#### LETTER OF TRANSMITTAL

To: Ms. Linda Michalets
Wisconsin Department of Natural Resources
2300 N. Dr. Martin Luther King Jr. Drive
Milwaukee, WI 53212

Please check the type(s) of documents you have enclosed. Submittals will be tracked and filed based on the information you provide. Include the FID and BRRTS numbers which have been assigned to this site, and identify the intent of the document(s) you are submitting in order to speed processing. Please attach any required fees to this checklist.

IS THIS RELEASE PECFA-ELIGIBLE?

From: Stephen Meer, P.E.
The Sigma Group, Inc.
1300 W. Canal Street
Milwaukee, WI 53233

Type of Submittal:

Date:	March 7, 2019
Site Name:	Former Biogenesis
Address:	610 West Rawson Avenue
	Oak Creek, WI
FID#	241020010
BRRTS#	02-41-107191

YES	□ NO □ UNKNOWN AT THIS TIME	☐ LUST ☐	ERP	☐ VPLE	OTHER
HECK	Agreements	E. Police		Fruit!	FEE
	Tax assignment agreement - ss.75.106(2)(d) & 292.55				\$700
	Tax cancellation agreement - ss. 75.106(2)(d) & 292.55				\$700
	Negotiated agreements - s. 292.11(7)(d)2				\$1,400
	Technical Assistance (s. 292.55)				FEE
	NR 708 No Further Action Letter				\$350
	NR 716 No Further Investigation				\$700
	NR 716 Site Investigation Workplan				\$700
	NR 716 Site Investigation Report				\$1,050
	NR 720 Soil Cleanup Standards/Reports				\$1,050
	NR 722 Remedial Action Options Report				\$1,050
	NR 724 Remedial Design Report				\$1,050
	NR 724 Operation and Maintenance Report				\$425
	NR 724 Construction Documentation Reports				\$350
	NR 724 Long-Term Monitoring Plan				\$425
	NR 726 Case Closure Action				\$1,050
	NR 506 Exemption for building on a historic waste site				\$700
	Other Technical Assistance				\$700
	Liability Clarification Letters				
	s. 292.13(3) Off-Site Exemption Letters				\$700
	s. 292.55 Lease Letters - Single Properties				\$700
	s. 292.55 Lease Letters - Multiple Properties				\$1,400
	s. 292.55 General Liability Clarification Letters				\$700
	s. 292.21(1)(c)1.d. Lender Assessments				\$700
	Department Database Fees (ss. 292.12 and 292.				FEE THE MENT OF THE PERSON OF
	Sites with groundwater contamination that attains or exceeds c	ch. NR 140			\$350
	Sites with soil contamination that attains or exceeds ch. 720 RC	CLs			\$300
	Sites not otherwise addressed in this schedule, where the department of the condition in accordance with s. 292.12(2)	artment impose	es any		\$350
	Cases submitted for closure with monitoring wells not properly residual groundwater contamination	abandoned, wi	thout		\$350
	Modification or removal of a site or property from the database				\$1,050
	Other / Miscellaneous				

Remarks



March 7, 2019

Project Reference #16366

Ms. Linda Michalets Wisconsin Department of Natural Resources 2300 N. Dr. Martin Luther King Jr. Drive Milwaukee, WI 53212

RE: PE

**PECFA Variance Cost Approval Request** 

Biogenesis Enterprises, Inc. 610 W. Rawson Avenue Oak Creek, Wisconsin BRRTS# 02-41-107191 PECFA# 53154-1437-10 FID# 241020010

Dear Ms. Michalets:

On behalf of Oak Creek Rawson Industrial, LLC (OCRI), The Sigma Group, Inc. (Sigma) is submitting this PECFA Cost Approval request to the Wisconsin Department of Natural Resources (WDNR) for completion of select remedial excavation activities associated with associated with redevelopment of the above referenced subject property (the "Site").

#### **BACKGROUND**

The subject property was historically used by a bulk fuel oil blending, storage, and distribution facility since development in the 1950s until the 1990s. Approximately thirtynine (39) above ground storage tanks (ASTs) were historically located at the site for use in the blending, storage and distribution operations. The ASTs were reportedly taken out of service in 1986 and the bulk of the ASTs, with the exception of three large (800,000 gallon) ASTs, removed in 1990. The large ASTs were removed in the late 1990s/early 2000s.

A separate release associated with leaking underground storage tanks (USTs) associated with the site and tracked by BRRTS# 03-41-001132 was investigated, remediated and received regulatory case closure in July 1996.

Sigma and a previous environmental consultant, Natural Resource Technology, Inc. (NRT), have completed extensive site investigation activities at the Site. A summary of site investigation activities completed to date and with a description of proposed remedial activities was submitted to WDNR in February 2019 in the report entitled *Site Investigation Report & Remedial Action Plan (SI/RAP)*.

