# **REMEDIAL ACTION PLAN**

Bay Towel, Inc. 501 South Adams Street Green Bay, Wisconsin 54301

> Project No.: 16-1304 BRRTS # 02-05-237064 FID # 405044090

> > November 8, 2019



909 North 8<sup>th</sup> Street, Suite 101 Sheboygan, Wisconsin 53081

Prepared for:

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#### 1.0 SITE DESCRIPTION AND REMEDIAL HISTORY

The Property is approximately 1.33 acres and is occupied by a parking lot. Drycleaning operations ceased at the Property in 1989 with demolition of the site building in 2016. Previous soil remediation activities were performed in June 2003 and included partial excavation of soil from two locations, removing 180 tons of soil beneath the former building and 225 tons of soil in the east parking lot. Additional excavation was also performed on the east edge of the property around an area excavated by Arcadis in 2003. Despite the removal of contaminated soil from this area, the groundwater chemistry results from well MW-3 continued to display elevated concentrations of vinyl chloride (VC), further source removal was completed. This smaller excavation connected with the previous backfill from 2003 and wrapped around the former excavation in three directions, measuring roughly 35 feet by 25 feet. Following excavations, four horizontal piping arrays were installed in trenches dug to a depth of approximately 5 feet below grade. The trenches were backfilled with perforated piping designed to allow the addition of liquid treatments of carbon (typically molasses) at a depth of 5 feet to help enhance the degradation of tetrachloroethene (PCE). A solution of molasses was added on multiple occasions from June 2003 through January 2007, with demonstrated success in reducing the concentration of PCE in groundwater. However, increases were observed in degradation products 1,2-dichloroethene (DCE) and VC at well MW-1, located beneath the former building in the greatest area of soil and groundwater contamination.

Additional remediation activities were conducted from November 2016 through March 2017, which included the treatment of soil with Fenton's reagent (which is a solution of hydrogen peroxide ( $H_2O_2$ ) with ferrous iron (typically iron(II) sulfate [FeSO<sub>4</sub>]) as a catalyst that is used to oxidize contaminants)), Bioavailable Absorbent Media (BAM<sup>M</sup>) a carbon and nutrient amendment, and a large soil excavation that removed 3,150 tons of soil and 292 tons of contaminated concrete. Additional remedial excavation activities were conducted in November-December 2018 that removed approximately 2,800 tons of soil. The final excavation boundaries were limited horizontally to the north and west due to the presence of the sidewalks/property boundaries along South Adams Street and Chicago Street to the north and west. The excavation connected with the 2016 and 2017 excavation boundaries and to the southeast with the 2003 excavation boundary based on the observation of uniform imported fill. The excavation extended to depths of 5 to 12 feet below grade.

### 1.1 Contacts

The project contacts are as follows:

Responsible Party Bay Towel Mr. John Butz P.O. Box 12115 2580 South Broadway Ashwaubenon, WI 54304 Phone: 920.497.2000 jbutz@baytowel.com

Wisconsin Department of Natural Resources (WDNR) Project Manager

#### WDNR

Department of Remediation and Redevelopment Ms. Josie M. Schultz Hydrogeologist - Northeast Region Remediation and Redevelopment Team Wisconsin Department of Natural Resources 2984 Shawano Avenue Green Bay, WI 54313-6727 Phone: 920.662.5424 Cell: 920.366.5685 Josie.Schultz@Wisconsin.gov

#### Consultant

Fehr Graham Mr. Matt Dahlem, PG Branch Manager 909 N. 8<sup>th</sup> Street, Suite 101 Sheboygan, WI 53081 Phone: 920.453.0700 mdahlem@fehr-graham.com

#### Remedial Contractor Legacy Construction Services of Wisconsin, LLC Mr. Bruce Phillips 1583 Fire Ln Dr Green Bay, WI 54311 Phone: 920.468.4428 legacyconstructionservices@gmail.com

<u>Analytical Laboratory:</u> Pace Analytical Laboratory Mr. Chris Hyska Project Manager 1241 Bellevue Street - Suite 9 Green Bay, WI 54302 Phone: 920.469.2436 Christopher.Hyska@pacelabs.com

#### Landfill:

Waste Management, Inc. Mr. Kyle DeVeau Ridgeview Facility 6207 Hempton Lake Road Whitelaw, WI 54247 Phone: 800.963.4776 kdeveau@wm.com

#### Chemical Contractor:

ORIN Technologies, LLC. Mr. Tyler Emerson 405 Investment Ct. Verona, WI 53593 Cell: 608.514.2095 Office: 608.838.6699 ext. 104 Fax: 608.838.6695 temerson@orinrt.com

#### Dewatering Contractor:

Covanta Environmental Solutions Mr. Steve Sternard Industrial Manager - Environmental Sales Fox Valley Division 210 Tower Road Winneconne, WI 54986 Phone: 920.582.7596 Cell: 920.912.5188 ssternard@covanta.com

Construction Material Testing Services Miller Engineers & Scientists

Mr. Brian Leibham 5308 South 12th Street Sheboygan, WI 53081 Office: 800.969.7013 Mobile: 920.946.0035 bleibham@startwithmiller.com Insurance Provider Resolute Management, Inc. Mr. E. Berch Willard CPCU, MBA Sr. Account Manager 100 Liberty Way 02A Dover, NH 03820 Phone: 603.970.2261 Fax: 603.334.8088 ewillard@resolutemgmt.com

Legal Counsel Axley Brynelson, LLP Mr. Donald P. Gallo N20W22961 Watertown Rd. Waukesha, WI 53186 Office: 262.524.8500 Fax: 262.524.9200 DGallo@axley.com

### 2.0 PREVIOUS FINDINGS

Volatile Organic Compound (VOC) contaminants detected in soil and groundwater at this site include PCE, trichloroethene (TCE), cis-1,2-DCE, trans-1,2-DCE, VC, and trimethylbenzenes (Figure 1 and Figure 2). PCE is the drycleaning solvent that was used at the site. When it degrades, associated biodegradation daughter products are generated, including TCE, DCE, and VC. Stoddard solvent was also used as a drycleaning solvent at the site until approximately 1973. Stoddard is a petroleum-based drycleaning chemical and is responsible for the elevated detections of trimethylbenzenes at the site. Previous remedial action documentation reports (Fehr Graham May 2018 and Fehr Graham April 2019) presented the results in greater detail.

