**KPRG** and Associates, Inc.

## PATHWAY TO CLOSURE WORK PLAN and BUDGET REQUEST

August 13, 2021

Mr. Timothy G. Alessi, P.G. Wisconsin Department of Natural Resources 2300 N. Dr. Martin Luther King Drive Milwaukee, WI 53212

#### VIA Email and US Mail

KPRG Project 24413

Re: Pathway to Closure Work Plan and Budget Request Milwaukee Fabricare Dry Cleaners – Milwaukee, WI BRRTS# 02-41-548258, FID# 241303810

Dear Mr. Alessi:

KPRG and Associates, Inc. (KPRG) submitted a Request for Closure Package to the Wisconsin Department of Natural Resources (WDNR) for the above referenced site on December 1, 2020. The WDNR reviewed the closure package on February 25, 2021 and reached out to KPRG on March 23, 2021 to discuss the closure package review. During that discussion, and in a follow-up letter dated April 19, 2021, WDNR outlined additional work to be completed based on the existing data generated to date to move the site to closure. Correspondence occurred between KPRG and the WDNR regarding the requested work, which resulted in the following proposed Work Plan.

#### ADDITIONAL SCOPE OF WORK

For budget estimating purposes, the additional work discussed below is divided into the following tasks:

- Task 1 Additional Groundwater Sampling
- Task 2 Additional Vapor Intrusion Investigation
- Task 3 Additional Evaluation of Subsurface Utilities
- Task 4 Notifications of Off-site Affected Properties
- Task 5 Additional Reporting

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Each task is discussed separately below.

#### <u>Task 1 – Additional Groundwater Sampling</u>

Two rounds of groundwater samples will be collected from monitoring wells MW-1D and MW-4. The two rounds will occur on a quarterly basis with approximately three months between each sampling event. One duplicate sample will be collected with each sampling. Groundwater samples will be collected using either disposable boilers or low flow sampling techniques. Sample handling, shipping and analytical procedures will be in accordance with previously approved work plans. The groundwater samples will be analyzed for chlorinated volatile organic compounds (CVOC).

The results of the groundwater sampling will be evaluated to determine if additional groundwater monitoring is required. If the groundwater sampling results indicate that no vertical migration has occurred and the concentrations at MW-4 are stable then additional groundwater sampling will not be necessary.

#### Task 2 – Additional Vapor Intrusion Investigation

The additional requested vapor intrusion investigation is divided into the following subtasks:

- Task 2a Pressure Field Extension Testing
- Task 2b 4433 Property Sub-Slab Sampling
- Task 2c 4441 Property Vapor Screening Analysis

The scope for each task is discussed separately below.

#### Task 2a – Pressure Field Extension Testing

Pressure field extension (PFE) testing will be performed at 4419 W. Fond du Lac Ave and 4427 W. Fond du Lac Ave properties to demonstrate the effectiveness of the existing sub-slab depressurization systems (SSDS). Three (3) tests will be performed over a six (6) month period that will include one test during the winter months and one during the high water period. A radon system contractor will be hired to perform the three tests. The PFE testing will be performed in accordance with the performance monitoring guidelines in Appendix D of RR-800.

The results of the PFE testing will be provided to the WDNR upon completion of all three tests. The results will also be verbally discussed as necessary with the responsible party/property owner.

If the resulting data indicates that the system is not operating optimally, contingency measures will be made to the system as necessary.

### <u>Task 2b – 4433 Property Sub-Slab Sampling</u>

The WDNR has requested that additional sub-slab vapor sampling be completed within the 4433 W Fond Du Lac Avenue property (see Figure 1). Previous sub-slab vapor samples were collected at this property in 2011 and did not identify any vapor risk screening level (VRSL) exceedances. Since this sampling, groundwater and soil remediation by injection has occurred and the WDNR is concerned that contaminants may have mobilized thereby causing the potential for vapors to be present beneath this property. The current establishment is 4,800 square feet. Two rounds of sub-slab vapor samples will be collected. The two rounds will occur on a quarterly basis, one during the heating season and one during the high water time-period. The sub-slab sampling will be performed in accordance with the guidelines of RR800.