#### ANTICIPATED REMEDIAL EXCAVATION ACTIVITIES

The SI/RAP identified seven distinct areas containing petroleum impacts associated with former bulk storage where remediation, specifically excavation and off-site disposal, is warranted. A copy of Figure 10 from the SI/RAP, illustrating the approximate extent of the areas targeted for remedial excavation, is attached. These areas are summarized as follows:

- The area containing elevated concentrations of benzene in the vicinity of NRT borings MW-14 and GP\_24 in the former dispensing area, approximately 35 feet by 17 feet by 4 feet deep. Based on these anticipated excavation dimensions, a disposal volume of 90 cubic yards (150 tons) is estimated.
- The area containing elevated concentrations of naphthalene in the vicinity of test pit STP-13 and SGP-7 in a former AST area, approximately 70 feet by 25 feet by 4 feet deep. Based on these anticipated excavation dimensions, a disposal volume of 260 yards (450 tons) is estimated.
- The area containing elevated concentrations of naphthalene in the vicinity of soil boring SGP-98. Although most recently located beneath a building footprint it is Sigma's opinion, as discussed in the SI/RAP, that the release associated with the naphthalene impacts likely occurred before the building was constructed and is associated with dispensing and distribution from former bulk storage activities at the Site. This area measures approximately 35 feet by 35 feet by 4 feet deep, an estimated disposal volume of 185 yards (315 tons).
- The area containing elevated concentrations of naphthalene and benzene in the vicinity of soil boring SGP-105. Although most recently located beneath a building footprint it is Sigma's opinion, as discussed in the SI/RAP, that the release associated with these impacts likely occurred before the building was constructed and is associated with dispensing and distribution from former bulk petroleum storage activities at the Site. This triangular area measures approximately 50 feet by 45 feet (1/2) by 4 feet deep, an estimated disposal volume of 175 yards (300 tons).
- The area containing elevated concentrations of benzene and naphthalene in the vicinity of soil boring SGP-25. This area is located adjacent to former ASTs and the shallow impacts within this area are associated with former bulk storage operations at the Site. This area measures approximately 25 feet by 25 feet by 4 feet deep, an estimated disposal volume of 100 yards (170 tons).
- The area containing elevated concentrations of benzene and naphthalene in the vicinity of test pit STP-5 and soil boring SGP-36. This area is located adjacent to former ASTs and the shallow impacts within this area are associate with former bulk storage operations at the Site. This area measures approximately 30 feet by 30 feet by 4 feet deep, an estimated disposal volume of 140 yards (240 tons).
- The area containing elevated concentrations of benzene, naphthalene, trimethylbenzenes and PCBs in the vicinity of soil borings SGP-23 and SGP-24. Although this area is not directly adjacent to the former AST areas, review of historic aerial photos indicates that trailers and other equipment associated with storage or dispensing of petroleum products were formerly stored within this area of the Site. Therefore, the impacts within this area are associated with the former petroleum storage operations at the Site. The anticipated excavation volume for this area, as described in the SI/RAP, is 200 yards (340 tons).

In addition to the planned remedial excavation areas summarized above and described in the SI/RAP, it is anticipated that additional petroleum impacted material may potentially be generated during excavation activities associated with construction of building foundations and subsurface utilities associated with the proposed redevelopment. Specifically, material may be generated from within the limits of Type 4 material as depicted on the Soil Management Plan figure submitted with the NR 718 Request for Approval previously submitted to WDNR (a copy of this figure is included as Attachment A) that cannot be reused on-site due to volumetric or geotechnical constraints. Excavation and off-site material of any additional Type 4 material will effectively serve as additional remedial action for the Site. Therefore, approval for costs associated with additional excavation and disposal from material within the limits of Type 4 is also requested at this time.

Based on the overlay of the redevelopment plans with the soil management areas, Sigma estimates the following volumes may be generated from within the limits of Type 4 material:

- Foundation excavation spoils: 100 cubic yards;
- Interior plumbing spoils: 250 cubic yards;
- · Exterior plumbing spoils: 350 cubic yards;
- Northeast stormwater basin: 300 cubic yards.

Therefore, the total estimated volume of Type 4 material anticipated to be excavated as part of proposed redevelopment is approximately 1,000 cubic yards (1,700 tons). Approval for on-site re-use of Type 4 material was requested in the previously submitted NR 718 Request. Assuming on-site re-use of Type 4 material is approved by WDNR this material will be re-used on-site to the maximum extent practical. However, in the event that geotechnical or volumetric constraints prevent on-site re-use, Sigma is requesting approval for costs associated with potential off-site disposal, if required.

In addition to the costs associated with excavation, transport and landfill disposal based on the volume/tonnage estimates described above, Sigma is requesting approval for costs associated with consultant bid preparation/project management, consultant oversight, including surveying the limits of the remedial excavation areas prior to initiation of excavation activities, laboratory analysis of confirmation samples (assumes 5 confirmation samples from each excavation area for laboratory analysis of PVOCs plus naphthalene), and preparation of a report documenting the remedial excavation.

### PECFA COST ESTIMATE

The following table summarizes the estimated commodity costs associated with proposed remedial excavation activities described above. Unit rate costs are based on bids received to date and quoted disposal rates.

<b>Excavation Area</b>	Estimated	Excavation/Hauling	Landfill	Total Estimated
	Tonnage	Rate (\$/ton)	Disposal Fee	Commodity
	(tons)		(\$/ton)	Cost (\$)
MW-14/GP-24	150	\$10	\$17.50	\$4,125
STP-13/SGP-7	450	\$10	\$17.50	\$12,375
SGP-98	315	\$10	\$17.50	\$8,662.50
SGP-105	300	\$10	\$17.50	\$8,250
SGP-25	170	\$10	\$17.50	\$4,675
STP-5/SGP-36	240	\$10	\$17.50	\$6,600
SGP-23/SGP-24	340	\$10	\$30.50	\$10,370
Excess Type 4	1,700	\$10	\$17.50	\$46,750

Consultant and laboratory costs were estimated using rates included in current U&C Standardized rate schedule. A copy of the Usual & Customary cost spreadsheet based on the proposed scope of work is included as **Attachment B**.