### 2.1 Pre-Remedial Excavation Soil Sampling

In June 2019, nine pre-excavation soil borings (B-121, C-R, EX-31B-R, EX-32B-R, EX-33B-R, EX-34B-R, EX-51-R, EX-52-R, and F-R, Figure 2) were completed by Horizon Construction and Exploration under the supervision and direction of Fehr Graham personnel. Soil was retained using hydraulic push methods of drilling, with continuous soil samples retained to the borehole base, at a maximum depth of 25 feet below grade.

In August 2019, 11 pre-excavation soil borings (A2 Base R, A2 S. SDWL, B-122, B-123, B-124, B-125, B-126, B-127, EX-33-BR1, EX-34-BR1, CR1, Figure 2) were completed by Intertek-PSI under the supervision and direction of Fehr Graham personnel. Soil was retained using split spoon methods of drilling, with continuous soil samples retained to the borehole base, at a maximum depth of 50 feet below grade.

The site geology was described and field photoionization detector (PID) measurements obtained during drilling. Soil samples were retained for laboratory analysis of total VOCs and toxicity characteristic leaching procedure (TCLP) VOCs.

Between both soil sampling events, a total of 57 samples were analyzed for VOC, and a total of 55 samples were run analyzed for TCLP VOC by the laboratory. The results from the borings have been used to direct the depth and extent of this remedial excavation and which soil needs treatment before licensed landfill disposal (Figure 1).

### 2.2 Pre-Remedial Excavation Groundwater Sampling

The June 2019 groundwater analytical results show groundwater at the site contains elevated levels of PCE and VC at levels slightly above the state Enforcement Standard (ES) only at MW-2R. The extent of contamination in groundwater has been defined both horizontally and vertically and no downward vertical migration of contamination has been observed (Figure 2).

## 3.0 PROPOSED REMEDIAL ACTION

### 3.1 Pre-Remedial Excavation Groundwater Sampling

Prior to remedial activities, groundwater samples will be obtained from all 16 groundwater monitoring wells and piezometers for laboratory analysis of VOCs in order to gauge the preexcavation groundwater chemistry and water levels. Sampling will be performed using standard groundwater sampling procedures, with individually dedicated bailers for sampling.

### 3.2 Construction Related Soil and Groundwater Management Plan

A Soil and Water Management Plan (SMP) will be prepared by Fehr Graham which will provide guidance on the management of soil and groundwater during construction activities where contaminated environmental media (e.g., soil, groundwater) or a combination of contaminated soil and other solid waste materials (e.g., historic fill) may be encountered. The SMP will be developed to assist construction contractors in understanding how to safely manage such materials in compliance with state law.

It will not be economically practical to excavate all soil from the site that exceeds WDNR RCLs. The remedial excavation is intended to remove the most contaminated soil from the site with an overall objective to demonstrate stable or improving groundwater chemistry results over time following the excavation.

### 3.3 <u>Remedial Excavation</u>

Historic laboratory results indicated most of the soil contamination mass resided in the boundaries shown on the attached map (Figure 1). The proposed "hot-spot" excavation areas will be marked using marking paint to guide the backhoe operator. Prior to excavation, public and private utilities will be marked by Diggers Hotline and a private utility locating contractor. Additionally, groundwater monitoring well SMW-1 will be abandoned prior to excavation activities as it is located in the main excavation. An abandonment form will be completed for groundwater monitoring well SMW-1.

The remedial excavation is proposed to remove contaminated soil containing PCE and TCE. The excavation is planned to be to 30-feet below grade at the maximum. The excavation is planned to go below the water table interface, but groundwater is not expected to enter the excavation. The site water table surface was monitored for years during the investigation and ranges from approximately 4-8 feet below grade. The tight silty clay formation and planned

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late fall/winter excavation activities will most likely prevent the accumulation of water in the excavation base, as it has in previous excavations. However, if groundwater infiltration occurs or if rainwater accumulates, Covanta Environmental Solutions (Covanta) will remove any water prior to excavation or backfilling activities via vacuum truck and properly dispose of the water per state code.

Previous remedial excavations at the site extended to depths of 5-14 feet below grade and were backfilled with clean crusher run rock chips and bank run sand and gravel with traffic bond silty gravel near the surface to present grade. In these areas where clean backfill is known to be present, the excavation contractor will excavate approximately 3,100 tons and stage onsite to be beneficially reused to backfill the current remedial excavation.

An estimated 2,300 tons of contaminated soil from two different areas will be excavated and direct hauled to Waste Management's Ridgeview Security LandfillI in Whitelaw, Wisconsin. In areas with higher concentrations of drycleaning solvent, from 14-feet to 25-feet below grade, the soils are considered hazardous in the central excavation area. These soils, approximately 1,200 tons, will be excavated and placed into approximately 14 roll-off boxes over two events (28 total roll-off boxes). The soil in the roll-off boxes will be treated using Fenton's reagent and BAM™ from Orin Remediation Technologies in Verona, Wisconsin. All soil will be treated by a combination of continuously mixing the impacted soils with an excavator while simultaneously applying the preferred treatment chemicals. The oxidant will be sprayed directly onto the soils until the desired amount of oxidant is thoroughly incorporated. A backhoe will mix the BAM™ with the treated soils to complete the oxidation reaction and to assist in stabilization of the treated, saturated soils.

