed Sub-Slab Depressurization System

Attachments: Table 1 Soil Analytical Results

Table 2 Groundwater Analytical Results

Table 3 Vapor Analytical Results
Table 4 Proposed Cost Estimate

DERF Site Investigation Bid Sheet Form 4400-233 (R4/04)

Distribution: Wisconsin Department of Natural Resources

Attn: Ms. Shanna Laube-Anderson (via USPS and DNR Upload)

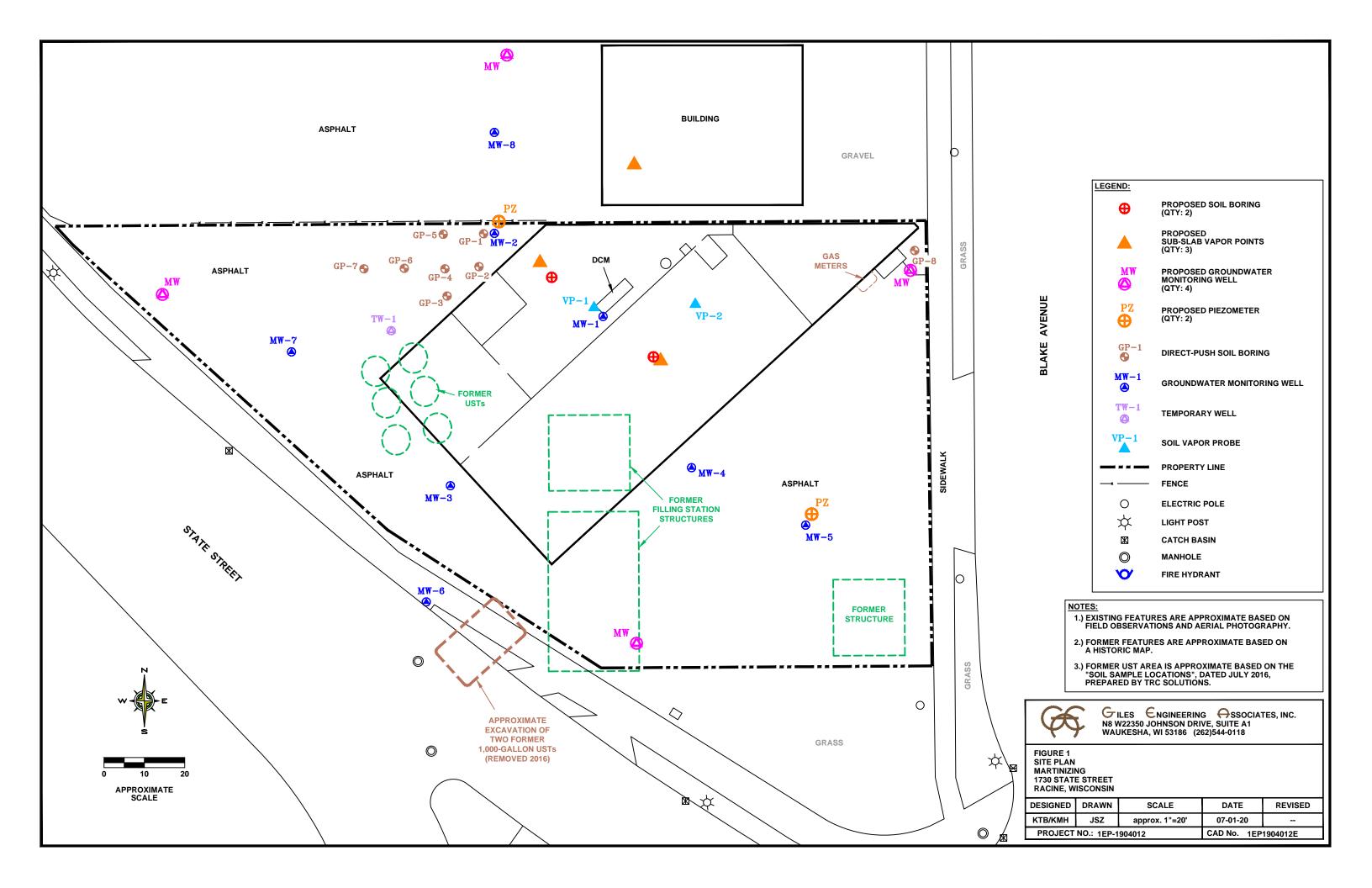
BMP Realty

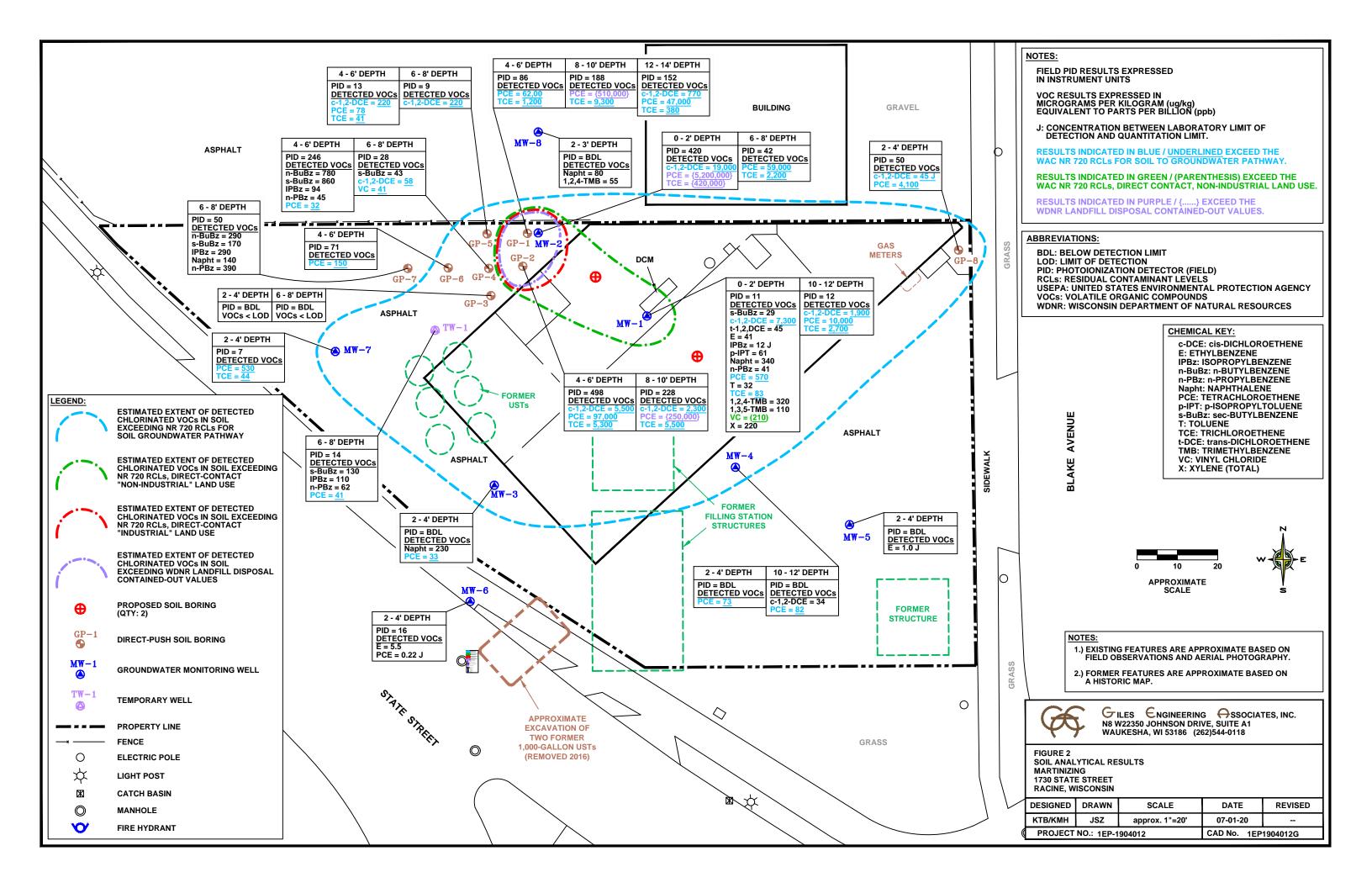
Attn: Mr. Jason Berry (via email: jberry1907@gmail.com)

