

May 13, 2020

Mr. John Hnat  
Wisconsin Department of Natural Resources  
2300 North Dr. Martin Luther King Jr. Drive  
Milwaukee, WI 53212

RE: Change Order #5  
Master Drycleaning Inc.  
6326 West Bluemound Road  
Wauwatosa, WI  
BRRTS # 02-41-545142

Dear Mr. Hnat:

Three additional wells (MW-15, MW-16, and MW-17) were installed at the above-mentioned property in December 2018 to define the extent of soil and groundwater contamination. Based on the soil and groundwater results from these wells and results from previously installed wells, additional soil borings and soil borings will need to be installed to define the extent of contamination. This report summarizes the scope of work and DERF budget needed to take this project to case closure.

The following DERF-eligible tasks, actions, and costs are proposed. Details follow on a Task by Task basis.

- Task 0/Task 100: Project Management
- Task 105: Well Installation and Soil Sampling to Delineate Extent
- Task 6/106: Groundwater Monitoring
- Task 7/107: Groundwater Monitoring Status Reports
- Task 9/109: Well Abandonment

## DERF Scope of Work

### Task 0/Task 100: Project Management

Due to the increased scope, additional time is needed to continue correspondence, off-site property owner sharing of information, access to the City of Wauwatosa right-of-way for well installations and permits/permission, updates, bidding, and overall management of the project scope and budget.

### Task 105: Well Installation and Soil Sampling to Delineate Extent

Additional soil and groundwater investigation north of MW-16 and to the west of North 64<sup>th</sup> Street is proposed. Three, 2.5-inch outside diameter macrocore geoprobe borings will be advanced at locations approximately 100 feet north MW-16, approximately 60 feet west of SMW-10, and approximately 40 feet west of SMW-14. Existing monitoring well SMW-13 already defines the extent of impacts straight north of well SMW-11.

The three proposed wells (MW-18, MW-19, and MW-20) will be installed within the west side of N. 64<sup>th</sup> Street right-of-way in the grass buffer just west of 64<sup>th</sup> Street and permission will be obtained from the City of Wauwatosa. Proposed well MW-18 will be installed in the right-of-way adjacent to 519 N. 64<sup>th</sup> Street. Proposed well MW-19 will be installed in the right-of-way adjacent to 533 N. 64<sup>th</sup> Street. Proposed well MW-20 will be installed in the right-of-way adjacent to 559 N. 64<sup>th</sup> Street.

At each drilling location, a boring will be advanced to a depth of 20 feet, geologically logged, and a small diameter monitoring well will be installed with a 10-foot screened interval and filter pack sand/bentonite surface seal. The wells will be completed flush with the ground surface and protected using a 4-inch diameter traffic weight cover. Two soil samples per boring will be retained for laboratory analysis of Volatile Organic Compounds (VOCs) (six total).

The wells will be added to the monitoring well network for the site and will be surveyed and developed. On May 28, 2018, the Wisconsin Department of Natural Resources (WDNR) provided a variance from the NR141 well construction code that is necessary for use of small diameter wells MW-15, MW-16, and MW-17. Another variance from the NR141 well construction code is requested for the installation of monitoring wells MW-18, MW-19, and MW-20.

The three new monitoring wells (MW-18 to MW-20) are proposed to be installed during the previously approved EZVI and DHC bacteria geoprobe injection. The injection was approved as part of Change Order #4.

#### Task 106: Groundwater Monitoring

Following injection, two more rounds of groundwater sampling events are expected to be necessary, one a minimum of four months after the proposed injection, and the second approximately eight months after injection. These two rounds of groundwater sampling have already been approved in Change Order #4 and the costs of sampling the additional three proposed wells will be added to the approved costs. Sampling will be completed from all 22 existing and three proposed wells and will include testing for field parameters, water level elevations, and laboratory analysis of VOCs.

#### Task 107: Groundwater Monitoring Status Reports

Upon receipt of each round of the laboratory analyses, the data will be tabulated and plotted. After the additional soil borings and injection is complete, a summary report, including the results of the soil and groundwater chemistry testing from the new locations, will be sent to the WDNR.

As has been performed after each sample event, information will be sent to the private well owners that have monitoring wells on their property.

After each full round of groundwater sampling, the data will be processed, and a summary sent to the WDNR via email. Assuming the results appear suitable, a request for case closure will be recommended after the second round of sampling.

A majority of the reporting costs were approved in Change Order #4, and the costs of data entry, evaluation, and reporting for the additional three wells will be added to the approved costs.

Task 109: Well Abandonment

With the installation of additional monitoring wells, there will be more cost associated with well abandonment upon closure of the project.

