



Ms. Nancy Ryan Hydrogeologist Wisconsin Department of Natural Resources 2300 N. Dr. Martin Luther King Jr. Drive Milwaukee, WI 53212

RE: Cost Estimate for Additional Sampling Activities at the Former Saukville Fabricare Property Located at 144 S. Foster Street in Saukville, Wisconsin -FEC Project No. 041101; BRRTS No. 02-46-448965; FID No. 246061640

Dear Ms. Ryan:

As requested, *Friess Environmental Consulting, Inc. (FEC)* provides this cost estimate to the Wisconsin Department of Natural Resources (DNR) for the scope of work discussed with you and outlined below. The additional scope of work includes one round of groundwater monitoring from nine (MW-2 through MW-10) of the on-site groundwater monitoring wells, the installation (if warranted) and sampling of five sub-slab vapor points to evaluate the vapor intrusion risks and continued operation of the current VMS system, repairs to the VMS system (as warranted), and submittal of the closure request and appropriate GIS registry information. This letter describes the proposed services for each category. The costs for the proposed services are itemized on the attached spreadsheets. We request that you review this submittal for approval through the Dry Cleaner Environmental Response Fund (DERF) program.

Groundwater Evaluation

As discussed, an additional round of groundwater sampling will be conducted at nine existing wells (MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, and MW-10). Prior to sampling, FEC will measure the depth to groundwater at the wells in order to evaluate groundwater elevations. After measuring the depths to groundwater, FEC will purge and collect groundwater samples from the wells. The samples will be submitted to the laboratory under standard chain-ofcustody protocol for analyses of volatile organic compounds (VOCs). Groundwater will be containerized and transported by FEC to our offices for disposal through the MMSD, as previously approved. A letter to the MMSD documenting the disposal will be included as documentation.

Additional Sub-Slab Sampling

FEC will collect sub-slab vapor samples at three of the previous sampling locations (VP-1R, VP-9, and VP-12) and install two new vapor sampling ports (VP-13 and VP-14) within the building (diagram attached). To install each new sub-slab vapor sample point, a small diameter hole will be drilled through the concrete slab into the sub-slab aggregate. The top of the hole will be reamed with a larger drill bit to allow for the sampling point to be finished flush with the floor. A 2-inch long stainless steel or brass sleeve will be inserted into the drill hole so that the top of the sleeve has female threads to allow for a male-threaded cap to be inserted. The male threads will be wrapped with Teflon tape prior to insertion. The space between the top of the sleeve and the concrete floor will be sealed with hydraulic cement and allowed to set.

After allowing for the cement to set, FEC will collect the sub-slab samples from In order to collect each sample, the probe cap will be the new locations. replaced with a stainless steel or brass ball valve with male NPT threads and an outlet equipped with either compression fittings or hose barb to allow for attaching dedicated HDPE sample tubing. The threads of the valve will also be wrapped with Teflon tape prior to insertion and the valve will be closed. Dedicated sample tubing will be connected to the outlet of the sampling probe ball valve and routed through a rubber stopper inserted into the shroud. The sample tubing will run through an in-line vacuum gauge and "T" to a vacuum pump and to a 6-liter summa canister equipped with a 30-minute regulator. The lines running to the vacuum pump and summa canister will both be equipped with stainless steel or brass ball valves with compression fittings or hose barbs. With the valves of the summa canister and sampling probe closed, a shut-in test will be conducted by creating a vacuum of approximately 50 to 100 in-water within the system and then closing the influent valve to the vacuum pump. If dissipation is observed on the vacuum gauge, the connections will be retightened and the test will be repeated. If no dissipation is observed after approximately 1 minute, the system will be considered leak-tight and a helium shroud leak test will be conducted with a helium shroud and a Mark 9822 helium detector. The shroud will consist of a plastic container placed over the vapor sampling point. The shroud will have three holes drilled in the sides each fitted with rubber stoppers to allow for the insertion of HDPE tubing to fill the shroud with helium, monitor the helium within the shroud, and allow the tubing from the vapor sampling point to exit the shroud. Once the shroud is filled with helium to at least 40% by volume based on the field screening within the shroud, the helium meter will be connected to the vapor sampling point tubing and monitored for leaks. If leaks are detected during the screening, the surface seal will be repaired and retested. If no leaks are detected during the helium shroud test, the sampling apparatus will be arranged to isolate the line from the sampling probe valve to the regulator on the summa canister. The summa canister valve will be opened and the sample will be collected over approximately 30 minutes to allow for recommended flow rates.