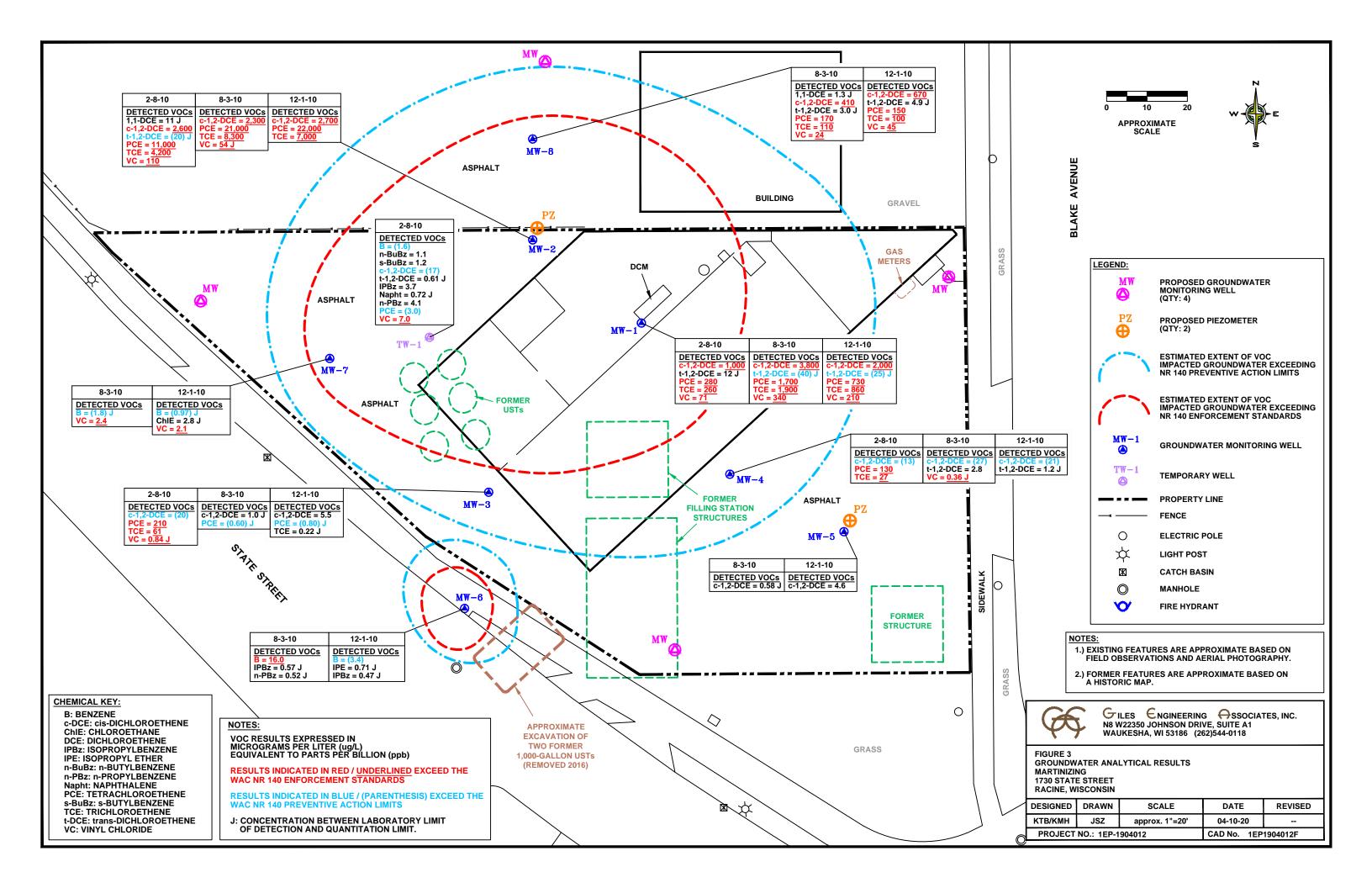
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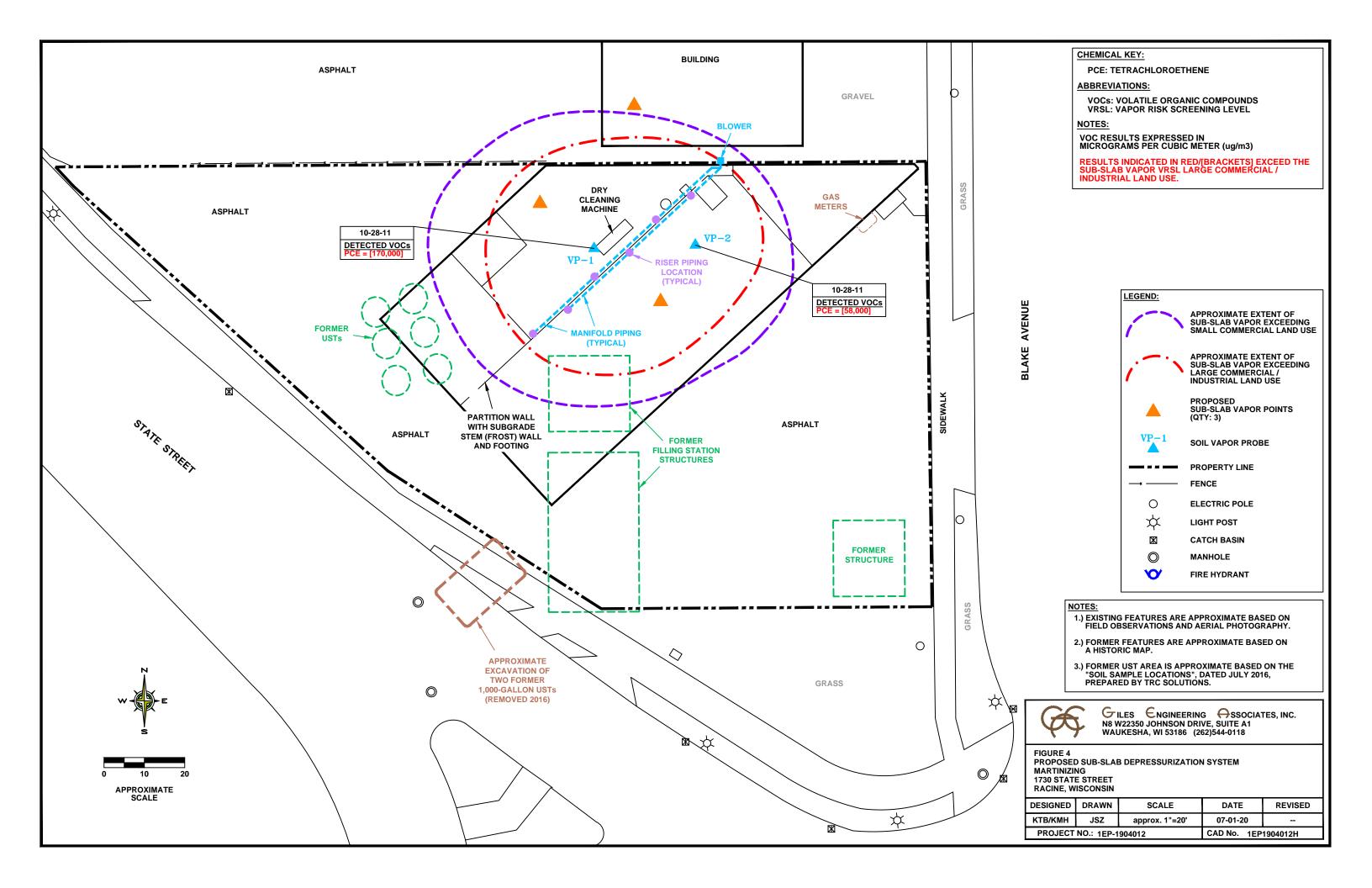