**Schedule**

Assuming approval can be provided in May 2020, the project schedule is broken out as follows:

May 2020	Approval
June 2020	Injection and Additional Soil Borings/Well Installation
October 2020	Groundwater Sampling All Wells, 4 months after Injection
November 2020	Data Evaluation/Reporting
February 2021	Groundwater Sampling All Wells, 8 months after Injection
March 2021	Data Evaluation/Report/Closure Potential
May 2021	If approved by DNR, Closure Request Submittal
July 2021	DNR Closure Provided
August 2021	Well Abandonment, VPLE Insurance Requested
September 2021	WDNR Issues VPLE Certificate of Closure

I trust this information meets your needs and look forward to approval of the attached cost estimate and budget request.

Sincerely,



Matt Dahlem, P.G.  
Branch Manager

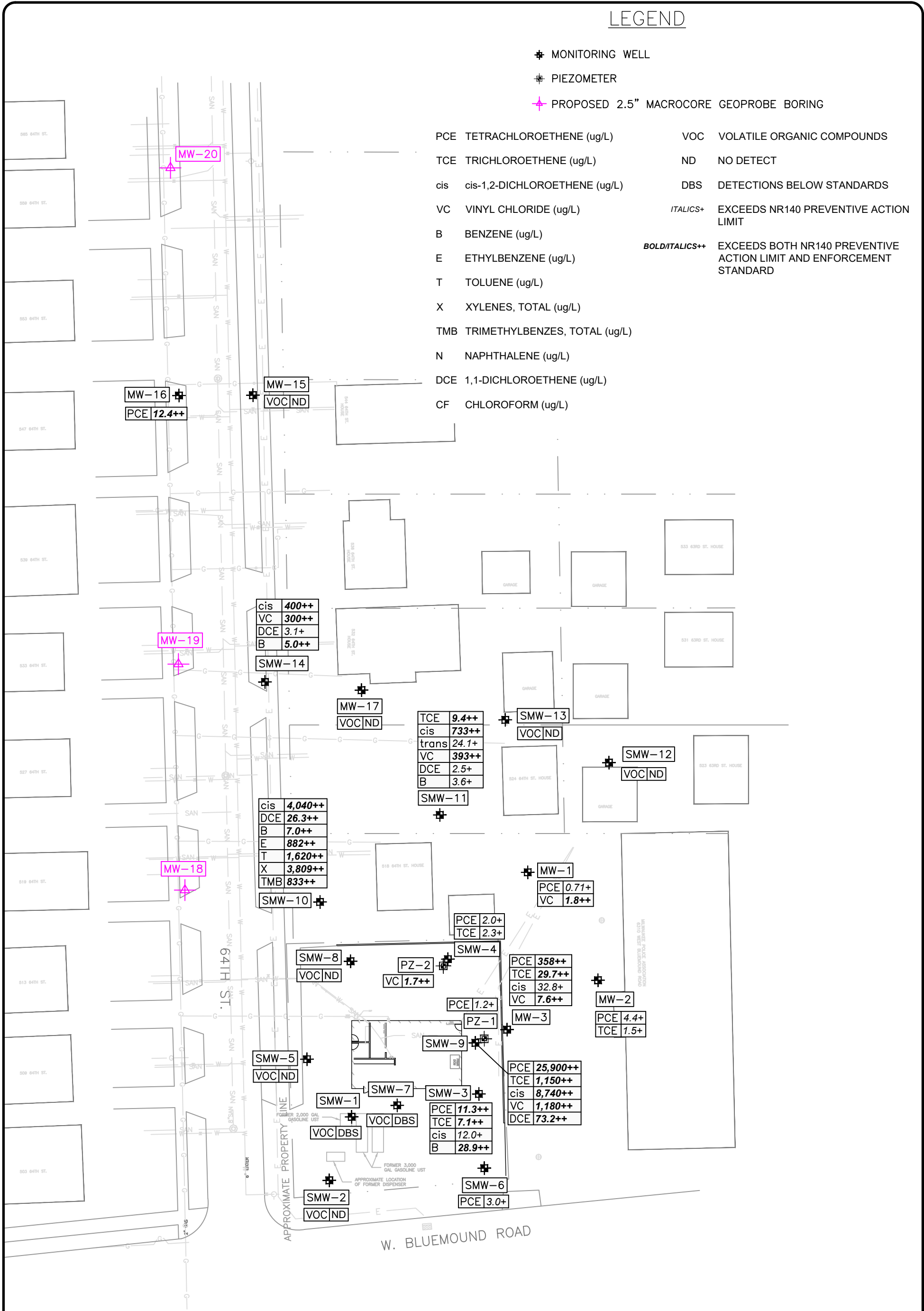
**Attachments:**

- Figure 1: Proposed Additional Monitoring Well Locations
- Table A: Additional Remedial Action Cost Estimate May 13, 2020
- DERF Change Order # 5 May 13, 2020
- DERF Linking Spreadsheet May 13, 2020