Three grab samples from each box will be analyzed for VOC and TCLP VOC analysis. The grab samples will be collected from discrete sample locations/depths in each box (i.e., the soil samples will not be composite samples). For disposal approval of the treated soil at a licensed Subtitle D facility in Wisconsin, the treated soil must display results that are below the following threshold values:

A. The sum of all detected individual VOCs must fall below 60 mg/kg (or 60,000 ug/kg) to meet concentrations that are 10 times the land disposal restriction (LDR). Demonstration that the total VOC concentration declined by 90 percent or more due to the treatment process would also meet the disposal restriction but at this time it does not appear there is adequate pre-treatment information to accurately assess the level of decrease in the soil via the treatment procedure.

- B. The soil must meet the "contained out values," which include the following for these soils:
  - PCE 153,000 ug/kg
  - TCE 8,800 ug/kg
  - VC 2,000 ug/kg
- C. The soil must be accepted by the landfill, which typically requires that the soil pass the characteristic test for TCLP. For these soils, the TCLP criteria include the following:
  - PCE 0.7 mg/l in leached extract
  - TCE 0.5 mg/l in leached extract
  - VC 0.2 mg/l in leached extract

Upon receipt of an acceptable amount of data that demonstrates compliance with these criteria, the treated material can be approved for landfill disposal at a Subtitle D facility by the WDNR. Once the WDNR indicates the material is acceptable for disposal, the landfill will accept the material for hauling and disposal.

Upon excavation completion, an estimated 25 sidewall/perimeter soil samples will be retained from the remedial excavation to document the final soil chemistry results from the excavation walls. Base samples will not be retained as previous soil chemistry results can be used to document the remaining in place soil chemistry concentrations. Soil samples will be retained for laboratory analysis of VOCs.

After soil samples have been retained, BAM<sup>™</sup> will be applied to the base of the soil excavation and backfilled with geotechnically suitable materials. Backfill will consist of American Association of State Highway and Transportation Officials (AASHTO) #57 clean clear stone (no fines) as fill material for the basal 18-feet, followed with dense base aggregate material and density testing on each lift for the remaining 11-feet to 1-foot below finished grade, with traffic bond material to be placed from 1-foot to finished grade. In order to confirm the adequacy of compaction of the backfill materials, a Proctor test will be performed on the proposed fill materials prior to backfilling. The established Proctor density of the fill will then be used in conjunction with field densities established via density testing to determine compaction levels being achieved. Compaction testing verification will be performed in 1-foot lifts using a rolling vibratory compactor from 11-feet below grade to the surface.

To note, AASHTO #57 clean clear stone (no fines) will not be tested or compacted. Compaction testing of AASHTO #57 clean clear stone with a nuclear gauge or other device is not possible, even though many specifications state that it should be compacted to 95 percent of Proctor values. So rather than compaction tests, the AASHTO #57 clean clear stone should have its individual stone facets properly oriented using a plate compactor, jumping jack, or other vibratory compaction device. Using compaction equipment, the AASHTO #57 stone will typically compact about 1 inch in vertical height, which is equivalent to about an 8 percent settlement. This can be visually observed and verified. Compaction of this layer will comply with the geotechnical engineer's recommendations.

#### 3.4 Post-Remedial Groundwater Monitoring Well Installation and Sampling

After remedial excavations and site restoration, replacement of SMW-1 will be completed with a well nest including a new groundwater monitoring well to excavation depth (30-feet below grade) and a piezometer to 50-feet below grade. Since the well and piezometer will be drilled through backfill and previously analyzed soil, the borings will be blind drilled via Hollow Stem Auger with no soil sampling. The monitoring well and piezometer will be installed using 2-inch diameter Schedule 40 PVC with a 25-foot screen from approximately 5 to 30 feet below grade for the monitoring well and a 5-foot screen from approximately 45-50-feet below grade for the piezometer. The well and piezometer will be completed using sand pack, a bentonite seal, and a traffic-weight, flush mounted surface cover that will be cemented into place. Monitoring well construction reports will be completed in accordance with Chapter NR 141 Wisconsin Administrative Code (WAC). Investigation derived soil generated during the soil sampling and well installation activities will be returned to the site.

A week (or possibly longer) after well installation activities, the groundwater from each well will be developed per NR 141 WAC by purging with a bailer until 10 well volumes have been removed or the wells go dry. Based on the anticipated geology, we expect the wells will bail

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dry. All wells will also be surveyed relative to the North American Vertical Datum of 1988 (NAVD88) in feet above mean sea level.

Approximately one week after monitoring well development activities, the monitoring well network will be sampled for laboratory analysis. Prior to sampling, field measurement of water levels and geochemical parameters, including pH, conductivity, redox, temperature, and dissolved oxygen, will be performed. Sampling will be performed using individually dedicated bailers to purge and sample each well.

Sampling of the groundwater will be performed for laboratory analysis of VOCs at all monitoring wells and piezometer locations using laboratory provided containers and standard WDNR required methods.

### 3.5 Remedial Action Documentation Report

This report will describe the results of the remedial excavation activities that were completed at the site. The WDNR will be contacted to discuss the findings from this report. It is expected that upon removal of this deeper contaminated soil, with continued favorable groundwater contaminant trends, case closure can be pursued in 2020.