TABLE 1 SOIL ANALYTICAL RESULTS

Martinizing Racine 1730 State Street Racine, Wisconsin 1E-0909013

Analyta						Sample	Location									WDND L KIII
Analyte	TW-1	MV	V-1	MW	I-2	MW-3	M\	N-4	MW-5	MW-6	MW-7	MW-8	N N	R 720 RCLs¹ (μg/l	(g)	WDNR Landfill
Sample Depth (feet)	6 - 8	0 - 2	10 - 12	0 - 2	6 - 8	2 - 4	2 - 4	10 - 12	2 - 4	2 - 4	2 - 4	2 - 3	Soil to	Direct C	ontact ²	Disposal Contained-Out
Sample Date	1/21/10	1/21/10	1/21/10	1/21/10	1/21/10	1/21/10	1/21/10	1/21/10	7/23/10	7/23/10	7/23/10	7/23/10	Groundwater	Non-Industrial	Industrial	Values ³
PID	14	11	12	420	42	BDL	BDL	BDL	BDL	16	7	BDL	Pathway	Land Use	Land Use	values
Detected VOCs (µg/kg)																
n-Butylbenzene	<29	<28	<58	<14,000	<300	<27	<31	<29	<31	<31	<31	<34	NS	108,000	108,000	NS
sec-Butylbenzene	130	29	<58	<14,000	<300	<27	<31	<29	<31	<31	<31	<34	NS	145,000	145,000	NS
cis-1,2-Dichloroethene	<29	<u>7,300</u>	<u>1,900</u>	<u>19,000</u>	<300	<27	<31	34	<31	<31	<31	<34	41.2	156,000	2,340,000	NS
trans-1,2-Dichloroethene	<29	45	<58	<14,000	<300	<27	<31	<29	<31	<31	<31	<34	62.6	1,560,000	1,850,000	NS
Ethylbenzene	<29	41	<58	<14,000	<300	<27	<31	<29	1.0 J	5.5	<31	<34	1,570	8,020	35,400	NS
Isopropylbenzene	110	12 J	<58	<14,000	<300	<27	<31	<29	<31	<31	<31	<34	NS	268,000	268,000	NS
p-Isopropyltoluene	<29	61	<58	<14,000	<300	<27	<31	<29	<31	<31	<31	<34	NS	162,000	162,000	NS
Naphthalene	<58	340	<120	<28,000	<610	230	<63	<57	<62	<61	<62	80	658.2	5,520	24,100	NS
n-Propylbenzene	62	41	<58	<14,000	<300	<27	<31	<29	<31	<31	<31	<34	NS	264,000	264,000	NS
Tetrachloroethene	<u>41</u>	<u>570</u>	<u>10,000</u>	{5,200,000}	<u>59,000</u>	<u>33</u>	<u>73</u>	<u>82</u>	<31	<31	<u>530</u>	<34	4.5	33,000	145,000	153,000
Toluene	<29	32	<58	<14,000	<300	<27	<31	<29	<31	<31	<31	<34	1,107	818,000	818,000	NS
Trichloroethene	<29	<u>83</u>	<u>2,700</u>	<u>{420,000}</u>	<u>2,200</u>	<27	<31	<29	<31	0.22 J	<u>44</u>	<34	3.6	1,300	8,410	8,800
1,2,4-Trimethylbenzene	<29	320	<58	<14,000	<300	<27	<31	<29	<31	<31	<31	55	1,379 ⁴	219,000	219,000	NS
1,3,5-Trimethylbenzene	<29	110	<58	<14,000	<300	<27	<31	<29	<31	<31	<31	<34	1,378	182,000	182,000	NS
Vinyl chloride	<41	<u>(210)</u>	<82	<20,000	<420	<38	<44	<40	<44	<43	<43	<47	0.1	67	2,080	2,000
total Xylenes	<99	220	<200	<47,000	<1,000	<93	<110	<98	<110	<100	<110	<110	3,960	260,000	260,000	NS

NOTES:

¹Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels were obtained from the Wisconsin Department of Natural Resources (WDNR) spreadsheet, last updated December 2018

²Direct Contact RCLs only apply to soil samples collected within four feet of the ground surface

³WDNR Landfill Disposal "Contained-Out" Values obtained from the fact sheet titled "Contained-Out Values for PCE, TCE, and Vinyl Chloride" (RR-969) effective as of November of 2013

⁴Soil to Groundwater Pathway RCLs for 1,2,4- and 1,3,5-Trimethylbenzene are combined

PID: Photoionization Detector

BDL: Below Detection Limit

VOCs: Volatile organic compounds

μg/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)

J: Result is below the method quantitation limit (MQL)

NS: No Standard Established

<xx.x: Result detected below the method detection limit of x</p>

xx.x: Underlined results exceed the NR 720 RCL for the Soil to Groundwater Pathway

(xx.x): Parenthesized results exceed the NR 720 RCL for Non-Industrial Direct Contact

[xx.x]: Bracketed results exceed the NR 720 RCL for Industrial and Non-Industrial Direct Contact