EDS will submit the summa canisters under standard chain-of-custody protocol to a Wisconsin-certified laboratory for analyses of cis-1,2-dichloroethene (DCE), trans-1,2-DCE, tetrachloroethene (PCE), trichloroethene (TCE), and vinyl chloride, via the TO-15 analytical method.

Repairs to the Existing VMS

As you are aware, the VMS System has been shut down since March 2017 and is in need of repair to replace two blowers and repair exterior piping. Based on the results of the above sub-slab vapor testing, if the vapor levels are above the DNR guidelines, we will repair and continue to operate the VMS in that area.

FEC requested a quote from Lifetime Radon Solutions to repair the piping and brackets and replace the fans for the main drop point of the existing VMS (copy attached). FEC also requested that Lifetime Radon Solutions provide costs for repair and/or fan replacement of any additional drop point of the existing VMS. Those contingency costs are in the attached quote and email and presented on FEC's cost spreadsheet.

Documentation

FEC will document the procedures and results of the additional sampling described in this letter. This will include the locations of the sub-slab vapor samples, VMS system repairs completed, measured VMS system pressure gradients and/or communication testing after reapirs, and all updated figures and tables for the closure request, GIS registry, and maintenance plans, and copies of all laboratory reports and investigative documentation.

We appreciate your assistance with this project. If you have any questions or comments regarding this submittal, please call me at (414) 228-9815.

Respectfully,

Friess Environmental Consulting, Inc.

Trenton J. Ott Project Manager Richard W. Frieseke, P.E. President

Richard W. Frieseke

Attachment

/water

041101zh

FEC Invoices 144 S. Foster Street Saukville, WI 53080 BRRTS No. 02-46-448965

Claimed Consulting Total = \$0.00 Claimed Commodity Total = \$0.00

Claimed Grand Total = \$0.00

Consulting	- Unit price is based on the Project Manager at 85 and Project Director at 10
Consumy	- Unit price is based on the Project Manager at 85 and Project Director at 10

	Unit Price	Proposed	Requested	Units	Approved	Requested	Revised
Item Description	Unit Frice	Quantity	Additional	Ullits	Approved	Additional	Budget
Item 1: Cost Estimate Preparation							
Documentation	85	6		hour	\$510.00	\$0.00	\$510.00
				Sub-Total =	\$510.00	\$0.00	\$510.00
Item 2: Groundwater Sampling (9 w	ells - 1 roun	<u>d)</u>					
Project Coordination	100	2		hour	\$200.00	\$0.00	\$200.00
Field Services	85	8		hour	\$680.00	\$0.00	\$680.00
Field Services Management	85	2		hour	\$170.00	\$0.00	\$170.00
Groundwater disposal coordination	85	1		hour	\$85.00	\$0.00	\$85.00
Data Evaluation/Conversion	85	2		hour	\$170.00	\$0.00	\$170.00
Expenses/Equipment (see below)	180	1		list	\$180.00	\$0.00	\$180.00
				Sub-Total =	\$1,485.00	\$0.00	\$1,485.00
Item 3: Sub-Slab Sampling							
Field Services	85	8		hour	\$680.00	\$0.00	\$680.00
Data Evaluation/Conversion	85	8		hour	\$680.00	\$0.00	\$680.00
Expenses/Equipment (see below)	375	1		list	\$375.00	\$0.00	\$375.00
				Sub-Total =	\$1,735.00	\$0.00	\$1,735.00
Item 4: Documentation							
Field Services	85	5		hour	\$425.00	\$0.00	\$425.00
VMS inspection and documentation	85	6		hour	\$510.00	\$0.00	\$510.00
Additional Closure documentation	85	10		hour	\$850.00	\$0.00	\$850.00
				Sub-Total =	\$1,785.00	\$0.00	\$1,785.00
					•		•
		Cons	sulting Serv	ices Total =	\$5,515.00	\$0	\$5,515.00