## 4.0 RESPONSIBLE PARTY APPROVAL

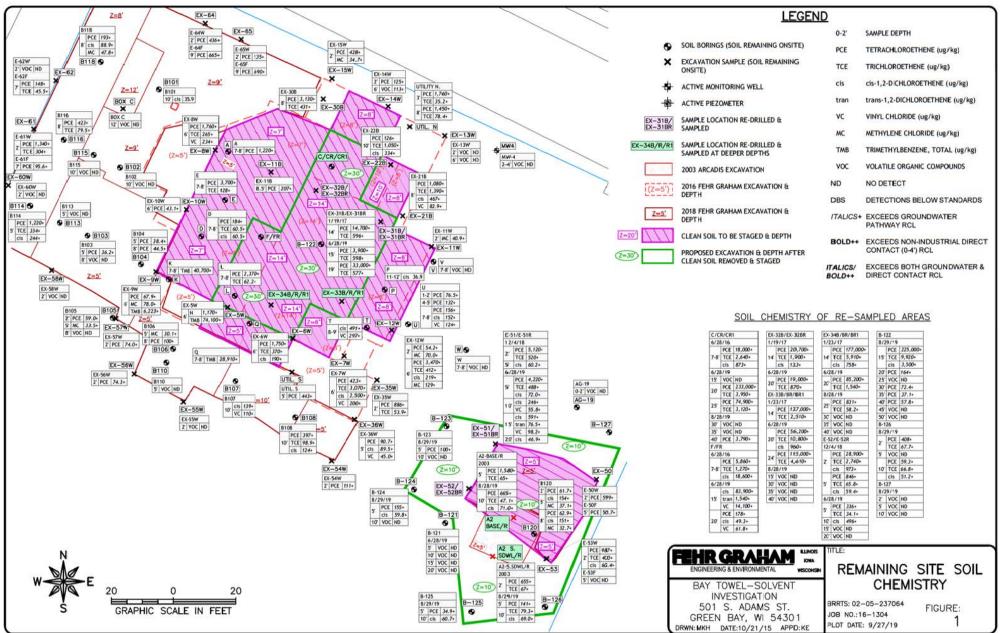
The proposed remedial activities and costs, which includes all consultant and subcontractor charges, is included on Table 1. If this Remedial Action Plan and associated costs meets your approval, please sign and return the attached Agreement for Professional Services, which will serve as your official authorization for us to proceed with the proposed work. If you should have any questions, please do not hesitate to contact Fehr Graham.

## 5.0 SCHEDULE

Assuming the project will proceed in short order, the following conservative estimate for the overall time frame is projected.

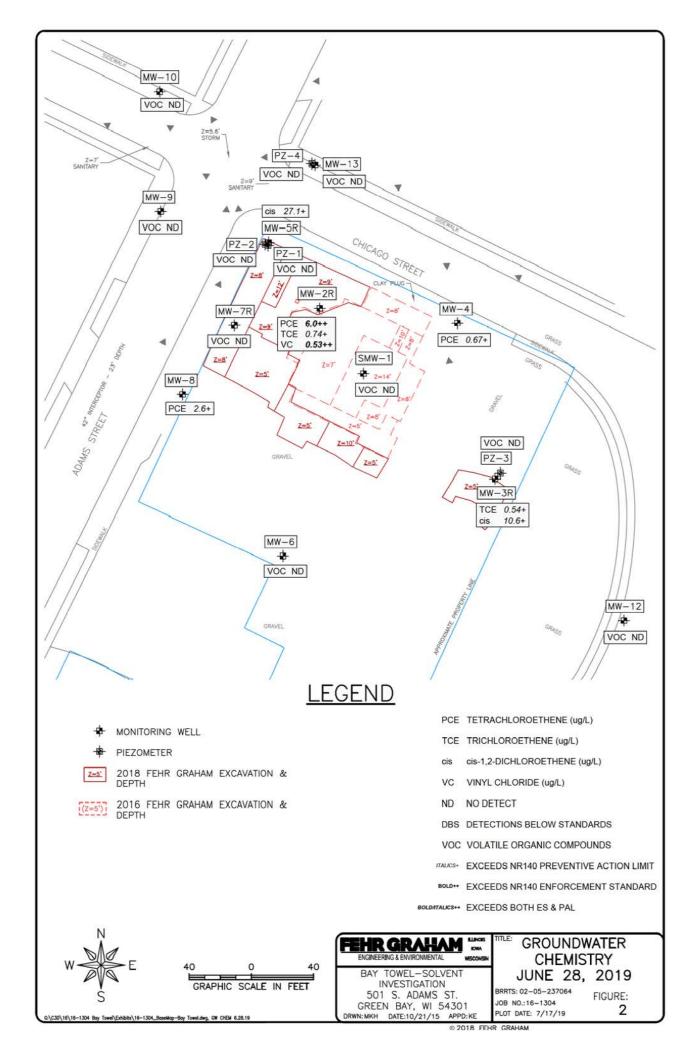
Remedial Action Approval	November 2019
Field Investigation: Groundwater Monitoring	November 2019
Remedial Excavations	December 2019
Field Investigation: Groundwater Monitoring	January 2020
Data Evaluation, Interpretation	January 2020
Remedial Action Documentation Report	February 2020

Figures



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**Tables** 

#### TABLE 1 COST ESTIMATE - Former Bay Towel, BRRTS # 02-05-237064 Remedial Action Costs 501 S. Adams Street, Green Bay, WI