The samples will be collected from the existing vapor pin, V-2 if present; otherwise, a new vapor pin will be installed. The existing vapor pin or the newly installed vapor pin will be tested for air tightness prior to sampling using the helium shroud or water dam test methods. A 6-liter summa canister assembly with a 30-minute flow regulator will then be connected and a shut-in test will be completed to verify that all connections in the sampling train are tight. Upon successful testing, a 30-minute sub-slab vapor sample will be collected from the vapor pin.

All vapor samples will be sent to a Wisconsin certified analytical laboratory for analysis using Method TO15. The samples will be analyzed only for tetrachloroethene (PCE) and trichloroethene (TCE) as these are the two constituents of potential concern based on existing groundwater data. Within 10 days of receipt of the analytical data from a sampling event, the data will be provided to the property owner, responsible party, as well as the WDNR. The results will also be verbally discussed as necessary with the tenant.

If the resulting data indicates there are no sub-slab VRSL exceedances, then additional sampling either sub-slab or indoor air will not be required. If during any of the sampling events a sub-slab vapor VRSL is exceeded, then indoor air samples will be collected. Two rounds of indoor air samples will be collected approximately three (3) months apart, with one round occurring during winter months. Background outdoor air samples will also be collected in conjunction with the indoor air samples.

#### <u>Task 2c – 4441 Property Vapor Screening Analysis</u>

The WDNR also requested that a vapor screening analysis in accordance with RR-800, be conducted on the 4441 W Fond Du Lac Avenue property. The WDNR is wondering if the previously conducted soil and groundwater remediation potentially migrated contaminants and vapors that may affect this property. A desktop analysis will be performed which will include reviewing the results of the sub-slab vapor samples conducted at the 4433 W. Fond du Lac Ave property.

As stated, the WDNR considers a potential pathway for vapor migration to be the migration of contaminants in the groundwater flow that passes under the 4433 and the 4441 W. Fond du Lac Ave properties. The existing groundwater data at MW-5 (north

of 4441 W. Fond du Lac Ave) shows that the PCE, TCE, and vinyl chloride concentrations are below detection limits, which have been this way since the well was installed and sampling began in 2007. The existing vapor data at V-2 (sub-slab sample inside 4433 W. Fond du Lac Ave) has no exceedances of the sub-slab VRSL and therefore this potential pathway is not a concern at this time. The contamination located at MW-4 is not expected to be a concern since the direction of the groundwater flow is away from the 4441 property. At this time, KPRG believes the vapor sampling at the 4441 property is not necessary.

After the data from the sub-slab samples at the 4433 property are obtained, it will be used as part of the vapor analysis for the 4441 property. If the results of the sub-slab screening at 4433 W. Fond du Lac Ave do not exceed the sub-slab VRSLs for either PCE or TCE then the vapor screening analysis for 4441 is not necessary and no sampling will be required.

#### Task 3 – Additional Evaluation of Subsurface Utilities

The WDNR has requested an evaluation of the potential or known impacts to receptors, which will include onsite and offsite subsurface utilities. The evaluation will include a discussion of the locations, depths, and connections of the subsurface utilities. The discussion will also include the potential for groundwater and vapor migration along these utilities.

#### Task 4 – Notifications of Off-site Affected Properties

As required in Wis. Admin. Code NR 725.05, the owners' of each affected property shall receive notification by the responsible party, Milwaukee Fabricare. Affected properties include:

- Properties within or partially within the contamination site;
- Clerk of the county or city where a public street or highway right-of-way is located and the municipal department or state agency that is responsible for maintaining the public street or highway;
- Owner of each property where a monitoring well was constructed;

All affected parties will be sent a letter regarding information pertaining to the status of the site

#### Task 5 – Additional Reporting

This task covers the additional effort in tabulating, evaluating and reporting the additional data. Specifically, this includes:

• Groundwater data transmittals with updated data tables and figures as appropriate.

- Data transmittals for PFE testing results and the sub-slab vapor results to the responsible party, property owners, and WDNR.
- Revisions to the existing Case Closeout Request package.

#### PATHWAY TO CLOSURE

KPRG understands that once the extent of groundwater and soil vapor impacts have been sufficiently defined, the previously provided closure request will be updated to obtain site closure. The Operation and Maintenance Plan for the subject property will be revised as needed. Relative to the off-site properties, the owners will be notified that the WDNR requires the sub-slab depressurization systems to be operational and maintained. An informational package will be provided that will include system inspection requirements and the contact information of the installation contractor if service is needed.