# LEGEND

- ✦ MONITORING WELL
- ⊕ PIEZOMETER
- ✦ PROPOSED 2.5" MACROCORE GEOPROBE BORING

PCE	TETRACHLOROETHENE (ug/L)	VOC	VOLATILE ORGANIC COMPOUNDS
TCE	TRICHLOROETHENE (ug/L)	ND	NO DETECT
cis	cis-1,2-DICHLOROETHENE (ug/L)	DBS	DETECTIONS BELOW STANDARDS
VC	VINYL CHLORIDE (ug/L)	<i>ITALICS+</i>	EXCEEDS NR140 PREVENTIVE ACTION LIMIT
B	BENZENE (ug/L)	<b><i>BOLD/ITALICS++</i></b>	EXCEEDS BOTH NR140 PREVENTIVE ACTION LIMIT AND ENFORCEMENT STANDARD
E	ETHYLBENZENE (ug/L)		
T	TOLUENE (ug/L)		
X	XYLENES, TOTAL (ug/L)		
TMB	TRIMETHYLBENZES, TOTAL (ug/L)		
N	NAPHTHALENE (ug/L)		
DCE	1,1-DICHLOROETHENE (ug/L)		
CF	CHLOROFORM (ug/L)		



**FEHR GRAHAM** ILLINOIS  
ENGINEERING & ENVIRONMENTAL IOWA  
WISCONSIN

MASTER DRYCLEANING INC.  
6326 W. BLUEMOUND RD.  
WAUWATOSA, WI 53213

DRWN:MKH DATE:01/17/14 APPD:KE

TITLE: PROPOSED BORINGS &  
8/13/19 GROUNDWATER  
CHEMISTRY

BRRTS: 02-41-545142  
JOB NO.: 15-1209  
PLOT DATE: 5/13/20

FIGURE:  
1

TABLE A: Remedial Action Plan Report Cost Estimate; DERF Eligible Items  
 Additional Soil Borings and Well Installation 5/13/2020  
 Master Drycleaner, 6326 W. Bluemound Road, Wauwatosa, WI

ITEM DESCRIPTION	Unit Price	Quantity	Units	Total Cost
<b>Consultant Services</b>				
<b>Task 0 / Task 100: Project Management</b>				
Sr. Hydrogeologist	\$100.00	10	hour	\$1,000.00
Administrative	\$60.00	4	hour	\$240.00
<b>Subtotal Task</b>				<b>\$1,240.00</b>
<b>Task 105: Well Installation and Soil Sampling to Delineate Extent</b>				
<i>Three Geoprobe Borings with 1-inch wells (MW-18 to MW-20), access in ROW, Drill, Develop, Survey</i>				
Sr. Hydrogeologist (access, utilities)	\$100.00	10	hour	\$1,000.00
Field Technician / Geologist (travel, drill)	\$70.00	8	hour	\$560.00
Field Technician / Geologist (travel, develop, survey)	\$70.00	8	hour	\$560.00
Drafting	\$60.00	4	hour	\$240.00
<b>Subtotal Task</b>				<b>\$2,360.00</b>
<b>Task 6 / Task 106: Groundwater Monitoring</b>				
<i>Additional budget for 3 additional wells for 2 rounds</i>				
Sr. Hydrogeologist	\$100.00	4	hour	\$400.00
Field Technician / Geologist (GW Samples)	\$60.00	6	hour	\$360.00
Drafting	\$60.00	2	hour	\$120.00
<b>Subtotal Task</b>				<b>\$880.00</b>
<b>Task 7 / Task 107: Groundwater Monitoring Status Reports</b>				
<i>Additional budget for off site wells comm., samples, data evaluation and reporting</i>				
Sr. Hydrogeologist (off site letters)	\$100.00	4	hour	\$400.00
Sr. Hydrogeologist (status reports)	\$100.00	16	hour	\$1,600.00
Field Technician / Geologist (Data Entry)	\$70.00	10	hour	\$700.00
Drafting	\$60.00	10	hour	\$600.00
<b>Subtotal Task</b>				<b>\$3,300.00</b>
<b>Task 9 / 109: Well Abandonment</b>				
<i>Additional time for additional wells since original bid</i>				
Sr. Hydrogeologist	\$100.00	1	hour	\$100.00
Field Technician / Geologist	\$70.00	5	hour	\$350.00
Supplies	\$25.00	1	each	\$25.00
<b>Subtotal Task</b>				<b>\$475.00</b>
<b>CONSULTING SERVICES TOTAL</b>				<b>\$8,255.00</b>
<b>Contractor Services</b>				
<b>Task 105: Well Installation and Soil Sampling to Delineate Extent</b>				
<i>Three Geoprobe Borings with 1-inch wells (MW-18 to MW-20), access in ROW, Drill, Develop, Survey</i>				
Geoprobe Contractor				
Mob	\$500.00	1	day	\$500.00
Drill / Sample	\$9.50	60	foot	\$570.00
Well Install	\$9.20	60	foot	\$552.00
Flush Mount Covers	\$135.00	3	each	\$405.00
Decon	\$75.00	1	day	\$75.00
Laboratory				
VOCs - Soil	\$52.00	6	each	\$312.00
<b>Subtotal Task</b>				<b>\$2,414.00</b>
<b>Task 6 / Task 106: Groundwater Monitoring</b>				
<i>Additional budget for 3 additional wells for 2 rounds</i>				
Laboratory				
VOCs - Groundwater	\$50.00	6	each	\$300.00
<b>Subtotal Task</b>				<b>\$300.00</b>
<b>CONTRACTOR SERVICES TOTAL</b>				<b>\$2,714.00</b>
<b>TOTAL ESTIMATED COST</b>				<b>\$10,969.00</b>
<p>Master Drycleaners Inc. approves of the site remediation costs described above and authorizes Fehr Graham to proceed with these activities. Fehr Graham shall not exceed any of these costs without receiving written authorization. The terms and conditions of the original contract for this project will apply to these services.</p>				
_____			_____	
Master Cleaners Inc.			Date	
<p>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.</p>				
_____			_____	
Mr. J. Hnat, WDNR Project Manager			Date	
_____			_____	
Mr. Matt Dahlem, Fehr Graham			Date	

