

Ken Ebbott

From: Ken Ebbott
Sent: Friday, April 12, 2024 3:10 PM
To: Michalets, Linda M - DNR
Cc: Tom Mckay; Hani Ahmad (hani2991@gmail.com); Ken Ebbott
Subject: Vapor and Groundwater Sampling Work Plan, One Hour Fabricare, BRRTS 02-41-548391
Attachments: 2024 04 01 Change order to DNR w Table 1 rates.pdf

Linda,

I've reached out to the neighbor to the north at 3119 N 47th Street for an updated access agreement to sample their indoor and subslab air. I haven't heard back, but will try to contact them via phone after I get agreement from you on the scope / methods discussion below. On the City records, it is the same owner's name as when we did the sampling in 2020, so that is good news.

WORK PLAN SCOPE AND METHODS

VAPOR SAMPLING

The adjacent house at 3119 N 47th Street was previously sampled for subslab vapors and indoor air within the crawl space of the home in June 2020. The results indicate the subslab vapors were not elevated, but the crawl space air had levels of naphthalene and tetrachloroethene (PCE) above levels of concern. Additional vapor sampling will be completed using passive samplers deployed for a 10-day duration.

Sample Locations

Further testing will be completed at three locations as follows:

- Ambient air on a telephone or light pole in the alley south of the home.
- Within the crawl space air.
- Within the living space of the home.

The house is one story and has a main building that measures roughly 26 feet north / south by 45 feet east / west. This part of the building is underlain by a 3' high crawlspace with a thin cement floor. Just to the west and attached to the main building is an approximately 18 foot north / south by 12 foot east / west slab on grade bedroom that extends to the west and connects to the slab on grade garage.

The crawlspace access is via an opening in a closet door in the far northwest corner of the main house, which is at the northeast corner of the slab on grade bedroom. The crawlspace cement block walls have been sprayed with a foam insulation along the interior perimeter in most places, not sure what that material is made from, but it could be a source for the observed chemicals in the air.

For the proposed testing, we plan to try and test the center of the main building, so the sampler will be hung at a height of 1 to 3 feet off the cement floor of the crawlspace, approximately 15 feet south and 20 feet east of the northwest access door.

The indoor sampler for the building will be placed in the approximate center of the main building that is underlain by the crawlspace. It is anticipated the sampler will be hung at approximate head height in an area between the kitchen and the main living room, although final placement will be discussed with the owners to accommodate a location that is convenient.

To the extent possible, a brief inventory of household products will be performed and products that contain PCE, TCE, or naphthalene will be identified and removed to the adjacent garage for storage during the texting. The materials will be placed in a sealed Ziploc bag during removal. These products may include glues, paint and spot removers, rug cleaning fluids, paint, metal and automotive cleaning products, recently dry cleaned clothes, insecticides, scented candles, and moth balls. Because naphthalene can be present related to combustion, we will ask the building occupants if they smoke cigarettes, and observe the indoor space for ashtrays and other indicators of tobacco use.

The outside ambient air sample will be deployed on a telephone or light pole near the home, likely along the alley just south of the residence. Prevailing winds tend to be from the west or southwest, and W. Burleigh Avenue is a relatively busy street with potentially detectable chemical emissions from automobile exhaust. The sampler will be protected from rain and the elements with a temporary shelter provided by the laboratory. The shelter has a roof and two walls and has been designed to optimize air flow while still providing protection from the elements.

Sample Method and Analysis

Upon collection, the samples will be shipped to Eurofins, Folsom, California for analysis using the Radiello 130 sampling and test method. Eurofins is working with the WDNR on several projects that utilize this high uptake passive vapor sampling method. A 10-day sample time is proposed with laboratory analysis for a short list of analytes that were previously identified, which include the following:

- Benzene
- Ethylbenzene
- Toluene
- Xylenes
- Naphthalene
- Tetrachloroethene (PCE)
- Trichloroethene (TCE)
- Cis – dichloroethene (DCE)

As the WDNR is aware, vinyl chloride can NOT be tested using this analytical method, but based on previous findings, vinyl chloride is not expected to be present at significant concentrations for this project.