#### **COST ESTIMATE**

Costs are summarized in Table 1 and detailed on the costing sheets in Attachment 2. The additional requested budget for the above-defined scope of work is \$19,730. The costs are based on the following assumptions:

- KPRG's client will pay all subcontractors (testing, lab, etc.) directly as to not incur KPRG mark-up, which is not DERF reimbursable.
- Task 1 Two (2) rounds of groundwater sampling at wells MW-1D and MW-4.
   One duplicate sample per round of sampling. All groundwater samples to be analyzed for CVOCs.
- Task 2a Two (2) rounds of PFE testing at both 4419 and 4427 W. Fond du Lac Ave performed by a SSDS installation contractor. Four (4) total PFE tests will be performed.
- Task 2b One vapor pin installation with two (2) rounds of sampling. This yields two vapor samples. All vapor samples to be analyzed for PCE and TCE only. Cost assumes standard analytical turn around.
- Task 2c Time necessary to conduct a desktop vapor screening analysis in accordance with RR-800.
- Task 3 Time necessary for evaluation of subsurface utilities as potential migration pathways.
- Task 4 –. Time and supplies necessary for creation of notification reports and supplying of information packets.

 Task 5 – Two groundwater data transmittals, air/vapor data transmittals, and update reports for the vapor intrusion study work. Revisions to the existing Case Closeout Request package to include the additional data collected. A formal site investigation report revision is not anticipated to be required and not contemplated in this estimate.

This estimate does not include SSDS maintenance. Only those costs incurred will be billed. All billing will be performed on a monthly basis using the unit rates. No additional work will be performed without KPRG's Client authorization. If there are any questions, please contact me at 262-781-0475.

Sincerely,

KPRG and Associates, Inc.

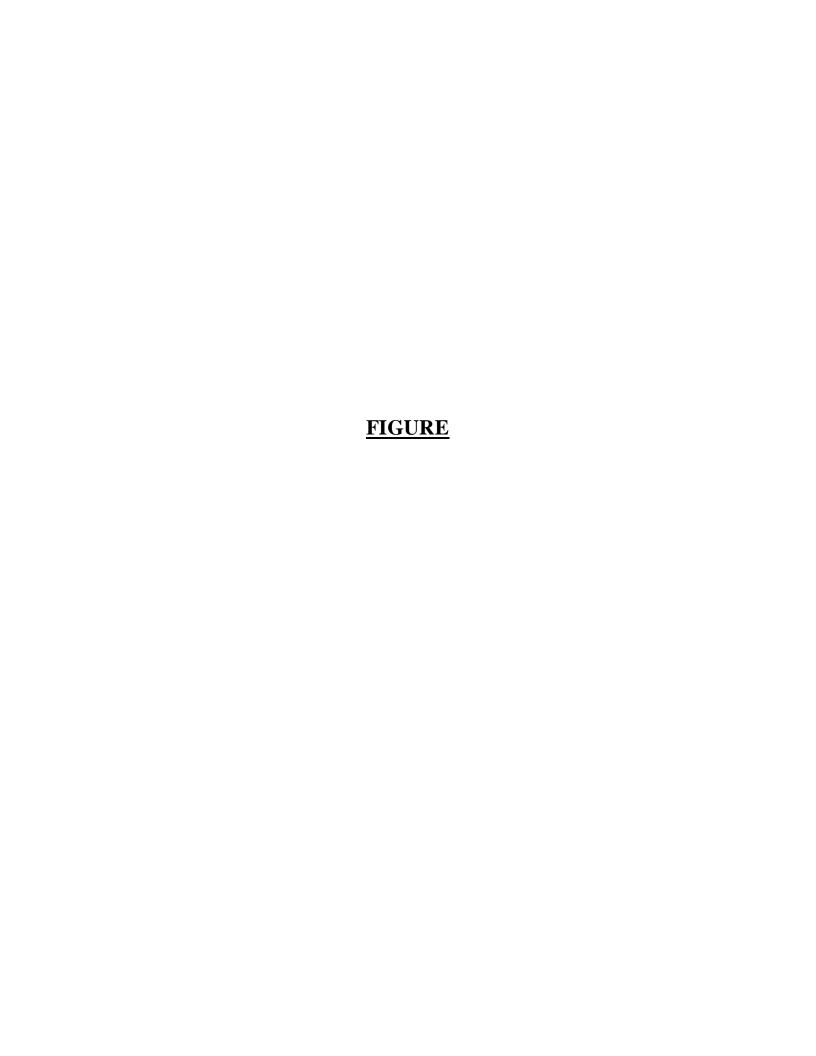
Joshua D. Davenport, P.E.