{xx.x}: Braced results exceed the WDNR Landfill Disposal Conained-Out Value

TABLE 1 (Continued) SOIL ANALYTICAL RESULTS

Martinizing Racine 1730 State Street Racine, Wisconsin 1E-0909013

Analysia		Sample Location										l	2 700 DOL 1 / #		MDND L IGH			
Analyte		GP-1		GI	P-2	GI	- -3	GI	P-4	GI	P-5	GP-6	GP-7	GP-8	NI	R 720 RCLs ¹ (μg/l	(g)	WDNR Landfill
Sample Depth (feet)	4 - 6	8 - 10	12 - 14	4 - 6	8 - 10	2 - 4	6 - 8	4 - 6	6 - 8	4 - 6	6 - 8	4 - 6	6 - 8	2-4	Soil to	Direct C	ontact ²	Disposal Contained-Out
Sample Date	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	10/28/10	Groundwater	Non-Industrial	Industrial	Values ³
PID	86	188	152	498	228	BDL	BDL	246	28	13	9	71	50	50	Pathway	Land Use	Land Use	values
Detected VOCs (µg/kg)																		
n-Butylbenzene	<290	<2,900	<290	<580	<1,400	<31	<29	780	<29	<31	<29	<28	290	<30	NS	108,000	108,000	NS
sec-Butylbenzene	<290	<2,900	<290	<580	<1,400	<31	<29	860	43	<31	<29	<28	170	<30	NS	145,000	145,000	NS
cis-1,2-Dichloroethene	<290	<2,900	<u>770</u>	<u>5,500</u>	<u>2,300</u>	<31	<29	<31	<u>58</u>	<u>220</u>	<u>220</u>	<28	<31	<u>45 J</u>	41.2	156,000	2,340,000	NS
trans-1,2-Dichloroethene	<290	<2,900	<290	<580	<1,400	<31	<29	<31	<29	<31	<29	<28	<31	<30	62.6	1,560,000	1,850,000	NS
Ethylbenzene	<290	<2,900	<290	<580	<1,400	<31	<29	<31	<29	<31	<29	<28	<31	<30	1,570	8,020	35,400	NS
Isopropylbenzene	<290	<2,900	<290	<580	<1,400	<31	<29	94	<29	<31	<29	<28	290	<30	NS	268,000	268,000	NS
p-Isopropyltoluene	<290	<2,900	<290	<580	<1,400	<31	<29	<31	<29	<31	<29	<28	<31	<30	NS	162,000	162,000	NS
Naphthalene	<590	<2,900	<570	<1200	<2,900	<62	<58	<61	<58	<63	<58	<57	140	<30	658.2	5,520	24,100	NS
n-Propylbenzene	<290	<2,900	<290	<580	<1,400	<31	<29	45	<29	<31	<29	<28	390	<30	NS	264,000	264,000	NS
Tetrachloroethene	<u>62,000</u>	<u>{510,000}</u>	<u>47,000</u>	<u>97,000</u>	{250,000}	<31	<29	<u>32</u>	<29	<u>78</u>	<29	150	<31	<u>4,100</u>	4.5	33,000	145,000	153,000
Toluene	<290	<2900	<290	<580	<1400	<31	<29	<31	<29	<31	<29	<28	<31	<30	1,107	818,000	818,000	NS
Trichloroethene	<u>1,200</u>	<u>9,300</u>	<u>380</u>	<u>5,300</u>	<u>5,500</u>	<31	<29	<31	<29	<u>41</u>	<29	<28	<31	<30	3.6	1,300	8,410	8,800
1,2,4-Trimethylbenzene	<290	<2,900	<290	<580	<1,400	<31	<29	<31	<29	<31	<29	<28	<31	<30	1,379 ⁴	219,000	219,000	NS
1,3,5-Trimethylbenzene	<290	<2,900	<290	<580	<1,400	<31	<29	<31	<29	<31	<29	<28	<31	<30	1,379	182,000	182,000	NS
Vinyl chloride	<410	<4,100	<400	<810	<2,000	<43	<41	<43	<u>41</u>	<44	<40	<40	<43	<30	0.1	67	2,080	2,000
total Xylenes	<1,000	<9,900	<980	<2,000	<4,900	<110	<99	<100	<99	<110	<98	<97	<100	<89	3,960	260,000	260,000	NS

NOTES:

¹Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels were obtained from the Wisconsin Department of Natural Resources (WDNR) spreadsheet, last updated December 2018

²Direct Contact RCLs only apply to soil samples collected within four feet of the ground surface

³WDNR Landfill Disposal "Contained-Out" Values obtained from the fact sheet titled "Contained-Out Values for PCE, TCE, and Vinyl Chloride" (RR-969) effective as of November of 2013

⁴Soil to Groundwater Pathway RCLs for 1,2,4- and 1,3,5-Trimethylbenzene are combined

PID: Photoionization Detector

BDL: Below Detection Limit

VOCs: Volatile organic compounds

μg/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)

J: Result is below the method quantitation limit (MQL)

NS: No Standard Established

<xx.x: Result detected below the method detection limit of x

xx.x: Underlined results exceed the NR 720 RCL for the Soil to Groundwater Pathway

(xx.x): Parenthesized results exceed the NR 720 RCL for Non-Industrial Direct Contact

[xx.x]: Bracketed results exceed the NR 720 RCL for Industrial and Non-Industrial Direct Contact

{xx.x}: Braced results exceed the WDNR Landfill Disposal Conained-Out Value

TABLE 2 GROUNDWATER ANALYTICAL RESULTS

Martinizing Racine 1730 State Street Racine, Wisconsin Project No. 1E-0909013

Analysta				S	ample Location	n				NR 140	¹ (µg/L)
Analyte		MW-1			MW-2			MW-3			
Sample Date	02/08/10	08/03/10	12/01/10	02/08/10	08/03/10	12/01/10	02/08/10	08/03/10	12/01/10	PAL	ES
Detected VOCs (μg/L)											
Benzene	<3.2	<8.0	<10	<2.0	<40	<50	<0.40	<0.20	<0.20	0.5	5
n-Butylbenzene	<3.2	<8.0	<10	<2.0	<40	<50	<0.40	<0.20	<0.20	NS	NS
sec-Butylbenzene	<4.0	<10	<13	<2.5	<50	<63	<0.50	<0.25	<0.25	NS	NS
chloroethane	<16	<40	<50	<10	<200	<250	<2.0	<1.0	<1.0	80	400
1,1-Dichloroethene	<8.0	<20	<25	<u>11 J</u>	<100	<130	<1.0	<0.50	<0.50	0.7	7
cis-1,2-Dichloroethene	<u>1,000</u>	<u>3,800</u>	2,000	2,600	2,300	<u>2,700</u>	(20)	1.0 J	5.5	7	70
trans-1,2-Dichloroethene	12 J	(40 J)	(25 J)	(20 J)	<100	<130	<1.0	<0.50	<0.50	20	100
isopropyl ether	<8.0	<20	<25	<5.0	<100	<130	<1.0	<0.50	<0.50	NS	NS
Isopropylbenzene	<3.2	<8.0	<10	<2.0	<40	<50	<0.40	<0.20	<0.20	NS	NS
Naphthalene	<4.0	<10	<13	<2.5	<50	<63	<0.50	<0.25	<0.25	10	100
n-Propylbenzene	<8.0	<20	<25	<5.0	<100	<130	<1.0	<0.50	<0.50	NS	NS
Tetrachloroethene	<u>280</u>	<u>1,700</u>	<u>730</u>	<u>11,000</u>	21,000	<u>22,000</u>	<u>210</u>	(0.60 J)	(0.80 J)	0.5	5
Trichloroethene	<u>260</u>	<u>1,900</u>	<u>860</u>	4,200	<u>8,300</u>	7,000	<u>61</u>	<0.20	0.22 J	0.5	5
Vinyl chloride	<u>71</u>	<u>340</u>	<u>210</u>	<u>110</u>	<u>54 J</u>	<50 J	<u>0.84 J</u>	<0.20	<0.20	0.02	0.2