## Proposed Tasks

- > Limited Soil Excavation Mob/Demob
- > Limited Soil Excavation Project Management
- > Limited Soil Excavation Consultant Oversight
- > PECFA Change Order
- > Laboratory Costs
- > Letter Report/Addendum

al Excess Type 4 Material Commodity Cost Estimate	\$8,265.76
Total Remedial Excavation Commodity Cost Estimate Total Excess Type 4 Material Commodity Cost Estimate	\$55,057.50 \$46,750.00
Total Variance Cost Approval Request	\$110,073.26

Actual claimed costs will be based on actual tonnage based on landfill disposal reports.

Sigma, on behalf of OCRI, requests that the Wisconsin Department of Natural Resources review and approve associated U&C Costs.

If you have any questions, please contact us at (414)-643-4200.

Sincerely,

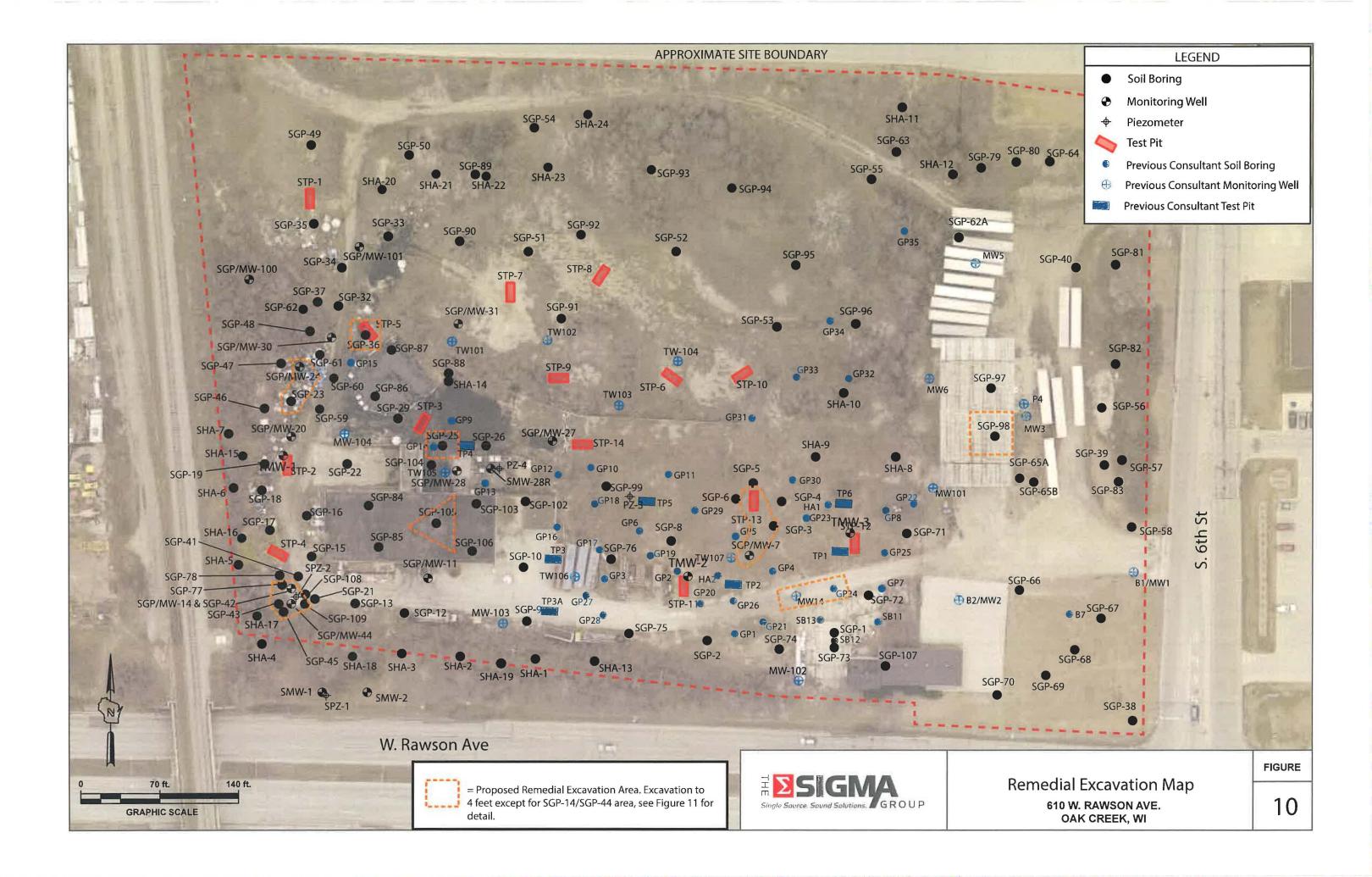
THE SIGMA GROUP, INC.