All three samples will be tested for these analytes, with the ambient sample mounted on a nearby light post deployed to check background levels of compounds in this relatively high traffic area.

Results and Communication of Findings

Within 10 days of receipt of the results from the laboratory, the findings will be shared with the property owner, client, and WDNR. The results will be tabulated and compared to the WDNR Quick Look-up Values for residential air.

The information will include a brief discussion of the findings and need for additional work, if any.

VAPOR MITIGATION SYSTEM at 4704 W. Burleigh (Former Fabricare Building)

A vapor mitigation system will be installed at the former drycleaner building. The building is a slab on grade structure measuring roughly 28 feet north / south by 66 feet east / west. The former drycleaning machine sat on the far western

edge of the building in an area currently separated from the rest of the building interior space by a north / south trending wall of tall refrigeration units located approximately 15 feet east of the western wall.

The vapor mitigation system will be installed with one or two floor penetrations located near the western wall. The exhaust piping will be run outside the western wall and extend above the roof line, with connection to an exterior-mounted exhaust fan. The fan discharge will be located at least 10 feet from any doors, windows, or air intake areas of the building.

A licensed radon mitigation contractor, Wisconsin Radon of Milwaukee, will be hired to design and install the system. The design elements, such as the number of floor penetrations and location of the piping, will depend in part on the field observations during installation. A pressure field extension testing will be performed by the radon mitigation contractor during installation, and a report will be prepared that documents the installed system elements and pressure extension results.

Previous testing of the indoor air at the former Fabricare building indicated very low levels of PCE were present and no TCE was detected. The observed PCE was far below standards for both residential and small commercial indoor air, and with the installation of a vapor mitigation system, the building will be better protected from potential vapor intrusion. No post-system chemical testing of indoor air at the former drycleaner building is planned.

GROUNDWATER SAMPLING

Testing of groundwater from the eight site monitoring wells will be completed. The wells have not been sampled since 2013, and current results should be obtained. The wells may be in relatively poor condition, and notes will be provided on the well total depth and any observed deficiencies in their current construction or condition. The wells will be purged per DNR groundwater sampling requirements to obtain representative groundwater, and will be sampled using new, dedicated bailers, with field measurement of temperature, conductivity, and dissolved oxygen prior to testing.

Samples will be obtained for laboratory analysis of VOC's, with analysis performed by either Synergy Laboratory or Pace Analytical laboratory.

Upon receipt of the results, the chemistry results will be tabulated and an updated table sent via email to the client and WDNR, along with a copy of the laboratory analytical report.

DRYCLEANER ENVIRONMENTAL REPAIR FUND (DERF) ELIGIBILITY

The project is eligible for coverage under DERF, although the fund is currently not able to reimburse claims in a timely manner. To maintain potential coverage if DERF becomes more viable, we request the WDNR review and approve the budget for the proposed charges for this work, as shown on the attached Change Order and detailed table showing the breakdown of charges. The costs are reasonable and necessary, and WDNR concurrence with the proposed budget has typically been required to maintaining full eligibility of charges.

SCHEDULE

Upon review and approval of this Work Plan, we can begin the sampling of vapors and authorize the vapor mitigation contractor to install the system at the former drycleaner building.

The work should require two to three months for completion once approval has been provided.

I look forward to hearing from you with any questions or comments.

