

April 22, 2024

Mr. Jim Mohr
Tidy Cleaners and Laundry
818 S. Broadway
Green Bay, Wisconsin

**RE: Vapor Mitigation System (VMS) Installation and Remedial Action Options Report (RAOR)
Proposal
Tidy Laundry Cleaners
818 S Broadway
Green Bay, Wisconsin**

Dear Mr. Mohr,

The most recent sub-slab vapor sampling at the Tidy Cleaners and Laundry site had exceedances of the Wisconsin Department of Natural Resources (DNR)/Wisconsin Department of Health and Family Services SMALL COMMERCIAL Subslab Vapor Risk Screening Level (VRSL). Following the submittal of the data to Wisconsin DNR on the most recent vapor sampling data, the DNR project manager provided the following feedback:

- » A VMS is recommended to be installed in the Tidy Cleaners and Laundry building.
 - The DNR highly recommends hiring an ANSI/AARST-certified radon mitigator to install the system.
 - An interim action report (IAR) documenting commissioning and system effectiveness must be submitted for the system.
 - The IAR needs to include a long-term Operations Maintenance & Monitoring (OM&M) Plan and inspection log that can be a standalone document (e.g., included as an appendix within the IAR).
 - The continuing obligation for VMS OM&M and inspection will be applied to the site at the time the interim action is completed.
- » Due to the VRSL exceedance, a remedial action/source removal must occur to reduce the mass and concentration of the vapor source per Wis. Admin. Code §§ NR 722.09 and 726.05.

Based on the feedback from the DNR project manager, Fehr Graham is recommending that the installation of a VMS be completed as recommended by the DNR.

In addition, Fehr Graham has conducted high-level reviews of some potential remedial action possibilities, as also required by the DNR, but has not yet found a solution that would be effective and cost-efficient based on the site conditions. Therefore, Fehr Graham recommends completing a RAOR that would further detail potential remedial action options, along with the projected effectiveness and cost efficiency of these options.

Furthermore, at the request of Tidy Cleaners and Laundry, Fehr Graham will prepare a Dry Cleaner Emergency Response Program (DERP) Claim for site investigation and remediation services at the site.

Below is a summary of the recommended additional scope of work.

DETAILED SCOPE OF WORK

Task 8: Sub-Slab VMS Installation

To ensure the ongoing safety and well-being of building occupants, Fehr Graham recommends the installation of a sub-slab VMS at the Tidy Cleaners and Laundry building. This proactive measure will effectively safeguard occupants from any potential hazards in the future. Under this task, a sub-slab VMS will be installed within the Tidy Cleaners and Laundry building. To install the VMS, the following actions will be completed:

- » Hire an ANSI/AARST-certified radon mitigator to properly install the VMS. The ANSI/AARST-certified radon mitigator will complete the following:
 - Seal visible floor penetrations (cracks around the floor drains, etc.) to prevent short-circuiting of the sub-slab vapor extraction to the building air.
 - Installation of two sub-slab floor penetrations to remove sub-slab vapor.
 - Install electric low-horsepower fans outside with piping.
 - Wire to dedicated circuit on electric panel (assumes adequate space to accommodate).
 - During installation, perform a communication test to verify a minimum of -0.004 inches induced vacuum present across the building subfloor.
 - Install visible U-tube manometers on vertical piping for easy observation of system operation.
- » Following the installation of the VMS, Fehr Graham will complete the following to properly commission the VMS:
 - Perform two (2) additional rounds of pressure field extension readings (at least one in the summer and one in the winter to evaluate seasonal effects) and one round of indoor air sampling (including background ambient air sample).
 - Prepare an IAR that will include a long-term OM&M Plan and inspection log.

While Fehr Graham will help coordinate the installation of the VMS, it is proposed that the ANSI/AARST-certified radon mitigator be hired directly by the client (Tidy Cleaners and Laundry). The cost estimate for the installation of the VMS by the ANSI/AARST-certified radon mitigator is included in the cost estimate as a direct expense.

Task 9: RAOR (DERF Ineligible, unless approved as an Interim Action)

The evaluation process for the RAOR will follow WAC NR 722.07(3), which states that the RAOR should be, “used to determine which remedial action option constitutes the most appropriate technology or combination of technologies to restore the environment, to the extent practicable, within a reasonable period of time and to minimize the harmful effects of the contamination to the air, land, or waters of the state, to address the exposure pathways of concern, and effectively and efficiently address the source of the contamination”. The evaluation of the remedial action options will be based on the following requirements and in compliance with the requirements of WAC NR 722.09, which incorporates long- and short-term effectiveness, feasibility, restoration time frames, and economic feasibility. This task will account for any remedial action option we may see as advantageous for the project and reporting to the DNR.