Senior Engineer

cc: Mr. Gregg Margulis, Milwaukee Fabricare

Mr. Donald Gallo, Axley Brynelson, LLP

Attachments



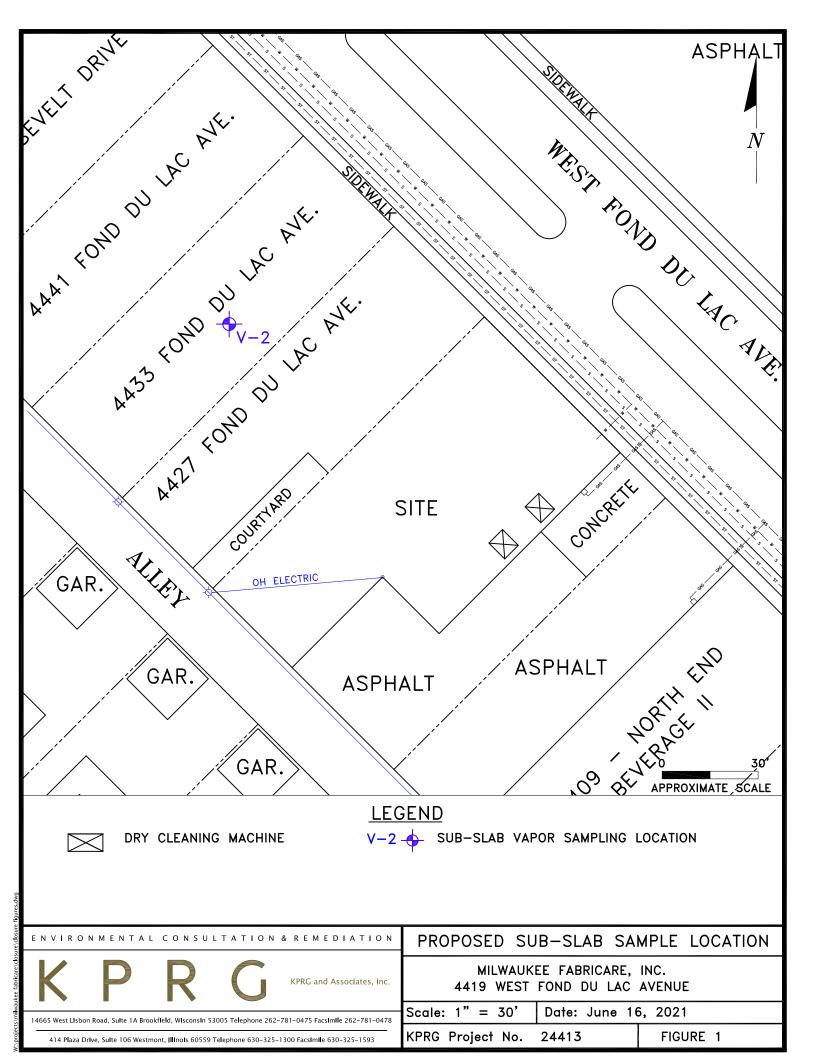




Table 1. Additional Work Plan Budget Summary June 2021 - Milwaukee Fabricare, Milwaukee WI

					Contractors			
Task	KPRG Labor	Expenses	Analytical	Driller*	IDW Disposal	Private Locate	Surveyor	Totals
1) Additional Groundwater Sampling	\$1,750	\$800	\$390	\$0	\$0	\$0	\$0	\$2,940
2a) Pressure Field Extension Testing	\$1,975	\$280	\$1,920	\$0	\$0	\$0	\$0	\$4,175
2b) 4433 Property Sub-Slab Sampling	\$895	\$670	\$390	\$0	\$0	\$0	\$0	\$1,955
2c) 4441 Property Vapor Screening Analysis	\$3,440	\$0	\$0	\$0	\$0	\$0	\$0	\$3,440
3) Additional Evaluation of Subsurface Utilities	\$3,205	\$0	\$0	\$0	\$0	\$0	\$0	\$3,205
4) Notifications of Off-Site Affected Properties	\$1,195	\$50	\$0	\$0	\$0	\$0	\$0	\$1,245
5) Additional Reporting	\$2,670	\$100	\$0	\$0	\$0	\$0	\$0	\$2,770
Totals	\$15,130	\$1,900	\$2,700	\$0	\$0	\$0	\$0	\$19,730