Thanks,

Ken

Regards,

Ken Ebbott, PG, CGWP

Senior Project Manager/Senior Geologist

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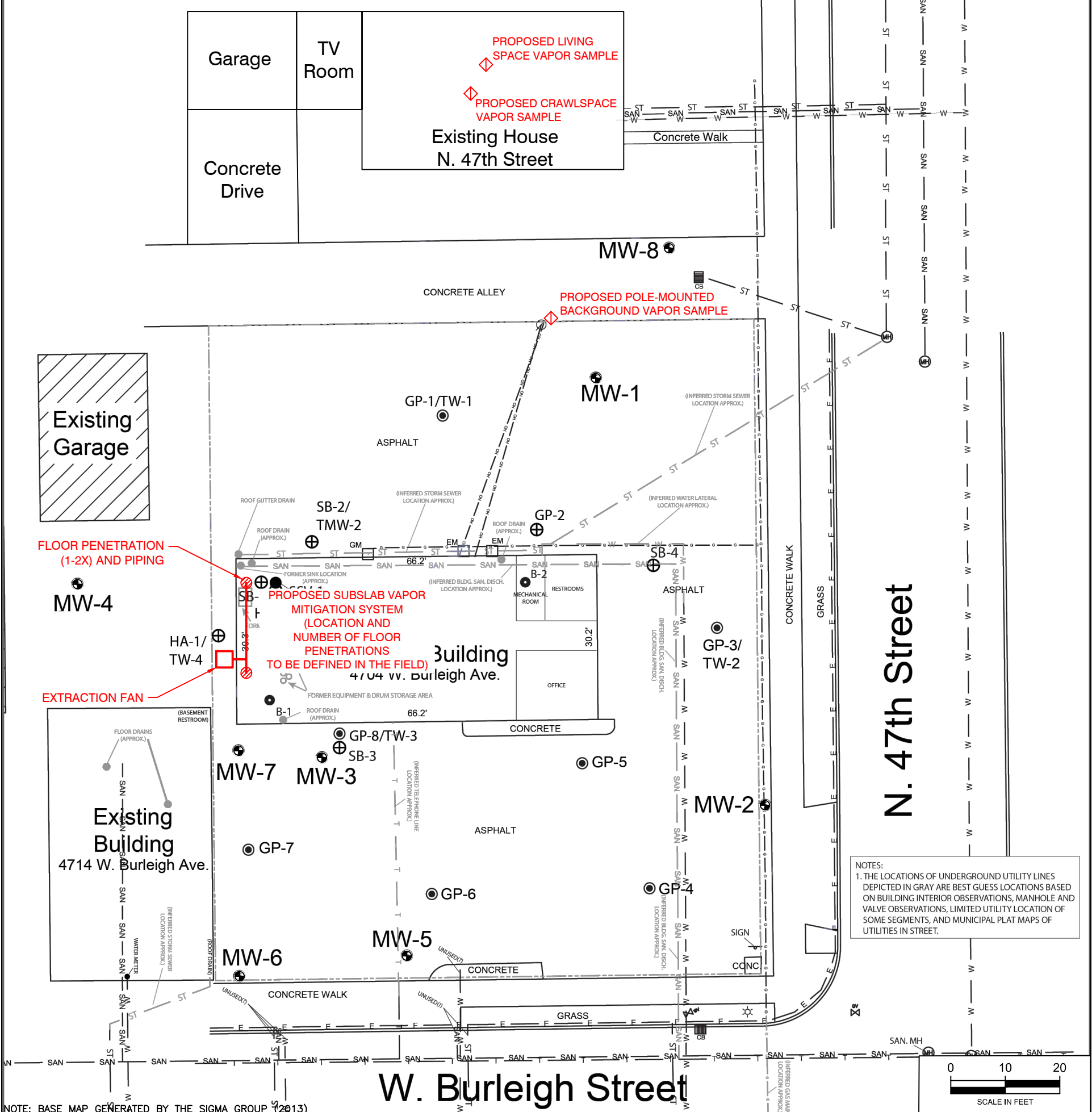
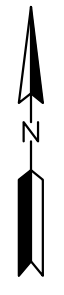
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LEGEND

- SSV- Sub-Slab Vapor Sample Location
- ⊕ HA- / TW- Hand Auger Boring & Temporary Well Location (06/02/2009)
- ⊕ SB- Soil Boring Location (10/09/2006)
- ⊕ SB- / TMW- Soil Boring & Temporary Well Location (10/09/2006)
- ⊙ GP- Soil Boring Location (06/02/2009 and 03/12/2013)
- ⊙ GP- / TW- Soil Boring & Temporary Well Location (06/02/2009)
- B- Soil Boring Location (03/12/2013 and 04/04/2013)
- ⊕ MW- Monitoring Well Location (05/05/2010 and 03/12/2013)
- ◇ Proposed Passive Vapor Sample Location (April 2024)



NOTES:
 1. THE LOCATIONS OF UNDERGROUND UTILITY LINES DEPICTED IN GRAY ARE BEST GUESS LOCATIONS BASED ON BUILDING INTERIOR OBSERVATIONS, MANHOLE AND VALVE OBSERVATIONS, LIMITED UTILITY LOCATION OF SOME SEGMENTS, AND MUNICIPAL PLAT MAPS OF UTILITIES IN STREET.