Due to the site investigation not yet being completed for the Tidy Laundry Cleaners case, Fehr Graham proposes that preparation of the RAOR be considered an interim action to be completed in conjunction with the Sub-Slab VMS Installation and the remainder of the site investigation.

In addition, although it is optional, it is recommended the DNR review fee of **\$1,050** for this type of report is included with the submittal for formal review and feedback on the report from DNR. The DNR review fee is included in the cost estimate as a direct expense to be submitted by the client (Tidy Cleaners and Laundry).

Task A: DERP Claim Preparation (DERF Ineligible)

Fehr Graham will complete a Dry Cleaner Emergency Response Program (DERP) Claim for site investigation and remediation services provided from December 2012 to present for the above-mentioned property.

EXCLUSIONS

Please note that the following items are excluded from the proposed scope of services:

- » Quarterly groundwater monitoring costs.
- » Additional environmental costs beyond the scope described above.
- » Additional Wisconsin DNR Reporting beyond reports specified above.
- » Additional Wisconsin DNR Report Review Fees.
- » Off-Site Liability Exemption(s) or Notification to Off-Site Receptors of Contamination (if needed).
- » Offsite investigations.
- » Indoor vapor monitoring or air sampling.

FEES

The cost estimate for consultant services to complete the scope of work summarized above is **\$16,900**.

Fehr Graham has provided estimated costs for direct expenses for reference only and the client will contract with subcontractors directly. The direct expenses to complete the scope of work summarized above are **\$9,750**.

Please see attached Table 1: Change Order #5 for cost estimate details and Drycleaner Reimbursement Program (DERP) rates for this project.

I trust this proposal meets your needs and look forward to hearing from you.

Sincerely,



Dillon Pfamann, PG
Project Hydrogeologist

Attachments

- Table 1: Change Order #5
- Agreement for Professional Services

TABLE 1
CHANGE ORDER #5 - Tidy Cleaners
Sub-Slab Vapor Mitigation System and Remedial Action Options Report

818 South Broadway, Green Bay, WI

CONSULTANT SERVICES	Rate	Units	Estimated Amount	Estimated Cost
Task 8: Sub-Slab Vapor Mitigation System (VMS) Installation				
<i>Sub-Slab Vapor Mitigation System Installation and Commissioning</i>				
Hydrogeologist V				
Coordinated Sub-slab Vapor Mitigation System Installation	\$95.00	hour	4	\$380
Sub-slab Vapor Mitigation System Installation Oversight	\$95.00	hour	8	\$760
Perform two additional rounds of pressure field extension readings (one in summer and one in winter to evaluate seasonal effects)	\$95.00	hour	12	\$1,140
Concrete	\$20.00	bag	2	\$40
Hammer Drill	\$50.00	day	2	\$100
Induced Vacuum Meter	\$50.00	day	2	\$100
<i>Interim Action Report</i>				
Hydrogeologist V	\$95.00	hour	20	\$1,900
Drafting/CAD	\$55.00	hour	8	\$440
Technician II	\$70.00	hour	4	\$280
<i>Operation, Monitoring, and Maintenance Plan</i>				
Hydrogeologist V	\$95.00	hour	20	\$1,900
Drafting/CAD	\$55.00	hour	8	\$440
Technician II	\$70.00	hour	4	\$280
Task Subtotal:				\$7,760
Task 9: Remedial Action Options Report (DERF Ineligible, unless approved)				
Hydrogeologist V	\$95.00	hour	60	\$5,700
Drafting/CAD	\$55.00	hour	8	\$440
Technician II	\$70.00	hour	8	\$560
Task Subtotal:				\$6,700
Task A: DERP Claim Preparation (DERF Ineligible)				
Hydrogeologist V	\$95.00	hour	8	\$760
Technician II	\$70.00	hour	24	\$1,680
Task Subtotal:				\$2,440
Total Estimated Consultant Cost				\$16,900
DIRECT EXPENSE				
Task 8: Sub-Slab Vapor Mitigation System (VMS) Installation				
<i>ANSI/AARST Certified Radon Mitigator</i>				
Install 2 subslab floor penetrations, seal all visible floor penetrations, install 2 EC6 Radon and Vapor Intrusion Fans, perform initial communication test to verify vacuum	\$6,200.00	lump	1	\$6,200
Radon Electrical Work	\$2,500.00	lump	1	\$2,500
Task Subtotal:				\$8,700
Task 9: Remedial Action Options Report (DERF Ineligible)				
DNR Review Fee - Remedial Action Options Report	\$1,050	each	1	\$1,050
Task Subtotal:				\$1,050
Total Estimated Direct Expense Cost				\$9,750
TOTAL ESTIMATED COST				\$26,650