Commodity

Item Description	Unit Price	Proposed Quantity	Requested Additional	Units	Approved	Requested Additional	Revised Budget
Item 1: Vapor Sampling 5 points)							
Analytical Laboratory							
Analytical Testing (Vapors)	250	5		lump	\$1,250.00	\$0.00	\$1,250.00
Analytical Testing (GW VOCs)	75	9		lump	\$675.00	\$0.00	\$675.00
				Sub-Total =	\$1,925.00	\$0.00	\$1,925.00
	1,925.00	\$0	1,925.00				

Commodity Contingency

<u> </u>							
Item Description	Unit Price	Proposed	Requested	Units	Approved	Requested	Revised
Item 1: SSDS Repair							
SSDS Contractor							
main drop	\$2,000	1		lump	\$2,000.00	\$0.00	\$2,000.00
additional drops	\$500	2		foot	\$1,000.00	\$0.00	\$1,000.00
-				Sub-Total =	\$3,000.00	\$0.00	\$3,000.00

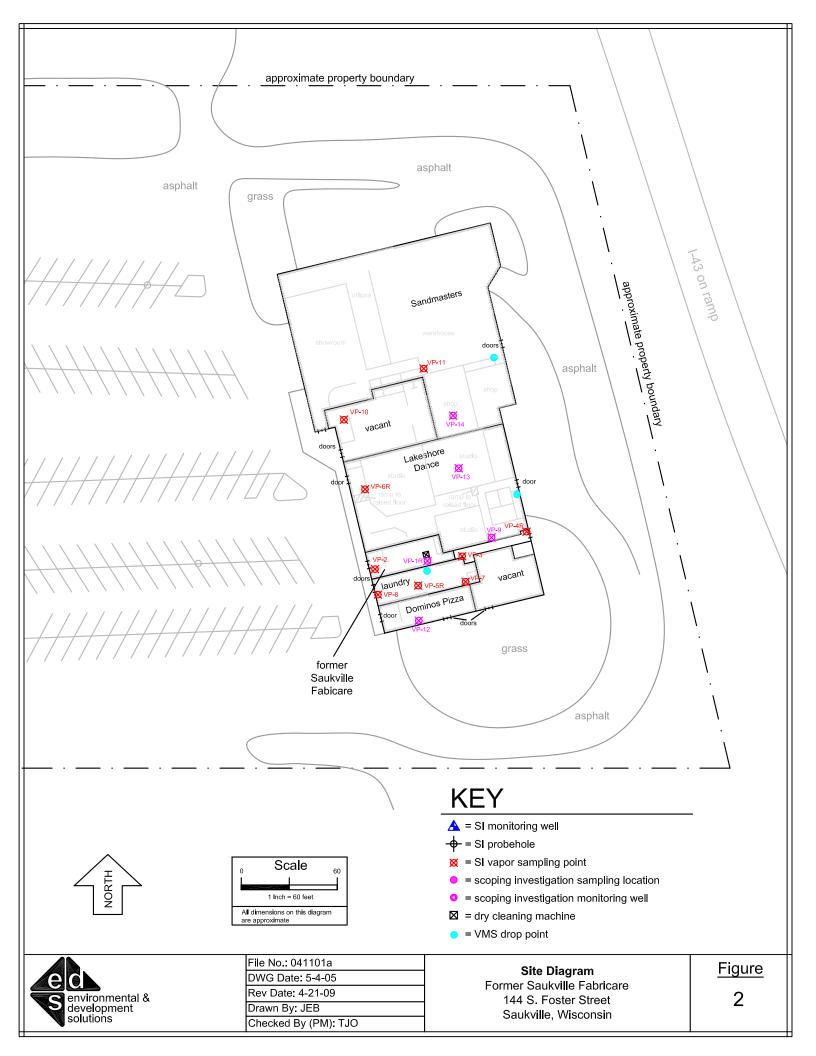
				Sub-Slab Vapor Expenses		
				vapor point \$25/point	\$125.00	
				helium meter	\$100/day	
Groundwater Sampling	<u>Expenses</u>			hammer drill	\$100/day	
well sampling equip.	\$20/well	9 well/1 rd	<u>\$180</u>	sampling eq. \$5/point	\$25.00	
			\$180	Vacuum/pump	\$25/day	
					\$375	