NOTES:

¹Wisconsin Administrative Code Natural Resources Chapter (NR) 140

PAL: Preventive Action Limit ES: Enforcement Standard **VOCs**: Volatile Organic Compounds

μg/L: Micrograms per Liter; equivalent to parts per billion (ppb)

J: Result is less than the reporting limit but greater than the method detection limit and the concentration is an approximate value NS: No Standard Established

<xx.x: Result concentration was detected below the method detection limit of x

(xx.x): Result exceeds the NR 140 Preventive Action Limit

xx.x: Result exceeds the NR 140 Enforcement Standard

TABLE 2 (Continued) GROUNDWATER ANALYTICAL RESULTS

Martinizing Racine 1730 State Street Racine, Wisconsin Project No. 1E-0909013

Amaluta						Sample	Location						NR 140	¹ (μg/L)
Analyte		MW-4		MV	V-5	MV	V-6	MV	N-7	MV	V-8	TW-1		
Sample Date	02/08/10	08/03/10	12/01/10	08/03/10	12/01/10	08/03/10	12/01/10	08/03/10	12/01/10	08/03/10	12/01/10	02/08/10	PAL	ES
Detected VOCs (μg/L)														
Benzene	<1.0	<0.20	<0.20	<0.20	<0.20	<u>16.0</u>	(3.4)	(1.8 J)	(0.97 J)	<0.40	<1.0	(1.6)	0.5	5
n-Butylbenzene	<1.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.40	<1.0	1.1	NS	NS
sec-Butylbenzene	<1.2	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<1.3	1.2	NS	NS
chloroethane	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.8 J	<2.0	<5.0	<1.0	80	400
1,1-Dichloroethene	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	(1.3 J)	<2.5	<0.5	0.7	7
cis-1,2-Dichloroethene	(13)	(27)	(21)	0.58 J	4.6	<0.50	<0.50	<0.50	<0.50	<u>410</u>	<u>670</u>	(17)	7	70
trans-1,2-Dichloroethene	<2.5	2.8	1.2 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3.0 J	4.9 J	0.61 J	20	100
isopropyl ether	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	0.71 J	<0.50	<0.50	<1.0	<2.5	<0.50	NS	NS
Isopropylbenzene	<1.0	<0.20	<0.20	<0.20	<0.20	0.57 J	0.47 J	<0.20	<0.20	<0.40	<1.0	3.7	NS	NS
Naphthalene	<1.2	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<1.3	0.72 J	10	100
n-Propylbenzene	<2.5	<0.50	<0.50	<0.50	<0.50	0.52 J	<0.50	<0.50	<0.50	<1.0	<2.5	4.1	NS	NS
Tetrachloroethene	<u>130</u>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<u>170</u>	<u>150</u>	(3.0)	0.5	5
Trichloroethene	<u>27</u>	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<u>110</u>	<u>100</u>	<0.2	0.5	5
Vinyl chloride	<1.0	<u>0.36 J</u>	<0.20	<0.20	<0.20	<0.20	<0.20	<u>2.4</u>	<u>2.1</u>	<u>24</u>	<u>45</u>	<u>7.0</u>	0.02	0.2

NOTES:

¹Wisconsin Administrative Code Natural Resources Chapter (NR) 140

PAL: Preventive Action Limit
ES: Enforcement Standard

VOCs: Volatile Organic Compounds

μg/L: Micrograms per Liter; equivalent to parts per billion (ppb)

J: Result is less than the reporting limit but greater than the method detection limit and the concentration is an approximate value **NS**: No Standard Established

<xx.x: Result concentration was detected below the method detection limit of x

(xx.x): Result exceeds the NR 140 Preventive Action Limit xx.x: Result exceeds the NR 140 Enforcement Standard

TABLE 3 SOIL GAS ANALYTICAL RESULTS

Martinizing Racine 1730 State Street Racine, Wisconsin Project No. 1E-0909013

Analyte	Sample	Location	Sub	-Slab Vapor VR	SL [*] (µg/m³)
Allaryte	VP-1	VP-2		Land Use	
Sample Date	10/28/2011	10/28/2011	Residential	Small	Large Commercial /
Sample Depth (feet below grade)	Sub-Slab	Sub-Slab	Residential	Commercial	Industrial
Detected VOCs (µg/m³)					
Tetrachloroethene	[170,000]	[58,000]	1,400	6,000	18,000

Notes:

VRSL: Vapor Risk Screening Level VOCs: Volatile Organic Compounds μg/m³: Micrograms per cubic meter

J: Concentration reported between the laboratory method detection limit and the reporting limit.

xx.x: Result exceeds the sub-slab VRSL for Residential, Small Commercial, and Large Commercial/Industrial land uses

*VRSLs are calculated from the indoor air Vapor Action Level (VAL). VALs are calculated from the United States Environmental Protection Agency (USEPA) Vapor Intrusion Screening Levels (VISLs) calculator spreadsheet. The VALs are based on a Target Risk for Carcinogens of 1 x 10⁻⁵ and a Target Hazard Quotient for Non-Carcinogens of 1. An attenuation factor is applied to the indoor air VAL to calculate the sub-slab VRSL. For Residential and Small Commercial land use, an attenuation factor of 0.03 is applied. For Large Commercial or Industrial land use, an attenuation factor of 0.01 is applied.