CHANGE ORDER 5: March 22, 2024
Tidy Cleaners and Laundry, Green Bay, WI
DERF Site, BRRIS #02-05-552220

ITEM DESCRIPTION	Original Appvd Cost	CO 2 email Approved 2017	CO 3 Approved 2019	CO 4 Approved 2021	CO 5 Request March 22, 2024	Total Cost	DERF Ineligible?
CONSULTING SERVICES							
Task 1: NR716 Work Plan	\$277.50	0	\$1,605.00	\$ -	\$ -	\$277.50	
Task 1A : Access Agreements Off-Site Locations						\$1,605.00	
Task 2: Field Investigation: Borings and Grab Water Samples, Vapor	\$840.00	0	\$0.00	\$ -	\$ -	\$840.00	
Task 3: Monitoring Well Installations	\$1,571.00	0	\$2,426.00	\$ -	\$ -	\$3,997.00	
Task 4: Groundwater Monitoring	\$3,984.00	750	\$2,302.00	\$ -	\$ -	\$7,036.00	
Task 5: Install / Sample Indoor Vapor Probes	\$395.00	0	\$665.00	\$ -	\$ -	\$1,060.00	
Task 4A and 5A Additional Field Investigation	\$0.00	0	\$0.00	\$ 4,768.00	\$ -	\$4,768.00	
Task 6: Data Evaluation and SI Report	\$3,530.00	650	\$3,200.00	\$ 5,260.00	\$ -	\$12,640.00	
Task 7: Project Management	\$570.00	0	\$1,300.00	\$ 1,960.00	\$ -	\$3,830.00	
Task 8: Sub-Slab Vapor Mitigation System (VMS) Installation	\$ -	\$ -	\$ -	\$ -	\$ 7,760.00	\$7,760.00	
Task 9: Remedial Action Options Report	\$ -	\$ -	\$ -	\$ -	\$ 6,700.00	\$6,700.00	DERF Ineligible (unless approved)
Task A: DERP Claim Preparation	\$ -	\$ -	\$ -	\$ -	\$ 2,440.00	\$2,440.00	DERF Ineligible
Consultant Total: Task 1-7	\$11,167.50	1400	\$11,498.00	\$11,988.00	\$ 16,900.00	\$52,953.50	
CONTRACTOR SERVICES							
Task 2: Field Investigation: Borings and Grab Water Samples							
Drilling	\$1,195.00	0	\$0.00	\$ -	\$ -	\$1,195.00	
Lab	\$462.00	0	\$0.00	\$ -	\$ -	\$462.00	
Task 3: Monitoring Well Installations							
Drilling	\$3,244.00	0	\$4,658.00	\$ -	\$ -	\$7,902.00	
Lab	\$416.00	0	\$468.00	\$ -	\$ -	\$884.00	
Drum Disposal	\$550.00	0	\$775.00	\$ -	\$ -	\$1,325.00	
Task 4: Groundwater Monitoring (4 Events at 4 Wells) Plus 2 Events at 3 wells							
Lab	\$1,308.00	200	\$900.00	\$ -	\$ -	\$2,408.00	
Task 5: Install / Sample Indoor Vapor Probes							
Lab	\$200.00		\$250.00				
Task 4A and 5A Additional Field Investigation	\$0.00	0	\$0.00	\$ 2,100.00	\$ -	\$2,100.00	
Task 8: Sub-Slab Vapor Mitigation System (VMS) Installation	\$ -	\$ -	\$ -	\$ -	\$ 8,700.00	\$8,700.00	
Task 9: Remedial Action Options Report WDNR Review Fee	\$ -	\$ -	\$ -	\$ -	\$ 1,050.00	\$1,050.00	DERF Ineligible
	\$7,375.00	\$200.00	\$7,051.00	\$2,100.00	\$9,750.00	\$26,026.00	
TOTAL SITE INVESTIGATION BUDGET							
Consulting	\$11,167.50	\$1,400.00	\$11,498.00	\$11,988.00	\$ 16,900.00	\$52,953.50	
Commodity	\$7,375.00	\$200.00	\$7,051.00	\$2,100.00	\$9,750.00	\$26,476.00	
TOTAL	\$18,542.50	\$1,600.00	\$18,549.00	\$14,088.00	\$26,650.00	\$79,429.50	