Site Name: Former Saukville Fabricare

BRRTS #: 02-46-448965
Type of Action: Investigation

TASKS	BUDGET												
Bid / Budgeted Description	Α	Budgeted mount -2-2012		d/Budgeted Amount 4-11-2013		id/Budgeted ount 1· 8-2014	1- Amou		Bid/Budgeted Amount 2 24-2015		2 Amount		INSERT
Consultant Costs	_	2 2012		T 11 2010		0 2014	Ė	27 2017	_	7 2010		3 2017	=
Cost Estimate/Work Plan Prep	\$	743.75	\$	743.75	\$	743.75	\$	743.75	\$	340.00	\$	510.00	\$ -
Groundwater Sampling (1 round@ MW-2, MW-	<u> </u>		Ť		<u> </u>					0.0.00	<u> </u>	0.0.00	Ψ
3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9 &													
MW-10) Sub-Slab Sampling (5 points)					-						\$	1,485.00	
Sub-Slab Sampling (5 points)											\$	1,735.00	
Groundwater Sampling (2 rounds@ MW-1, MW-													
2, MW-3, MW-4, MW-5, MW-6, MW-7 & TW-4)	\$	2,297.50											
Closure/GIS/CMP Documentation	\$	3.920.00									\$	850.00	
Well Abandonment (8 1-inch & 8 2-inch)	\$	1,500.00									Ψ	030.00	
von / Bandonnon (o 1 mon a o 2 mon)	Ψ	1,500.00											
Groundwater Sampling (1 round@ MW-1, MW-													
2, MW-3, MW-4, MW-5, MW-6, MW-7 & TW-4)			\$	1,385.00									
Results Documentation (8 wells)			\$	67.50									
Well Installation (1 well - MW-8)			\$	795.00									
Additional Vapor Sampling (1 sub-slab)			\$	765.00									
Groundwater Sampling (3 rounds@ MW-1, MW-			_										
2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8 &													
TW-4)			\$	3,805.00									
Results Documentation			\$	202.50									
Well Abandonment (MW-8)			\$	52.75									
Off-site Access			_		\$	510.00							
Well Installation (2 wells - MW-9 & 10)					\$	840.00							
Groundwater Sampling (3 rounds@ MW-9, MW-					Ė								
10 & WG-6)					\$	735.00							
Results Documentation					\$	172.50							
Well Abandonment (MW-9 & 10)					\$	91.50							
Groundwater Sampling (3 rounds @ MW-2, MW-													
3, MW-4, MW-5, MW-8, MW-9, MW-10 & TW-4							\$	3,795.00					
Groundwater Sampling (3 rounds @ MW-6 &													
MW-7 - eliminate TW-4 from above)									\$	367.50			
Results and Disposal Documentation							\$	1,125.00			\$	425.00	
VMS Inspection and Documentation									\$	562.50	\$	510.00	
Consultant Cost Total	\$	8,461.25	\$	7,816.50	\$	3,092.75	\$	5,663.75	\$	1,270.00	\$	5,515.00	\$ -
Sub-Contractor Costs													
GW Analytical (8 wells-2 rounds)	\$	1,632.00											
Groundwater Disposal	\$	325.00	\$	325.00	\$	325.00							
Groundwater Analytical (8 wells-1 round)			\$	520.00									
Groundwater Disposal			\$	325.00									
Well Installation & Soil Disposal (2 wells)			\$	1,600.00	\$	2,072.50							\$ -
Vapor Analytical			\$	223.00							\$	1,250.00	
GW Analytical (9 wells-3 rounds)			\$	1,755.00									
GW Analytical (3 wells-3 rounds)					\$	585.00							
GW Analytical (8 wells-3 rounds)							\$	1,560.00					
GW Analytical (1 well-3 rounds)									\$	195.00			
GW Analytical (9 wells-1 round RNA)									\$	684.00	\$	675.00	
VMS Repair											\$	3,000.00	
Sub-Contractor Cost Total	\$	1,957.00	\$	4,748.00	\$	2,982.50	\$	1,560.00	\$	879.00	\$	4,925.00	\$ -
DERF ELIGIBLE SUB-TOTALS	\$	10,418.25	\$	12,564.50	\$	6,075.25	\$	7,223.75	\$	2,149.00	\$	10,440.00	\$ -