	Rate	Quantity	Units	Estimated Cost
oject Management, Work Plan and Approvals: WDNR, Landfill, Haz Waste Determination, Landfill Approval Branch Manager	\$150.00	20	hour	\$3,00
Project Hydrogeologist	\$85.00	20	hour	\$1.7
CAD	\$75.00	20	hour	\$1,5
Project Assistant	\$65.00	20	hour	\$1,3
	Sub			\$7,5
e-Remedial Groundwater Sampling and Reporting - 16 locations Branch Manager	\$150.00	2	hour	\$3
Project Hydrogeologist	\$150.00	- fi	nou	90
Scope, Set Up, Field Prep	\$85.00	2	hour	\$1
Water Level / Purge / Sample / NA Parameters	\$85.00	20	hour	\$1,7
Water Level Meter	\$36.00	2	day	
YSI	\$127.00	2	day	\$2
Forms, Prep, Ship	\$85.00	2	hour	5
Vehicle	\$68.00	2	day	5
Field Supplies (bailers, rope, ice, dist H2O, etc.)	\$25.00	16	well	\$
Groundwater Status Report	<u></u>	80) - C - B	연구가가구벗는	123
Branch Manager	\$150.00	4	hour	S
Project Hydrogeologist	\$85.00	20	hour	\$1,3
CAD	\$75.00	6	hour	\$4
Project Assistant	\$65.00		hour	
Instruction Related Soil and Groundwater Management Plan	Sub	total:		\$6,0
Branch Manager	\$150.00	6	hour	\$9
Project Hydrogeologist	\$85.00	32	hour	\$2.7
CAD / Drafter	\$75.00	16	hour	\$1,2
	Sub	total:		\$4,8
medial Action: Soil Excavation Oversight, Disposal, Mixing, Sampling, Profiling, Backfilling (25 days) cavale 3600 tons. Stage clean, direct haul non-haz, mix Fentons and BAM / LF haz, 28 Drop Boxes; 84 rapid turn VOCs and TCLP \	VOCs: Add chem	icals in base; 25	perimeter side	wail final VOCs.
ersee excavation backtilling and monitor imported fill		General		
Branch Manager	\$150.00	16	hour	\$2,400
Project Hydrogeologist	\$85.00	250	hour	\$21,250
CAD	\$75.00	10	hour	\$750
Project Assistant	\$65.00	4	hour	\$260
PID (ppb RAE)	\$100.00	25	day	\$2,500
Vehicle	\$68.00	25	day	\$1,700
Field Supplies-gloves, etc.	\$10.00	25 total:	each	\$250
ell / Piezometer Installations - Two Borings - one to 30', one to 50'; 2" NR 141 Wells	500	total.		\$29,1
Banch Manager	\$150.00	6	hour	\$900
Project Hydrogeologist		<u> </u>		
Scope, Set Up, Field Prep	\$85.00	2	hour	\$1
Well / Piezometer Installation Oversight	\$85.00	16	hour	\$1,360
Water Level Meter	\$36.00	1	day	1
Forms	\$85.00	2	hour	\$1
Vehicle	\$68.00	1	day	5
Field Supplies (bailers, rope, ice, dist H2O, etc.)	\$25.00 Sub	2	well	\$2,0
rveying, Well Development (2 new wells 1 week after well installations)	Sub	COLAL.		32,1
Banch Manager	\$150.00	2	hour	\$300
Project Hydrogeologist				
Scope, Set Up, Field Prep	\$85.00	2	hour	\$1
Water levels, Calculations, Develop 2 wells	\$85.00	6	hour	\$510
Water Level Meter	\$36.00	1	day	4
Survey New Wells	\$85.00	3	hour	53
Survey Equipment	\$20.00	3	hour	
Forms Vehicle	\$85.00 \$68.00	2	hour	\$1
Venicle Field Supplies (bailers, rope, ice, dist H2O, etc.)	\$65.00	1	day well	3
r new supports (seems s, rope, nee, see, enc.)	Sub		High .	\$1,6
st-Excavation Groundwater Sampling - 17 locations		1 2		
Branch Manager Project Hydrogeologist	\$150.00	2	hour	\$
Project Hydrogeologist Scope, Set Up, Field Prep	\$85.00	2	hour	\$
Water Level / Purge / Sample / NA Parameters	\$85.00	24	hour	\$2.0
Water Level Meter	\$36.00	2	day	92,0
YSU STAR	\$127.00	2	day.	\$
Forms, Prop, Ship	\$85.00	2	hour	S
Vehicle	\$68.00	2	day	\$
Field Supplies (bailers, rope, ice, dist H2O, etc.)	\$25.00	17	well	\$
Groundwater Status Report				
Branch Manager	\$150.00	4	hour	\$(
Project Hydrogeologist	\$85.00	20	hour	\$1,7
CAD	\$75.00	6	hour	\$4
Project Assistant	\$65.00	1	hour	1
		ototal		\$6,3
	Subtotal	Nound 2:		\$6,
medial Action Documentation Report	\$150.00	40	hour	\$6,0
medial Action Documentation Report Branch Manager			hour	\$3.4
	\$85.00	40	1004	
Branch Manager	\$85.00 \$75.00	24	hour	\$1,6
Branch Manager Project Hydrogeologist	\$85.00 \$75.00			\$1,1 \$11,2
Branch Manager Project Hydroposlogist. CAD / Drafter	\$85.00 \$75.00	24 total:		