# ATTACHMENT 1 DETAILED COSTING SHEETS

Project: Milwaukee Fabricare - Milwaukee, WI

Task: 1 Additional Groundwater Sampling (MW-1D & MW-4, 2 rounds)

Professional Labor	Rate (\$/Hr.)		<u>Units</u>	<u>Total</u>
Principal/Proj. Mgr.	\$155		2	\$310.00
Sr. Eng./Sci.	\$100		8	\$800.00
Eng./Sci.	\$80		8	\$640.00
CADD	\$65		0	\$0.00
Admin. Asst/ Word Proc.	\$45		0	\$0.00
			Total Labor	\$1,750.00
External Expenses	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Field Vehicle	\$70	Daily	2	\$140.00
Water Quality Meter	\$150	Daily	2	\$300.00
Water Depth Meter	\$25	Daily	2	\$50.00
Peristaltic Pump	\$75	Daily	2	\$150.00
Disposable Bailers	\$15	Each	4	\$60.00
Shipping	\$50	Est.	2	\$100.00
			Total Expenses	\$800.00
<u>Contractors</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Analytical	\$65	Est.	6	\$390.00
			Total Contractors	\$390.00

TASK TOTAL: \$2,940.00

Project: Milwaukee Fabricare - Milwaukee, WI

Task: 2a Pressure Field Extension Testing (4419 & 4427 Properties)

Professional Labor Principal/Proj. Mgr. Sr. Eng./Sci. Eng./Sci. CADD	Rate (\$/Hr.) \$155 \$100 \$80 \$65		<u>Units</u> 2 4 12 4	Total \$310.00 \$400.00 \$960.00 \$260.00
Admin. Asst/ Word Proc.	\$45		_ 1 _	\$45.00
			Total Labor	\$1,975.00
External Expenses Photoionization Detector	<u>Rate</u> \$75	<u>Type</u> Daily	Units 0	<u>Total</u> \$0.00
Field Vehicle	\$70	Daily	4	\$280.00
Sub-slab Probes Concrete Drill Setup	\$85 \$100	ea Daily		\$0.00 \$0.00
Waukesha Permit (if necessary)	\$300	Est.	0	\$0.00
Helium Detection Kit	\$80	per test	_	\$0.00
			Total Expenses	\$280.00
Contractors Lifetime Radon	<u>Rate</u> \$120	<u>Type</u> Hour Each	<u>Units</u> 16	<u>Total</u> \$1,920.00 \$0.00
		Te	otal Contractors	\$1,920.00

TASK TOTAL: \$4,175.00

Project: Milwaukee Fabricare - Milwaukee, WI

Task: 2b Soil Vapor Pin Installation, Testing and Sampling (Apt Bldg and Community Center)

Professional Labor	Rate (\$/Hr.)		<u>Units</u>	<u>Total</u>
Principal/Proj. Mgr.	\$155		1	\$155.00
Sr. Eng./Sci.	\$100		2	\$200.00
Eng./Sci.	\$80		4	\$320.00
CADD	\$65		2	\$130.00
Admin. Asst/ Word Proc.	\$45		2	\$90.00
			Total Labor	\$895.00
External Expenses	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Field Vehicle	\$70	Daily	2	\$140.00
VP Leak Test Kit	\$100	ea	1	\$100.00
Cox Colvin Vapor Pins	\$85	Ea	1	\$85.00
Shut-in test	\$10	ea	2	\$20.00
Installation Equipment	\$125	Daily	1	\$125.00
Misc.	\$200	Est.	1	\$200.00
			_	\$0.00
			Total Expenses	\$670.00
Contractors	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Analytical (Summa w/ regulator)	\$195	Each	2	\$390.00
			_	\$0.00
			Total Contractors	\$390.00

TASK TOTAL: \$1,9
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Project: Milwaukee Fabricare - Milwaukee, WI