Stephen Meer, P.E. Senior Engineer

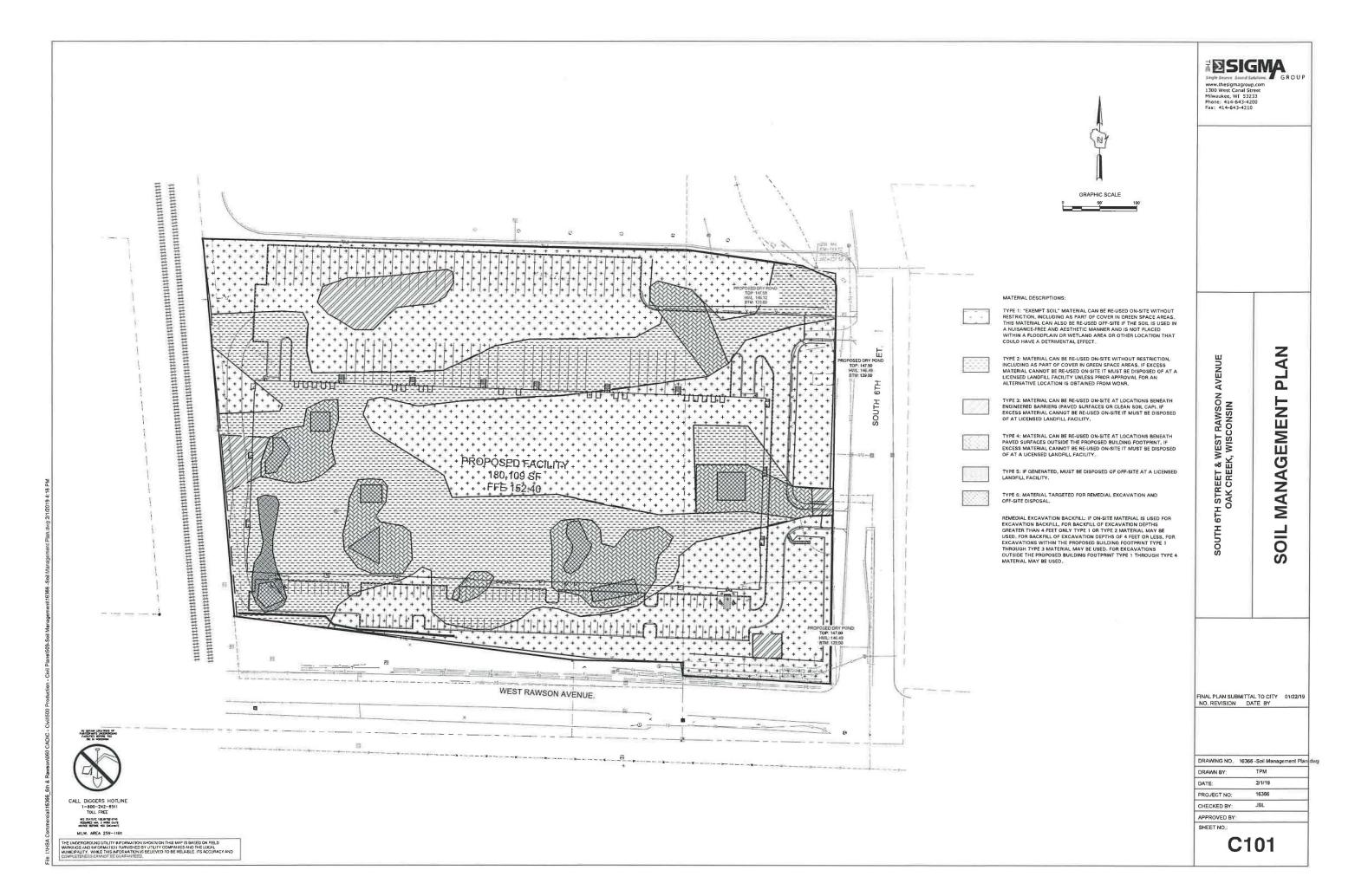
Attachments

Cc: Mr. Eric Ogden – Oak Creek Rawson Industrial, LLC (E-Copy)

## **FIGURE**



## ATTACHMENT A



## ATTACHMENT B

# Usual and Customary Standardized Invoice #25 January 2019 - June 2019





 PECFA #:
 53154-1437-10
 Vendor Name:
 U&C Total \$ 3,596.88

 BRRTS #:
 02-41-107191
 Invoice #:
 Variance to U&C Total \$ 4,668.88

 Site Name:
 Former Biogenesis Enterprises, Inc. Invoice Date:
 Variance to U&C Total \$ 4,668.88

 Site Address:
 610 W. Rawson Ave., Oak Creek, WI Check #:
 Grand Total \$ 8,265.76