Non-DERF Eligible Expenses	
Mileage	
DERF Claim	
GW Disposal	
Non-DERF Cost Total	
INVOICE GRAND TOTAL	







262.955.5701 RADON TESTING AND MITIGATION

Date: 6/27/2017 ATTN: Trent Ott

Property: 140 S. Foster St., Saukville, 53080

Service Proposal/Contract

This is an estimate for servicing a radon-related issue and/or sump pump at the above property. The installation is guaranteed to meet all EPA/NRPP guidelines. If additional issues are discovered after the site assessment, further charges may apply.

TVKT 1 guidennes. It additional issues are discovered after the site assessment, furth	her charges may appry.
Repair of main system drop and 2 fans in that main drop	\$2,000.00
Fan repair each additional drop if needed	\$0.00
Estimated Total	\$2000.00
Please note: Non-standard shingles, any electrical work, and all drywall repair tradesman. Lifetime Radon Solutions, Inc. works with master electricians, profinstallation assistance. Our team does everything possible to find out if their sethe most accurate estimate. If there is any question as to the necessity of their sethem.	essional roofers and professional drywallers that can provide ervices are needed ahead of time to provide our customers with

The above work has a *lifetime warranty* on workmanship and a 5 year warranty on the fan (this is transferrable). Any other issues outside of these parameters can be serviced by Lifetime Radon Solutions, Inc. in the future for a service fee. We certify that we are fully insured for errors and omissions. We belong to the National Environmental Health Association and the National Radon Proficiency Program (License #101552RMT).

Please sign below to accept this proposal as a contract with Lifetime Radon Solutions, Inc. Cancellations/ rescheduling must be made 24 hours prior to installation to avoid a \$79 fee. If you have large amounts of items in your basement and/or garage, please make sure there is ample workspace available to avoid rescheduling onsite. Our technicians are not responsible for moving items for liability purposes.

Proposed by: Lifetime Radon Solutions	s, Inc.	Clast Name Trans Out				
Scot Carpbell	6/27/17	Client Name: Trent Ott				
Signature	Date	Client Signature	Date			

Subject: Re: Lifetime Radon Service Call

From: "Lifetime Radon Solutions, Inc" <scheduling@lifetimeradon.com>

Date: 6/27/2017 3:36 PM

To: tott@fecinc.us

Also, if any additional drops are needed it would be \$500 per drop.

Thanks,

Jennifer

Lifetime Radon Solutions, Inc www.lifetimeradon.com 262-955-5701 104 Hill St (D) Hartland, WI

On Tue, Jun 27, 2017 at 3:31 PM, Schedule schedule < scheduling@lifetimeradon.com > wrote:

Hey Trent,

Just following up on the proposal you requested last week. I have attached it again here for your review because on our end it kind of looks like it never went through to you all the way., If you want to get on the schedule we can get there this week Friday OR after the holiday. Let me know, we would be happy to help you out again!

Thanks and have a great rest of your day!

Lifetime Radon Solutions, Inc. 145 North Ave, Suite i Hartland, WI 53029 www.lifetimeradon.com (262) 955-5701

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