NOTE: BASE MAP GENERATED BY THE SIGMA GROUP (2013)



PROPOSED VAPOR SAMPLE LOCATIONS (APRIL 2024)

**FORMER ONE HOUR FABRICARE
 4704 WEST BURLEIGH STREET
 MILWAUKEE, WISCONSIN**

DATE:	APRIL 2024	DRAWN BY:	ASR
SCALE:	1"=20'	APPROVED BY:	KE

FIGURE 1

ADDITIONAL INVESTIGATION AND INTERIM ACTION CHANGE ORDER # 4: April 1, 2024
One Hour Fabricare 02-41-548391

DESCRIPTION	Unit Price	Quant.	Units	Total ADDL Cost	Prior Apprvd Cost	TOTAL COST	Comment
CONSULTANT SERVICES							
Site investigation Consultant Costs							
Task 1 Work Plan and Project Management					*	*	*Total approved budget has been established but breakout by tasks is not known
Task 2: Access and Receptor Survey					*	*	
Task 3 Drilling and Well Installation, Drum Disposal					*	*	
Drum Disposal					*	*	
Task 4 Well Development, GW Sampling	see Sand County Table 1		1 Wells	1695	*	*	
Task 5: Soil Gas Vapor Intrusion Assess					*	*	
Task 6: Data Eval					*	*	
Task 7: Report Preparation					*	*	
Total Site Investigation Consultant costs				1695	*	*	
Sub-Contractor Costs							
Site Investigation Contractor							
Task 3 Drilling and Well Installation, Drum Disposal	See Table A				*	*	*Total approved budget has been established but breakout by tasks is not known
Drilling	See Table A				*	*	
Lab	See Table A				*	*	
Task 4 Well Development, GW Sampling					*	*	
Lab		87	8 each	696	*	*	
Total Site Investigation Contractor costs				696	*	*	
Non-DERF Eligible Expenses							
City Permit					177	177	
Non-DERF Cost Total				0	177	177	
TOTAL SI COSTS				2391	44,487.50	46,878.50	

Interim Action Costs							
Task 1: Work Plan and PM	see Sand County Table 1		1	1120	1525	2645	
Task 2: Access and Receptor	see Sand County Table 1		1	460	1036	1496	
Task 5: Indoor and Crawl Space Vapor at neighbors	see Sand County Table 1		1	1785	1458	3243	
Task 6: Data Eval, Interp. Letter Neighbors	see Sand County Table 1		1	1445.50	1426	2871.5	
Consultant Cost Total	see Sand County Table 1			4810.50	5,445	10255.5	

Interim Action Costs Contractor							
Task 5: Lab Vapor Neighbors		292	2 each	584	\$ 1,470.00	2054	
Install System at Site		3000	1 each	3000	\$ -	3000	
Sub-Contractor Cost Total				3584	\$ 1,470.00	5054	

TOTAL INTERIM ACTION COST				8394.50	\$ 6,915.00 *	15309.5
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TOTAL PROJECT				10785.50	51402.50	62188.00
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One Hour Fabricare approves of the environmental costs described above and authorizes Sand County (formerly Sand Creek) to proceed with these activities. Sand County shall not exceed any of these costs without receiving written authorization.

 One Hour Fabricare, Mr. Tom McKay Date

This approval does not guarantee the reimbursement of costs. Final determination regarding the eligibility of costs will be determined at the time of claim review.