TASK	TASK DESCRIPTION	SERVICES	ACTIVITY CODE	ACTIVITY REFERENCE CODE DESCRIPTION	UNIT	AX UNIT COST	UNITS		TOTAL MAX
1	GW Sampling		GS05	Sample Collection	Well	\$ 72.45		\$	2
1	GW Sampling		GS06	Sample Collection in well w/LNAPL	Well	\$ 87.45		\$	ш
1	GW Sampling		GS10	Incremental Sample Collection (natural attenuation)	Well	\$ 47.67		\$	2
1	GW Sampling		GS15	Incremental Sample Collection (cadmium & lead)	Well	\$ 26.25		\$	¥
1	GW Sampling		GS20	Measure Water Levels (for wells not being sampled)	Well	\$ 14.70		\$	¥
1	GW Sampling		GS25	Primary Mob/Demob	Site	\$ 690.92		\$	ü
1	GW Sampling		GS30	Temporary Well Abandonment	Well	\$ 26.99		\$	¥
2	O & M Reporting		OMR05	Semi-Annual GW Monitoring (Form 4400-194)	Report	\$ 823.73		S	逼
2	O & M Reporting		OMR10	Semi-Annual GW Monitoring (Form 4400-194) with LNAPL Removal per RR-628	Report	\$ 1,040.45		\$	*
3	LNAPL Assessment & Removal		LAR06	LNAPL Sample Collection (1 per site, unless otherwise direct	Site	\$ 68.25		\$	:#:
3	LNAPL Assessment & Removal		LAR10	Primary Mob/Demob	Site	\$ 569.88		\$	17
4	Waste Disposal	Consultant	WD05	Consultant Coordination	Site	\$ 137.13		\$	
4	Waste Disposal	Commodity	WD10	GW Sample and/or Purge	Drum	\$ 42.11		\$	
4	Waste Disposal	Commodity	WD15	Drill Cuttings	Drum	\$ 108.15		\$	-
4	Waste Disposal	Commodity	WD17	Landfill Environmental Fee (provide documentation)	ACTUAL COST				
4	Waste Disposal	Commodity	WD20	Free Product	Drum	\$ 118.76		\$	*
4	Waste Disposal	Commodity	WD25	Primary Mob/Demob	Site	\$ 316.47		\$	
5	Closure Request		CR05	Primary Closure Request	Submittal	\$ 2,700.00		\$	#**
5	Closure Request		CR15	Continuing Obligation Packet Submittal (For Source Property	Packet	\$ 507.36		\$	
5	Closure Request		CR20	Continuing Obligation Packet Submittal (For off-site Propertie	Per Additional Property	\$ 222.71		\$	727
5	Closure Request		CR25	Closure Request Concurrent with SIR	Submittal	\$ 1,250.00		\$	
6	Letter Report/Addendum		LRA05	Letter Report/Addendum	Letter	\$ 1,039.29	1	\$	1,039.29

TASK	TASK DESCRIPTION	SERVICES	ACTIVITY CODE	ACTIVITY REFERENCE CODE DESCRIPTION	UNIT	MAX UNIT COST	UNITS	TOTAL MAX
7	Regulatory Correspondence		RC05	Regulatory Correspondence	Letter/Status Update	\$ 128.94		\$ , <b>3</b>
8	Well Abandonment	Consultant	WAB05	Coordination	Site	\$ 162.86		\$
8	Well Abandonment	Consultant	WAB10	Water column < 30 ft	Ft	\$ 2.52		\$ -
8	Well Abandonment	Consultant	WAB15	Water column > 30 ft (requires pumping [s. NR 141.25 (2) (d)]	Ft	\$ 8.82		\$ (4)
8	Well Abandonment	Consultant	WAB20	Bentonite Pellets (50lb bag - 1/4" pellet)	Bag	\$ 10.82		\$
8	Well Abandonment	Consultant	WAB25	Portland Cement (94lb bag)	Bag	\$ 8.19		\$ -
8	Well Abandonment	Consultant	WAB30	Primary Mob/Demob	Site	\$ 398.48		\$
8	Well Abandonment	Consultant	WAB31	Primary Mob/Demob w/ vapor point abandonment	Site	\$ 563.48		\$ (#)
8	Well Abandonment	Consultant	WAB32	Vapor Point Abandonment	Point	\$ 81.58		\$
8	Well Abandonment	Commodity	WAB35	Well Abandonment Mob/Demob	Site	\$ 453.81		\$ -
8	Well Abandonment	Commodity	WAB40	Well Abandonment (2 inch)	Ft	\$ 5.57		\$ 
8	Well Abandonment	Commodity	WAB45	Well Abandonment (4 inch)	Ft	\$ 6.51		\$
8	Well Abandonment	Commodity	WAB50	Well Abandonment (6 inch)	Ft	\$ 7.98		\$ 3
9	Investigation Workplan Preparation		IWP05	Investigation Workplan Preparation	Report	\$ 1,451.63		\$ er er
10	Initial Site Survey	Consultant	IS05	Coordination of Initial Site Survey (features + well elevations)	Survey	\$ 117.18		\$
10	Initial Site Survey	Consultant	IS10	Subsequent Surveys	Well	\$ 110.15		\$ 2
10	Initial Site Survey	Commodity	IS15	Initial Survey	Survey	\$ 1,171.70		\$ -
11	Potable Well Field Reconnaissance	)	PWFR05	Potable Well Field Reconnaissance	Site	\$ 583.50		\$ -
12	Direct Push	Consultant	DP05	0 - 24 ft bgs W/ Continuous Soil Sampling	Ft	\$ 5.36		\$ -
12	Direct Push	Consultant	DP10	> 24 ft bgs W/ Continuous Soil Sampling	Ft	\$ 5.99		\$ •
12	Direct Push	Consultant	DP15	GW Profiling (No Soil Sampling)	Ft	\$ 2.31		\$ -
12	Direct Push	Consultant	DP20	GW Sample Collection	Each	\$ 36.10		\$
12	Direct Push	Consultant	DP25	Temporary Well Installation	Each	\$ 49.90		\$
12	Direct Push	Consultant	DP30	Primary Mob/Demob	Site	\$ 563.31		\$
12	Direct Push	Commodity	DP35	0 - 24 ft bgs W/ Continuous Soil Sampling	Ft	\$ 6.93		\$ *
12	Direct Push	Commodity	DP40	> 24 ft bgs W/ Continuous Soil Sampling	Ft	\$ 9.03		\$ *
12	Direct Push	Commodity	DP45	GW Profiling (no soil sampling)	Ft	\$ 6.51		\$ *
12	Direct Push	Commodity	DP50	GW Sample Collection (cost for tubing)	Ft	\$ 0.42		\$ *
12	Direct Push	Commodity	DP55	Expendable Drive Point	Each	\$ 14.49		\$ *
12	Direct Push	Commodity	DP60	Borehole Abandonment	Ft	\$ 1.26		\$
12	Direct Push	Commodity	DP65	Concrete Penetration	Each	\$ 20.10		\$