COMMODITY SERVICES	0.1		10000	Estimated
aboratory Samples	Rate	Quantity	Units	Cost
Laboratory Services (standard 2 week turnaround)	1			
Pre-Remedial Groundwater VOC - standard 2 week turnaround (16 wells)	\$71.50	16	each	\$1,144
Treated Soil VOC - rush 1-day tumaround (3 soil samples per box - 28 boxes)	\$214.50	84	each	\$18,018
Treated Soil TCLP VOC - rush 3-day turnaround (3 soil samples per box - 28 boxes)	\$211.75	84	each	\$17,787
Perimeter Soil VOC - standard 2 week turnaround	\$71.50	25	each	\$1,787
Dry Weight	\$6.60	193	each	\$1,273
Post-Remedial Groundwater VOC - standard 2 week turnaround (17 wells for two rounds)	\$71.50 Sub	34	each	\$2,431
Remedial Action: Soil Excavation, Disposal, Mixing, Sampling, Profiling, Dewatering, Backfilling (25 business days)	Sub	total:		242,441
xeavate 3500 tons. Stage clean, direct haul non-haz, mix Fentons and BAM / LF haz, 28 Drop Boxes, 84 rapid turn VOCs and TCLF	VOCs: Add chemi	cals in base. 25	perimeter side	wall final VOGs
versee excavation backfilling and monitor imported fill	a b b b a s rabe deresión		permitte debe	inder minder in Group,
Chemical Contractor				
Fenton's Reagent and BAM	\$99.00	1800	ton	\$178,200
Contractor Labor (2 personnel)	\$242.00	84	hour	\$20,320
Trailer and Equipment	\$5,830.00	8	day	\$46,640
Treat Excvn Base - Chemicals	\$18,370	1	lump	\$18,370
Treat Excvn Base - Contractor Oversight	\$242	10	hour	\$2,420
Standby Time	\$385	24	hour	\$9,240
Excavation Contractor		10.000	0.000.00	
Construction Permit (Erosion Control)	\$2,200	.1	lump	\$2,20
Water Permit + Water Usasge (Hydrant for Water Usage for Chemical Mixing)	\$1,100	1	lump	\$1,100
Private Locale	\$138	8	hour	\$1,10
Contractor Mob / Demob	\$11,000	1	lump	\$11,00
Barriers, Secure site	\$1,650.00	1.1	kimp	\$1,650
Erosion Control	\$4.95	200	feet	\$99
Soil Excavation of Current Backfill and Stage Onsite	\$5.50	3100	ton	\$17,050
Soil Haul to Landfill (Ridgeview - Whitelaw) (includes Hauling, but NOT Landfill Fee)	\$15.40	2300	ton	\$35.420
Soil Haul to Landfill in 28 Rolloff Boxes Post-Treatment (Ridgeview - Whitelaw) (includes Hauling, but NOT Landfill Fee)	\$19.80	1200	ton	\$23.76
Contractor Mixing of Chemicals within Rolloff Boxes	\$1,100.00	28	eacti	\$30.80
Contractor Plastic for Drop Boxes	\$4.40	28	each	\$12
Contractor Plasac for landfill hauf	\$5,500.00	4	kimp	\$22.00
	\$27.50	1400		\$38,50
Backfill with AASHTO #57 clear stone (or equivalent) from 30-12-feet below grade Backfill and Compact in 1-foot lifts previously excavated Bank Run Sand/Grvl 12-feet to 0.5-feet below grade	\$27.50	855	yards vards	\$8,46
	\$38.50	200		\$7,70
Backfill and compact imported traffic bond / screenings 0.5-feet below grade to surface grade		1200	yards	
Unload Dumpsters	\$1.10		ton	\$1,32
Max chemicals into Excvn Base (incl in mix hours) Landfill Contractor	\$275.00	12	hour	\$3,30
WWM	\$1.10	3500		\$3.85
			ton	
Fuel Surcharge	\$1,10	3500	ton	\$3,85
Lanfil Environmental Fee	\$1.10	3500	ton	\$3,85
Landfill Treated Sol	\$36.30	1200	ton	\$43,56
Landfil Non-Treated Soil	\$36.30	2300	ton	\$83,49
Drop Box Rental	\$55.00	28	month	\$1,54
Drop Box Delivery / Pickup	\$247.50	28	each	\$6,93
Dewatering Contractor via Vacuum Truck Extraction (if necessary) - Assume 4 Events at 1000 gallons per event				20000
Mobilization	\$385.00	4	lump	\$1,54
Onsite Time	\$286.00	4	lump	\$1,14
Disposal	\$429.00	4	lump	\$1,71
Environmental, Insurance and Security Fee	\$4,840.00	0.095	ton	\$45
	Sub	total:		\$633,60
onstruction Material Testing Services Field Time	<u> </u>	-		
Field Density Testing	\$104.50	60	hour	\$6.27
Travel Time	\$104.50	12	hour	\$1,25
Mieago	\$0.64	816	miles	\$520
Lab Testing	00.04	0.010	10003	432
Sieve Analysis (washed)	\$104.50	2	lest	\$20
Proctor (clays and gravels)	\$104.50	2	liest	\$20
Reporting Time	0104.00	1 É	and a	\$20
Report Preparations	\$104.50	2	hour	\$20
Clerical Formatting	\$82.50	<b>1</b>	hour	\$20
Executive Review by Principal PE	\$181.50		hour	\$6.
Procession consume ed. c. underge L.C.		total:	1504	\$8,93
/ell / Piezometer Installations - Two Borings - one to 30", one to 50"; 2" NR 141 Wells	- Mariana - A		2.5 12	
Geoprobe 3230 DT drill rig mobilization and support truck	\$990.00	1	day	\$990
Blind 4 1/4* Hollow Stem Auger (0-25 feet)	\$13.20	50	feet	\$660
Bind 4 1/4* Hollow Stem Auger (26-50 feet)	\$17,60	30	foot	\$521
2* Well Installation	\$16.50	80	feet	\$1,320
8 X 12" Flushmounts	\$212.30	2	each	\$42
Decon	\$82.50	1 Intel:	day	\$8.
	Sub	total:		\$4,00
	COMMO	DITY COSTS:		\$688,98

Costs do not include: Groundwater monitoring beyond two rounds of post-remediation sampling Cloware reporting Well abandomment activities

**Professional Service Agreement** 



## AGREEMENT FOR PROFESSIONAL SERVICES

Client Mr. John Butz Bay Towel 2580 South Broadway P.O. Box 12115 Green Bay, WI 54307-2115

920.497.2000

Description of Services:

#### **Bay Towel - Remedial Excavation**

Fehr Graham to conduct remedial excavation of the source area soil contamination with post-excavation groundwater monitoring in order to exhibit stable or declining groundwater contaminant levels in order to obtain case closure per Fehr Graham's Remedial Action Plan dated November 8, 2019.