 Ms. Linda Michalets, WDNR Project Manager Date

Kendrick A. Ebbott
 Mr. Kendrick A. Ebbott, Sand County Environmental 1-Apr-24 Date

TABLE 1: Interim Action Cost Estimate: GW and Vapor Sample
February 29, 2024
Sample All 8 Wells, Install Subslab Vapor at Drycleaner, Retest Vapor Neighbor N

ITEM DESCRIPTION	Unit Price	Quantity	Units	Total Cost
CONSULTING SERVICES				
Task 1 Work Plan and Project Management				
Plan, DNR Email Correspondence, Scope, Budget (3 months)				
Project Manager (PG)	\$130.00	4	hour	\$520.00
Drafting	\$100.00	2	hour	\$200.00
Administrative	\$100.00	4	hour	\$400.00
Subtotal Task				\$1,120.00
Task 2: Revisit Access Agreement				
Access with one neighbor				
Branch Manager	\$171.00	0	hour	\$0.00
Project Manager (PG)	\$130.00	2	hour	\$260.00
Field Technician	\$100.00	2	hour	\$200.00
Subtotal Task				\$460.00
Task 4: Groundwater Monitoring				
Groundwater Sample wells MW1 to MW8, Analysis VOCs				
Branch Manager	\$171.00	0	hour	\$0.00
Project Manager (PG)	\$130.00	2	hour	\$260.00
Field Technician	\$100.00	11	hour	\$1,100.00
YSI Multi Meter	\$100.00	1	day	\$100.00
WL Probe	\$50.00	1	day	\$50.00
Bailers, Rope	\$20.00	8	each	\$160.00
Field Supplies	\$25.00	1	day	\$25.00
Subtotal Task				\$1,695.00
Task 5: Indoor Vapor Sampling at Neightobr to North, Vapor System Installation at Former Drycleaner				
Vapor Samples Two 24-hour Indoor from North Neighbor crawlspace and indoor air. Vapor mitigation system at former drycleaner, two floor penetrations with fan, communication testing, manometer for visual function verification				
Branch Manager	\$171.00	0	hour	\$0.00
Project Manager (PG)	\$130.00	2	hour	\$260.00
Field Technician	\$100.00	14	hour	\$1,400.00
PID	\$100.00	1	day	\$100.00
Field Supplies	\$25.00	1	day	\$25.00
Subtotal Task				\$1,785.00
Task 6: Data Evaluation and Interpretation, Letter to Neighbor				
Tabulate Data. Letter to Off Site Owner to North. Email report to DNR with copy of off site letters				
Branch Manager	\$171.00	0.5	hour	\$85.50
Project Manager (PG)	\$130.00	2	hour	\$260.00
Field Technician	\$100.00	6	hour	\$600.00
CAD	\$75.00	3	hour	\$225.00
Admin Assistant	\$55.00	5	hour	\$275.00
Subtotal Task				\$1,445.50
CONSULTING SERVICES TOTAL				\$6,505.50
CONTRACTOR SERVICES				
Task 4: Groundwater Sampling				
GW Samples, 8 wells for VOCs				
VOCs	\$87.00	8	each	\$696.00
Subtotal Task				\$696.00
Task 5: Vapor Sampling/Mitigation System Install				
Vapor Samples 2Total, 4 CVOCs plus Five Petrol Compounds				
LABORATORY				
Canister w Regulators	\$70.00	2	each	\$140.00
Analytical TO-15 for PCE, TCE, DCE, VC, B,E,T,X,N	\$210.00	2	each	\$420.00
Teflon Tubing	\$6.00	4	feet	\$24.00
VAPOR MITIGATION CONTRACTOR				
Vapor System Installation				
Electrician / Permit	\$700.00	1	each	\$700.00
Floor Penetrations	\$250.00	2	each	\$500.00
Piping and Fan	\$300.00	2	lump	\$600.00
Sealing, Manometer	\$100.00	1	lump	\$100.00
Labor	\$800.00	1	lump	\$800.00
Communication Test	\$150.00	1	lump	\$150.00
Documentation Report	\$150.00	1	lump	\$150.00
				\$3,000.00
Subtotal Task				\$3,584.00
CONTRACTOR SERVICES TOTAL				\$4,280.00
TOTAL ESTIMATED COST				\$10,785.50