TASK	TASK DESCRIPTION	SERVICES	ACTIVITY CODE	ACTIVITY REFERENCE CODE DESCRIPTION	UNIT	MAX UNIT COST	UNITS	OTAL MAX
12	Direct Push	Commodity	DP70	GW Sample Collection	Each	\$ 39.27		\$ -2
12	Direct Push	Commodity	DP75	Temporary Well Installation	Ft	\$ 5.25		\$ 
12	Direct Push	Commodity	DP80	Mob/Demob (Includes decon)	Site	\$ 578.66		\$ -
13.a	Drilling In Unconsolidated Soils - With Soil Sampling	Consultant	DR05	0 - 25 ft bgs	Ft	\$ 5.40		\$
13.a	Drilling In Unconsolidated Soils - With Soil Sampling	Consultant	DR10	26 - 50 ft bgs	Ft	\$ 5.67		\$ *:
13.a	Drilling In Unconsolidated Soils - With Soil Sampling	Consultant	DR15	51 - 75 ft bgs	Ft	\$ 7.30		\$ ž.
13.a	Drilling In Unconsolidated Soils - With Soil Sampling	Consultant	DR20	Primary Mob/Demob	Site	\$ 652.34		\$ =
13.b	Drilling In Unconsolidated Soils - Without Soil And/Or GW Sampling	Consultant	DR25	Consultant Oversight	Ft	\$ 1.58		\$ *
13.b	Drilling In Unconsolidated Soils - Without Soil And/Or GW Sampling	Consultant	DR30	Primary Mob/Demob	Site	\$ 555.68		\$ 5
13.c	Drilling In Bedrock	Consultant	DR35	Consultant Oversight	Ft	\$ 6.20		\$ -
13.c	Drilling In Bedrock	Consultant	DR40	Primary Mob/Demob	Site	\$ 652.34		\$ -
13.d	Drilling In Unconsolidated Soils - With Soil Sampling	Commodity	DR45	0 - 25 ft bgs	Ft	\$ 16.70		\$ -
13.d	Drilling In Unconsolidated Soils - With Soil Sampling	Commodity	DR50	26 - 50 ft bgs	Ft	\$ 18.38		\$ ¥
13.d	Drilling In Unconsolidated Soils - With Soil Sampling	Commodity	DR55	51 - 75 ft bgs	Ft	\$ 21.53		\$ *
13.e	Drilling In Unconsolidated Soils - Without Soil And/Or GW Sampling	Commodity	DR60	Drilling in Unconsolidated Soils	Ft	\$ 11.97		\$ 2
13.f	Drilling In Bedrock	Commodity	DR65	Drilling in Bedrock	Ft	\$ 33.18		\$ 9
13.f	Drilling In Bedrock	Commodity	DR70	Bedrock Drilling Setup Charge	Each	\$ 162.02		\$ 2
13.f	Drilling In Bedrock	Commodity	DR75	Air Compressor	Day	\$ 426.41		\$ -
14	Monitoring Well Installation	Consultant	MWI05	0 - 25 ft bgs	Ft	\$ 3.89		\$ -
14	Monitoring Well Installation	Consultant	MWI10	26 - 75 ft bgs	Ft	\$ 2.73		\$ 10.
14	Monitoring Well Installation	Commodity	MWI15	2 inch PVC Casing	Ft	\$ 16.70		\$ 12
14	Monitoring Well Installation	Commodity	MWI20	Well Development	Well	\$ 147.63		\$ 2/
14	Monitoring Well Installation	Commodity	MWI25	Mob/Demob (For development of grout or slurry sealed wells	Site	\$ 603.49		\$ 0.00
15	Misc. Drilling Activities & Supplies		MDT05	Drill Rig Mob/Demob	Mob/Demob	\$ 1,059.72		\$ \$ <b>4</b> 7
15	Misc. Drilling Activities & Supplies		MDT10	Well Cover/flushmount	Each	\$ 202.65		\$
15	Misc. Drilling Activities & Supplies		MDT15	Stickup Well Cover	Each	\$ 163.91		\$