COST: You will be billed on a time and material basis as per the annually established fee schedule.

The fee for performing the above services is estimated to be \$764,771.51.

The attached General Conditions are incorporated into and made a part of this Agreement.

#### ACCEPTED AND AGREED TO:

I/we, the undersigned, authorize Fehr Graham to provide services as outlined above, and also agree that I/we are familiar with and <u>ACCEPT THE TERMS OF THE ATTACHED GENERAL CONDITIONS.</u>

CLIENT:	CONSULTANT:
Signature	By len & Thes
Name	Name Ken Thompson
Title	Title Principal
Date Accepted	Date Proposed November 8, 2019

#### GENERAL CONDITIONS TO AGREEMENT FOR PROFESSIONAL SERVICES

- 1. The Client orders the professional services of Fehr Graham hereinafter called "Consultant" as described herein ("Order").
- 2. The Consultant agrees to furnish and perform the professional service described in this Order in accordance with accepted professional standards. Consultant agrees to provide said services in a timely manner, provided, however, that Consultant shall not be responsible for delays in completing said services that cannot reasonably be foreseen or for delays which are caused by factors beyond its reasonable control or delays resulting from the actions or inaction of any governmental agency. Consultant makes no warranty, expressed or implied, as to his findings, recommendations, plans and specifications or professional advice except that they were made or prepared in accordance with the generally accepted engineering practices.
- 3. It is agreed that the professional services described in the Order shall be performed for Client's account and that Client will be billed monthly for said services. A 1.5% per month service charge will be incurred by Client for any payment due herein and not paid within 60 days of such billing which is equal to an ANNUAL PERCENTAGE RATE OF 18%. Partial payments will be first credited to the accrued service charges and then to the principal.
- 4. This agreement shall inure to the benefit of and be binding upon the heirs, successors and /or assigns of the Client and Consultant and to any party claiming a whole or partial interest in and/or to the Client and the Consultant.
- 5. The Client shall be responsible for payment of all costs and expenses reasonably incurred by the Consultant for its account, including any such monies that the Consultant may advance for Client's account for purposes consistent with this Order.
- 6. The Consultant reserves the right to withdraw this Order if not accepted within 30 days.
- 7. The Consultant shall present, for the consideration of the Client, engineering and technical alternatives, based upon its knowledge and experience in accordance with accepted professional standards, with selection of alternatives and final decisions as requested by the Client to be the sole responsibility of the Client.
- 8. Estimates of Fees When fees are on a time and material basis the estimated costs required to complete the services to be performed are made on the basis of the Consultant's experience, qualifications, and professional judgment, but are not guaranteed. If the costs appear likely to exceed the estimate in excess of 10%, the Consultant will notify the Client before proceeding and shall provide written notice to Client before incurring the additional costs. If the Client does not object to the additional costs within seven (7) days of receiving notification, the increased costs shall be deemed approved by the Client.
- 9. The Consultant shall be responsible for the safety on site of its own employees. Neither the professional services of the Consultant, nor the presence of its employees or subcontractors, when permitted, shall be construed to imply that the Consultant has any responsibility for any activities on site performed by personnel other than the Consultant's employees or subcontractors or those individuals or companies acting under the guidance and/or supervision of Consultant.
- 10. Original survey data, field notes, computations, and other such documents ("Documents") generated by the Consultant are instruments of service and shall remain the property of the Consultant. The hardware, software and licensures of any electronic management system remain the property of the Consultant. Reports and the associated attachments, agency correspondence and other such documentation shall be the property of the Client. The Consultant shall provide copies to the Client of all documents specified in the Description of Services. Client shall, however, have the right to use, photocopy, or distribute the Documents in a manner that is reasonably necessary to utilize the Documents for Client's intended purpose.

Any documents generated by the Consultant are for the exclusive use of the Client and any use by third parties or use beyond the intended purpose of the document shall be at the sole risk of the Client. To the fullest extent permitted by law, the Client shall indemnify, defend and hold harmless the Consultant for any loss or damage arising directly from the unauthorized use of such documents which, but for the actions of Client, would not have occurred.

- 11. If a Client's Purchase Order form or acknowledgment or similar form is issued to identify the agreement, authorize work, open accounts for invoicing, provide notices, or document change orders, the preprinted terms and condition of said Purchase Order shall be superseded by the terms hereof.
- 12. Standard of Care Services performed by Consultant under this agreement will be conducted in a manner consistent with that level of skill and expertise ordinarily exercised by members of the profession currently practicing under similar conditions. No other representation expressed or implied, and no warranty or guarantee is included or intended in any report, opinion or document under this agreement.
- 13. Indemnification and Limitation of Liability Client and Consultant each agree to indemnify and hold the other harmless, including their respective shareholders, officers, directors, employees, agents, members, and representatives, from and against liability for all claims, costs, losses, damages and expense, including reasonable attorney's fees, to the extent such claims, losses, damages or expenses are caused by the indemnifying party's negligent acts or failure to act, errors or omissions.