Task: 2c 4441 Property Vapor Screening Analysis

Professional Labor	Rate (\$/Hr.)		<u>Units</u>	<u>Total</u>	
Principal/Proj. Mgr.	\$155		2	\$310.00	
Sr. Eng./Sci.	\$100		12	\$1,200.00	
Eng./Sci.	\$80		20	\$1,600.00	
CADD	\$60		4	\$240.00	
Admin. Asst/ Word Proc.	\$45		2	\$90.00	
			Total Labor	\$3,440.00	
External Expenses	Rate	<u>Type</u>	Units	Total	
Photoionization Detector		Daily	0	\$0.00	
Field Vehicle		Daily		\$0.00	
Sub-slab Probes		ea		\$0.00	
Concrete Drill Setup		Daily		\$0.00	
·		Est.	0	\$0.00	
Helium Detection Kit		per test		\$0.00	
			Total Expenses	\$0.00	
Contractors	Rate	Type	Units	<u>Total</u>	
		Each	<u> </u>	\$0.00	
		Each		\$0.00	
			Total Contractors	\$0.00	

TASK TOTAL: \$3,440.00

Project: Milwaukee Fabricare - Milwaukee, WI

Task: 3 Additional Evaluation of Subsurface Utilities

Professional Labor	Rate (\$/Hr.)		<u>Units</u>	<u>Total</u>
Principal/Proj. Mgr.	\$135		1	\$135.00
Sr. Eng./Sci.	\$100		8	\$800.00
Eng./Sci.	\$80		24	\$1,920.00
CADD	\$65		4	\$260.00
Admin. Asst/ Word Proc.	\$45		2	\$90.00
			Total Labor	\$3,205.00
External Expenses	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Photoionization Detector	\$75	Daily	0	\$0.00
Field Vehicle	\$80	Daily	0	\$0.00
Sub-slab Probes	\$85	ea	0	\$0.00
Concrete Drill Setup	\$100	Daily	0	\$0.00
Waukesha Permit (if necessary)	\$300	Est.	0	\$0.00
Helium Detection Kit	\$80	per test	0	\$0.00
			Total Expenses	\$0.00
<u>Contractors</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Laboratory Rental (canisters)	\$50	Each	0	\$0.00
Laboratory Analytical	\$120	Each	0	\$0.00
		Te	otal Contractors	\$0.00

TASK TOTAL: \$3,205.00
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Project: Milwaukee Fabricare - Milwaukee, WI

Task: 4 Notification of Affected Properties

Professional Labor	Rate (\$/Hr.)		<u>Units</u>	<u>Total</u>
Principal/Proj. Mgr.	\$155		1	\$155.00
Sr. Eng./Sci.	\$100		4	\$400.00
Eng./Sci.	\$80		8	\$640.00
CADD	\$65		0	\$0.00
Admin. Asst/ Word Proc.	\$45		0	\$0.00
			Total Labor	\$1,195.00
External Expenses	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Reproduction	\$50	Est.	1	\$50.00
Field Vehicle	\$80	Daily		\$0.00
Sampling Supplies	\$20	Daily	0	\$0.00
Drums	\$55	Each	0	\$0.00
PPE - Modified Level D	\$15	Daily	0	\$0.00
PPE - Level C	\$35	Daily	0	\$0.00
			Total Expenses	\$50.00
Contractors None	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
	-	Total Contract	tors	\$0.00
		TASK	TOTAL:	\$1,245.00

Project: Milwaukee Fabricare - Milwaukee, WI

Task: 5 Additional Reporting

Professional Labor	Rate (\$/Hr.)		<u>Units</u>	<u>Total</u>
Principal/Proj. Mgr.	\$155		2	\$310.00
Sr. Eng/Geol	\$100		6	\$600.00
Eng./Sci.	\$80		16	\$1,280.00
CADD	\$65		6	\$390.00
Admin. Asst/ Word Proc.	\$45		2	\$90.00
			Total Labor	\$2,670.00
External Expenses	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Reproduction	\$50	Est.	2	\$100.00
Field Vehicle	\$60	Daily	0	\$0.00
Water Quality Meter	\$175	Daily	0	\$0.00
Water Depth Meter	\$25	Daily	0	\$0.00
PPE - Modified Level D	\$15	Daily	0	\$0.00
Reproduction	\$50	Est.	0	\$0.00
			Total Expenses	\$100.00
Contractors	Rate	<u>Type</u>	Units	<u>Total</u>
None	11010	<u> </u>	<u> </u>	\$0.00
			Total Contractors	\$0.00

TASK TOTAL:	\$2,770.00