TASK	TASK DESCRIPTION	SERVICES	ACTIVITY CODE	ACTIVITY REFERENCE CODE DESCRIPTION	UNIT	MAX UNIT COST	UNITS	TOTAL MAX
15	Misc. Drilling Activities & Supplies		MDT20	Bumper Guard Posts	Each	\$ 69.30	\$	(*)
15	Misc. Drilling Activities & Supplies		MDT21	Drum, 55 gal. DOT steel	Each	\$ 55.13	\$	(e.
15	Misc. Drilling Activities & Supplies		MDT25	Commodity Service Provider Per Diem (drilling and direct push)	Person	\$ 203.28	\$	
15	Misc. Drilling Activities & Supplies		MDT30	Well Repair	Well	\$ 84.42	\$	
15	Misc. Drilling Activities & Supplies		MDT35	Borehole Abandonment	Foot	\$ 5.46	\$	(2)
15	Misc. Drilling Activities & Supplies		MDT40	Concrete Penetration	Each	\$ 72.87	\$	· 41
15	Misc. Drilling Activities & Supplies		MDT41	Private Utility Locate	ACTUAL COST		\$	-
15	Misc. Drilling Activities & Supplies		MDT45	Padlocks	Each	\$ 7.98	\$	
16	Hand Auger Boring		HA05	Hand Augering	Boring	\$ 89.99	\$	54
16	Hand Auger Boring		HA10	Primary Mob/Demob	Site	\$ 611.12	\$	-
17	Surface Soil/Sediment/Water Sampling		SSWS05	Sampling	Sample Location	\$ 21.53	\$	es.
17	Surface Soil/Sediment/Water Sampling		SSWS10	Primary Mob/Demob	Site	\$ 497.70	\$	111
19	Hydraulic Conductivity Testing		HCT05	Hydraulic Conductivity Testing	Well	\$ 58.59	\$	¥
19	Hydraulic Conductivity Testing		HCT10	Primary Mob/Demob	Site	\$ 718.07	\$	*
20	Soil Boring/Monitoring Well Permits		SBMWP05	Soil Boring/Monitoring Well Permit	Permit	\$ 246.12	\$	-
20	Soil Boring/Monitoring Well Permits		SBMWP10	Permit Fee (copy of permit & fee receipt required)	Permit Fee			
21	Access Agreements		AA05	Access Agreements	Property	\$ 401.94	\$	
22	Soil Investigation Report		SIR05	Soil Investigation Report	Report	\$ 3,330.92	\$	*
23	Soil And GW Investigation Report		SGIR05	Soil and GW Investigation Report	Report	\$ 4,965.35	\$	-
24	Limited Soil Excavation	Consultant	LSE05	Consultant Oversight for Limited Soil Excavation	Ton	\$ 4.94	\$	
24	Limited Soil Excavation	Consultant	LSE10	Primary Mob/Demob	Site	\$ 915.11	1 \$	915.11
24	Limited Soil Excavation	Commodity	LSE13	Laboratory (see task 24 total on Lab Schedule)	Lab Schedule		35 \$	1,260.70
24	Limited Soil Excavation	Commodity	LSE15	Limited Soil Excavation	Ton	\$ 60.00	\$	*
24	Limited Soil Excavation	Commodity	LSE16	Landfill Environmental Fee (provide documentation)	ACTUAL COST			
25	Remediation System Shut Down		SSD05	Permanent	Site	\$ 1,095.47	\$	•
25	Remediation System Shut Down		SSD10	Temporary	Site	\$ 329.28	\$	*
25	Remediation System Shut Down		SSD15	Primary Mob/Demob	Site	\$ 520.91	\$	-
27	Claim Submittal		CS05	Claim Submittal	Claim	\$ 585.90	\$	*
28	Standardized Invoice		SI05	Standardized Invoice	Invoice	\$ 17.64	\$	•
30	Meeting With Regulators		MR05	Meeting with Regulators	Meeting	\$ 349.23	\$	9
31	Consultant Overnight Per Diem		COPD05	Overnight	Night	\$ 125.09	\$	ě

TASK	TASK DESCRIPTION	SERVICES	ACTIVITY CODE	ACTIVITY REFERENCE CODE DESCRIPTION	UNIT	MAX UNIT COST	UNITS	TOTAL MAX
33	Schedule Of Laboratory Maximums	Commodity		Laboratory (see task 33 total on Lab Schedule)	Lab Schedule		\$	
34	Consultant Incremental Mob/Demob		IMD05	Incremental Mob/Demob	Site	\$ 287.18	\$	-
35	Cap Maintenance Plan		CMP05	Cap Maintenance Plan	Plan	\$ 320.04	\$	~
36	Change Order Request		COR05	Change Order Request (cost cap exceedance requests)	Change Order	\$ 381.78	1 \$	381.78
37	Vapor Point Installation & Sampling	)	VIS05	Installation & Sampling (up to 5 points)	Point	\$ 510.26	\$	-
37	Vapor Point Installation & Sampling	3	VIS10	Mob/Demob (up to 5 points)	Site	\$ 813.95	\$	*
Variance	Excavation Project Management			Project Manager Hourly Rate	Hours	\$ 112.96	8 \$	903.68
Variance	Excavation Field Oversight			Staff Professional Hourly Rate	Hours	\$ 94.13	40 \$	3,765.20