Client agrees to limit Consultant's liability to the Client arising from Consultant's professional acts, errors or omissions, such that the total aggregate liability of Engineer shall not exceed One Million Dollars (\$1,000,000.00).

14. Allocation of Risk - Consultant and Client acknowledge that, prior to the start of this Agreement, Consultant has not generated, handled, stored, treated, transported, disposed of, or in any way whatsoever taken responsibility for any toxic substance or other material found, identified, or as yet unknown at the Project premises. Consultant and Client further acknowledge and understand that the evaluation, management, and other actions involving toxic or hazardous substances that may be undertaken as part of the Services to be performed by Consultant, including subsurface excavation or sampling, entails uncertainty and risk of injury or damage. Consultant and Client further acknowledge and understand that Consultant has not been retained to serve as an insurer of the safety of the Project to the Client, third parties, or the public.

Client acknowledges that the discovery of certain conditions and/or taking of preventative measures relative to these conditions may

result in a reduction of the property's value. Accordingly, Client waives any claim against Consultant for injury or loss allegedly arising from procedures associated with environmental site assessment (ESA) activities or the discovery of actual or suspected hazardous materials or conditions that has a negative impact upon the value of the property. Client releases Consultant from any claim for damages resulting from or arising out of any pre-existing environmental conditions at the site where the work is being performed which was not directly or indirectly caused by and did not result from, in whole or in part, any act or omission of Consultant or subcontractor, their representatives, agents, employees, and invitees.

If, while performing the Services set forth in any Scope of Services, pollutants are discovered that pose unanticipated or extraordinary risks, it is hereby agreed that the Scope of Services, schedule, and costs will be reconsidered and that this Agreement shall immediately become subject to renegotiation or termination. Client further agrees that such discovery of unanticipated hazardous risks may require Consultant to take immediate measures to protect health and safety or report such discovery if required by law, regulation or ordinance. Consultant shall promptly notify Client upon discovery of such risks. Client, however, hereby authorizes Consultant to take all measures Consultant believes necessary to protect Consultant and Client personnel and the public. Furthermore, Client agrees to compensate Consultant for any reasonable costs associated with such measures.

- 15. In the event of legal action to construe or enforce the provisions of this work order, the prevailing party shall be entitled to collect reasonable attorney fees, court costs and related expenses from the losing party and the court having jurisdiction of the dispute shall be authorized to determine the amount of such fees, costs and expenses and enter judgment thereof.
- 16. Termination The obligation to provide further services under this Agreement may be terminated by either party upon seven (7) days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party. In the event of any termination, Consultant will be paid for all services rendered to the date of receipt of written notice of termination, at Consultant's established charge-out rates, plus for all Reimbursable Expenses including a 15% markup.
- 17. Provision Severable The unenforceability or invalidity of any provisions hereof shall not render any other provisions herein contained unenforceable or invalid.
- 18. Governing Law and Choice of Venue Client and Consultant agree that this Agreement will be governed by, construed, and enforced in accordance with the laws of the state in which the project occurs. If there is a lawsuit, Client and Consultant agree that the dispute shall be submitted to the jurisdiction of the circuit court for the county in which the project is located.
- 19. Insurance: Consultant shall procure and maintain the following insurance policies with insurers having an A.M. Best rating of not less than A where applicable during the term of this Agreement and for a period of two years following the date of final invoicing:
  - a. Workers' Compensation Coverage: Consultant shall maintain Workers' Compensation and Employers Liability Insurance for its employees in accordance with the laws of the state in which the project subject to this Agreement is located. Any notice of cancellation or non-renewal of all Workers' Compensation policies will be sent to the Client in accordance with the policy provisions.
  - b. Commercial General Liability Coverage: Consultant shall keep and maintain Commercial General Liability Insurance in an amount not less than One Million Dollars (\$1,000,000.00) per occurrence for injury to persons, including death, and damage to property.
  - c. Automobile Liability Coverage: Consultant shall maintain Automobile Liability Insurance covering injury to persons, including death, and property damage arising out of the use of company-owned, hired and no-owned vehicles, in an amount of not less than One Million Dollars (\$1,000,000.00) combined single limit for each occurrence.
  - d. Professional Liability Coverage: Consultant shall maintain Professional Errors and Omissions Liability for protection against claims resulting from, or alleging to have resulted from, the negligent acts, errors or omissions which may arise from Constant's services under this Agreement. The amount of this insurance shall not be less than One Million Dollars (\$1,000,000.00) on an annual aggregate basis.
- 20. Accessing the Property: Consultant will take reasonable precautions to avoid unnecessary damage or disturbance to Client's property. At the conclusion of field activities, Consultant shall restore the property to a condition that is the same or similar to that which existed immediately prior to the initiation of the field work proposed within this Agreement.
- 21. Status as an Independent Contractor: Consultant understands and agrees that its status is that of independent contractor and nothing contained in the Agreement shall in any way be construed as creating any agency, partnership or joint venture between the parties. Consultant shall conduct its business at its own responsibility and expense and shall be responsible for and promptly pay all applicable taxes chargeable or assessed with respect to its employees. All persons employed or subcontracted by Consultant in performance of the Services shall be under the sole and exclusive direction and control of Consultant and for no purpose shall they be considered the employees of Client.
- 22. Use of Subcontractors: In the event Consultant desires to subcontract any portion of the Services or deliverables to any subcontractor, sub-supplier or specialist (Subcontractor"), Consultant shall select Subcontractors with suitable qualifications to perform the Services. Consultant shall ensure that each Subcontractor agrees to be bound by the terms and conditions of this Agreement and the Purchase Order.



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