TABLE 4 PROPOSED COST ESTIMATE

SITE INVESTIGATION CHANGE ORDER NO. 3- STATE STREET MARTINIZING RACINE, WI RACINE, WISCONSIN

Phase		СО	NSULTANT	FEES	SUBCONTRACTOR FEES	
No.	Description	Labor	Expenses	Equipment	FEES	Budget
TASK 01:	SAMPLING PLAN PREPARATION	\$880	\$0	\$0	\$0	\$880
TASK 02:	SHSP PREPARATION & UTILITY LOCATE	\$130	\$0	\$0	\$350	\$480
TASK 03:	WELL RE-DEVELOP, SURVEY, & GAUGING	\$1,240	\$60	\$260	\$0	\$1,560
TASK 04:	GW SAMPLING (INITIAL EVENT)	\$1,065	\$60	\$215	\$540	\$1,880
TASK 05:	ON-SITE/OFF-SITE SUB-SLAB VAPOR TESTING	\$620	\$60	\$340	\$885	\$1,905
TASK 06:	SUB-SLAB DEPRESSURIZATION SYSTEM INSTALL	\$1,240	\$60	\$0	\$5,000	\$6,300
TASK 07:	ADDITIONALL BORINGS/WELLS INSTALL, DEVEL. SU	\$1,010	\$60	\$240	\$4,820	\$6,130
TASK 08:	INTERIOR SOIL BORINGS	\$130	\$0	\$0	\$440	\$570
TASK 09:	GW SAMPLING (3 QUARTERLY EVENTS)	\$4,200	\$360	\$960	\$3,585	\$9,105
TASK 10:	SI REPORT PREPARATION	\$4,060	\$0	\$0	\$0	\$4,060
	Fee Estimate	\$14,575	\$660	\$2,015	\$15,620	\$32,870

TABLE 4 PROPOSED COST ESTIMATE

SITE INVESTIGATION CHANGE ORDER NO. 3- STATE STREET MARTINIZING RACINE, WI RACINE, WISCONSIN

SUBCONTR	ACTOR FEES DETAIL	SUBCONTRACTOR FEES	Budget
TASK 01:	SAMPLING PLAN PREPARATION	\$0	\$0
TASK 02:	SHSP PREPARATION & UTILITY LOCATE	\$350	\$350
TASK 03:	WELL RE-DEVELOP, SURVEY, & GAUGING	\$0	\$0
TASK 04:	GW SAMPLING (INITIAL EVENT)	\$540	\$540
	Laboratory Subcontractor Costs	\$540	
TASK 05:	ON-SITE/OFF-SITE SUB-SLAB VAPOR TESTING	\$885	\$885
	Laboratory Subcontractor Costs	\$885	
TASK 06:	SUB-SLAB DEPRESSURIZATION SYSTEM INSTALL	\$5,000	\$5,000
	American Radon	\$5,000	
TASK 07:	ADDITIONALL BORINGS/WELLS INSTALL, DEVEL. SURVEY- IF NEEDED	\$4,820	\$4,820
	Laboratory Subcontractor Costs	\$810	
	Direct-push Subcontractor Costs	\$3,855	
TASK 08:	INTERIOR SOIL BORINGS	\$440	\$440
	Laboratory Subcontractor Costs	\$270	
	Purge/ Dev. Water Soil Waste Disposal Subcontractor Costs	\$0	
TASK 09:	GW SAMPLING (3 QUARTERLY EVENTS)	\$3,585	\$3,585
	Laboratory Subcontractor Costs	\$2,835	
	Purge/ Dev. Water Soil Waste Disposal Subcontractor Costs	\$750	
TASK 10:	SI REPORT PREPARATION	\$0	\$0

TOTALS: \$15,620

State of Wisconsin Department of Natural Resources PO Box 7921, Madison WI 53707-7921 dnr.wi.gov

DERF Site Investigation Bid Summary Consultant Selection Cover Sheet

Form 4400-233 (R 4/04) Page 1 of 6

Notice: Use this form to notify the Department of Natural Resources of the consultant you are selecting to conduct a site investigation and to submit and summarize the bids required in the Dry Cleaner Environmental Response Fund (DERF) Program. This form is authorized under s. 292.65, Wis. Stats, and s. NR 169.23, Wis. Adm. Code. Completion of this form is mandatory for any person applying for DERF reimbursement. Persons who do not submit a completed form will not be eligible for reimbursement under DERF. Personal information will be used to manage the DERF program, and be made available to requesters under Wisconsin's Open Records laws (ss. 19.32-19.39, Wis. Stats.) and requirements.

Complete the following information and submit it to your DNR regional project manager. Copy this form as necessary. Site Information Site name: **Facility Name: BRRTS#** Martinizing Cleaners Site Investigation 1730 State Street, Racine WI 02-52-549890 Consultant Selected Consultant Name: Consultant Address: Giles Engineering Associates, Inc. N8W22350 Johnson Drive Suite A 1 Waukesha, WI 53186 **Summary of Costs:** Consultant Name: Giles Engineering Associates, Inc. Consultant Name: Consulting costs: \$ 14,575 Consulting costs: Drilling costs: \$ 4.025 Drilling costs: \$ 5,340 Analytical costs: Analytical costs: \$ 8,930 Miscellaneous costs: Miscellaneous costs: \$ Total Costs: 32,870 Total Costs: Consultant Name: Optional 4th bid information: Consulting costs: Consultant Name: Consulting costs: Drilling costs: Analytical costs: Drilling costs: Analytical costs: Miscellaneous costs: Total Costs: Miscellaneous costs: Total Costs: Justification for Selection: Martinizing Cleaners has Selected Giles Engineering to perform the requested services of the RFP because their proposal provides a thorough and complete approach to accomplish the requested work. Applicant Information and Certification I certify that the information contained above is true and correct to the best of my knowledge. Applicant Name Date Laurie I. Berry Street Address City State Zip Code WI Racine 53406 3319 Nobb Hill Drive Signature Department Use Only Project Manager Approval Signature Phone Number Date If not approved, reason for non-approval:

Consultant Name: Giles Eng Site Name: Martinizing Cleaners; State Street Racine, WI BRRTS #:02-52-549890

Date:6/11/13

DERF Site Investigation Bid Sheet Consultant Bid Summary

Form 4400-233 (R 4/04) Page 2 of 6

Drilling Costs Total = \$ 4,025 Analytical Costs Total = \$ 5,340	
Anglytical Costs Total = \$ 5.340	
Analytical Costs Total = \$ 5,340	
Consulting Costs Total = \$ 14,575	
Misc Costs Total = \$ 8,930	
Grand Total = \$ 32,870	
I certify that the costs are an accurate estimate of my total projected costs for the site investigation and I understa	and will

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

Consultant Name: Giles Eng Site Name:Martinizing Cleaners; Racine, WI BRRTS #:02-52549890 Date:6/11/13

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

Drilling Costs						
Task	Interval	Number of Borings or Wells	Number of Days	Total Number Feet Drilled	Cost/feet, Day or Well	Total Cost
Direct Push/Hand Auger	Borings (per point)					
Hand Probe/Auger	< 10 ft depth	2				\$170
NR 141 Variance Well Piezometer	<10 ft depth	6				\$2,475
Decontamination Costs						\$150
Mobilization Costs						\$275
Other		HELLEN				
Drums	1				- T	\$55
Flush Mount Covers	1 /2	6			150	\$900
Total Drilling Costs			1			\$4,025

Consultant Name: Giles Eng Site Name:Martinizing Cleaners; State Street Racine, WI BRRTS #:02-52-549890 Date:6/11/13

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

Parameter	WIC	Certified I	Lab	Field	d Test/Fie	eld Kit	1 300	Mobile Lab		
	\$/ sample	# samples	Method Used	\$/ sample	# samples	Method Used	\$/Sample \$/Day	# Samples # Days	Method Used	Total Costs
Solids Analysis										
VOCs (6 new wells/pz)	\$67.50	12	8260				1 222			\$810.00
VOC (interior soil borings)	\$67.50	4	8260	1						\$270.00
Water Analysis (low flow samp	pling assume	d unless ot	herwise in	ndicated a	at bottom o	f this shee	t)			
VOCs (existing 8 wells)	\$67.50	32	8260							\$2,160.00
VOCs (6 new wells/pz)	\$67.50	18	8260							\$1,215.00
Air Analysis										
VOCs	\$295	3	TO-15							\$885.00
Total Analytical Costs				0.7						\$5,340.00

^{*} Natural Attenuation parameters required for consideration of NA as remedy.

DERF Site Investigation Bid Sheet Miscellaneoous Costs

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

Major Activity	Specifications	Commodity Unit (specify)	Unit Rate	Number of Units	Total Cost
IDW Disposal					
Soil Disposal - Special Waste	Non-Hazardous	per drum	\$80	1	\$80
Soil Disposal - Assume Direct Subtile C	Hazardous	per drum			
Soil Drum Transportation		trip	\$75	1	\$75
Groundwater Disposal	Non-Hazardous	per drum	\$125	4	\$500
Groundwater Disposal	Hazardous	per drum			
Groundwater Transportation		trip	\$250	1	\$250
Field Supplies (list)					
Peristaltic Pump			\$40	8	\$320
Whale Pump & Tubing			\$35	1	\$35
Water Level Indicator			\$20	9	\$180
Water Quality Meter			\$100	7	\$700
Photoionization detector			\$75	1	\$75
Drums			\$55	5	\$275
Survey Equipment			\$40	2	\$80
Hammer Drill & Supplies			\$50	1	\$50
Vapor Pin assembly			\$100	3	\$300
Surveying					
					0
					0
Personal Protection Equipment (list)					
				850	0
					0
Sample Shipping Costs					1.00
					0
					0
					0
Other (specify)		N CONTRACTOR OF THE CONTRACTOR			
'Sub-Slab Depressorization Sys			\$5,000.00	1	\$5,000
Private Utility locator			\$350.00	1	\$350
Mileage (Not Eligible)		100 Miles\rndtrip	\$0.60	1100	\$660
Total Miscellaneous Costs					\$8,930

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.

Consultant Name: Giles Eng Site Name:Martinizing Cleaners, State Street; Racine, WI BRRTS #:02-520549890 Date:6/11/13

DERF Site Investigation Bid Sheet ConsultantI Costs

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

											Hours	/Task								
Position (specify)	Hourly Rate	Workplan Development	SHSP Prep & Utility Locate	Receptor Survey	Waste Determination	Drilling Oversight	Soil Sampling	Drilling sampling	<u>≥</u> .	Well Development & Survey - New wells (6)	Groundwater sampling - Initial (8 wells)	Groundwater sampling - 3 Quarterly (14 wells/pz)	Soil gas/vapor intrusion survey	Sub-Slab System Oversight	SSRCL calculations (contained out or remedial actions)	SI Report preparation	RAOR Report preparation	Project Management	Data Reduction a	Total Costs
Professional Staff																				
Sr. Project Manager	115	2						2	4		2	6	2	4		10				\$3,680.00
Field Staff																				
Field Technician	65	10	2					12	12	2	12	54	6	12		40				\$10,530.00
Office Support Staff																				
CAD Operator	55								1							4				\$275.00
Clerical	45															2				\$90.00
Total Consulting Costs																				\$14,575.00