## Usual and Customary Standardized Invoice #25 January 2019 - June 2019





Hard"		TOTAL LAB CHARG	ES \$ 1,260.70	TASK 33	0	\$	TA	SK 24	35	\$ 1,260.70
MATRIX	REF CODE	REIMBURSABLE ANALYTE	UNITS	MAX COST	SAMPLES	TOTAL	MA	X COST	SAMPLES	TOTAL
AIR	A1	Benzene	SAMPLE	\$ 44.94		\$				
AIR	A2	BETX	SAMPLE	\$ 49.46		\$ -				
AIR	A3	GRO	SAMPLE	\$ 46.10		\$ 				
AIR	A4	VOC's	SAMPLE	\$ 71.93		\$ 				
WATER	W1	GRO/PVOC	SAMPLE	\$ 29.19		\$				
WATER	W2	PVOC	SAMPLE	\$ 26.99		\$ -				
WATER	W3	PVOC + 1,2 DCA	SAMPLE	\$ 43.79		\$ 				
WATER	W4	PVOC + Naphthalene		\$ 30.35		\$ -				
WATER	W5	VOC	SAMPLE	\$ 71.93		\$ 				
WATER	W6	PAH	SAMPLE	\$ 72.98		\$ 116.2				
WATER	W7	Lead	SAMPLE	\$ 12.39		\$ -				
WATER	W8	Cadmium		\$ 13.55		\$ 14				
WATER	W9	Hardness	SAMPLE	\$ 12.39		\$ (4)				
WATER	W10	BOD, Total	SAMPLE	\$ 23.63		\$ -				
WATER	W11	Nitrate	SAMPLE	\$ 11.24		\$ -				
WATER	W12	Total Kjeldahl		\$ 20.27		\$ -				
WATER	W13	Ammonia		\$ 16.91		\$ -				
WATER	W14	Sulfate		\$ 10.19		\$				
WATER	W15	Iron	SAMPLE	\$ 10.19		\$ _				
WATER	W16	Manganese		\$ 10.19		\$ -				
WATER	W17	Alkalinity		\$ 10.19		\$				
WATER	W18	methane		\$ 46.10		\$				
WATER	W19	Phosphorous		\$ 18.06		\$ -				
WATER	W20	VOC Method 524.2		\$ 176.30		\$ ũ.				
WATER	W21	EDB Method 504		\$ 95.45		\$ -	MA	X COST	SAMPLES	TOTAL
SOILS	S1	GRO		\$ 24.78		\$ -	\$	24.78		\$ -
SOILS	S2	DRO		\$ 30.35		\$ -	\$	30.35		\$ -
SOILS	S3	GRO/PVOC		\$ 28.14		\$ 6	\$	28.14		\$ ě.
SOILS	S4	PVOC		\$ 25.83		\$ 2	\$	25.83		\$ 2
SOILS	S5	PVOC + 1,2 DCA + Naphthalene		\$ 49.46		\$ -	\$	49.46		\$ *
SOILS	S6	PVOC + Naphthalene	SAMPLE	\$ 36.02		\$ -	\$	36.02	35	\$ 1,260.70
SOILS	S7	VOC		\$ 71.93		\$ 7.	\$	71.93		\$
SOILS	S8	SPLP Extraction VOC only		\$ 50.61		\$ -	\$	50.61		\$
SOILS	S9	PAH		\$ 72.98		\$ ~	\$	72.98		\$
SOILS	S10	Lead		\$ 12.39		\$ -	\$	12.39		\$ -
SOILS	S11	Cadmium	SAMPLE	\$ 14.60		\$ _	1	TA	SK 24 TOTAL	\$ 1,260.70

MATRIX	REF CODE	REIMBURSABLE ANALYTE	UNITS		MAX COST	SAMPLES	TOTAL	MAX COST	SAMPLES	TOTAL
SOILS	S12	Free Liquid	SAMPLE	\$	11.24	\$				
SOILS	S13	Flash Point	SAMPLE	\$	25.83	\$	-			
SOILS	S14	Grain Size - dry	SAMPLE	\$	42.74	\$	,			
SOILS	S15	Grain Size - wet	SAMPLE	\$	57.33	\$				
SOILS	S16	Bulk Density	SAMPLE	\$	13.55	\$	-			
SOILS	S17	Permeability	SAMPLE	\$	41.58	\$	-			
SOILS	S18	Nitrogen as Total Kjeldahl	SAMPLE	\$	20.27	\$				
SOILS	S19	Nitrogen as Ammonia	SAMPLE	\$	16.91	\$	), <del>*</del> /			
SOILS	S20	% Organic Matter	SAMPLE	\$	29.19	\$				
SOILS	S21	TOC as NPOC	SAMPLE	\$	57.33	\$	120			
SOILS	S22	Soil Moisture Content	SAMPLE	\$	6.83	\$				
SOILS	S23	Air Filled Porosity	SAMPLE	\$	25.83	\$	•			
SOILS	S24	% Total Solids	SAMPLE	\$	6.83	\$				
SOILS	S25	Field Capacity	SAMPLE	\$	28.14	\$				
SOILS	S26	TCLP Lead	SAMPLE	\$	83.16	\$	-			
SOILS	S27	Cation Exchange (Ca, MG, & K)	SAMPLE	\$	26.99	\$	*			
SOILS	S28	TCLP Cadmium	SAMPLE	\$	83.16	\$	1.00			
SOILS	S29	TCLP Benzene	SAMPLE	\$	83.16	\$				
		Viscosity + Density								
LNAPL	LFPS01	Interfacial tension I (LNAPL/water [dyne/cm]) Interfacial tension II (LNAPL/air [dyne/cm]) Interfacial tension III (water/air) [dyne/cm])	SAMPLE	\$	561.33	\$	<del>e</del> r			
				138	TAS	SK 33 TOTAL \$	TOTAL SEA			