**CHANGE ORDER # 5: May 13, 2020**  
 Master Cleaners, Wauwatosa, WI BRRTS # 02-41-545142

DESCRIPTION	Unit Price	Quant.	Units	Total ADDL Cost	Prior Apprvd Cost	TOTAL COST
<b>CONSULTANT SERVICES</b>						
Task O / 100: Project Management	See Table A			1240	15740	16980
Task A : Remove DCM					0	0
Task B: Geoprobe Borings Inside Bldg					1685	1685
Task C: Subslab Vapor Sample / Analysis					1765	1765
Task C1: Subslab Vapor Sample / Analysis Neighbor to East, 2nd North					2305	2305
Task C2 : Subslab Vapor System Neighbor to North					1340	1340
Task C3 Subslab Vapor System Second Neighbor to North (if needed)					1340	1340
Task D Floor Drain Removal, Chem Treat Sub Building					2390	2390
Task E Vapor Mit System Instln with three comm tests and two chem tests					4750	4750
Task E1: Vapor Occupancy Request (not DERF Eligible)					1600	1600
Task 1 RA Report, WPDES Permit, Notifications, Access					5280	5280
Task 2 Pre-Inj. Baseline GW Sampling (18 wells) Indoor Util Locate					3087	3087
Task 3 Injection					10760	10760
Task 103 Addition of EZVI and DHC Bacteria with RA Doc Report					13025	13025
Task 4 Post Inj GW Monitor 4 months					3431	3431
Task 5 Inj Doc Report					2880	2880
Task 105 Well Installation and GW Sampling to Delineate Extent	See Table A			2360	4540	6900
Task 6 / 106 GW Monitoring	See Table A			880	14338	15218
Task 7 / 107 GW Monitor Status	See Table A			3300	13740	17040
Task 8 / 108 Closure Request					11520	11520
Task 9/109 Well Abandonment	See Table A			475	3160	3635
						0
Task F Addl Assessment Utility Corridors					2270	2270
Task G Landfill Disposal Approval					2020	2020
Task H Soil Excvn and Disposal					5800	5800
Task I Contingency Chemical Addn under Building Post Excvn					3550	3550
Task J Documentation Report					4980	4980
<b>Total Consultant</b>				<b>8255</b>	<b>137296</b>	<b>145551</b>
<b>CONTRACTOR SERVICES</b>						
Task A Remove DCM					0	0
Task B Geoprobe Borings inside Bldg					1853	1853
Task C Subslab Vapor Sample / Analysis					576	576
Task C1: Subslab Vapor Sample / Analysis Neighbor to East					1152	1152
Task C2 : Subslab Vapor System Neighbor to North					2750	2750
Task C3 Subslab Vapor System Second Neighbor to North (if needed)					2750	2750
Task D Floor Drain Removal, Chem Treat Sub-Building					8473.5	8473.5
Task E Vapor Mit System Instln with three comm tests and two chem tests					3726	3726
Task 2 Pre-Inj Baseline GW Sample (18 wells) Indoor Util locate					1300	1300
Task 3 Injection Outside					14723.5	14723.5
Task 103 Addition of EZVI/ DHC Bacteria					32587	32587
Task 4 Post Inj Monitor 4 months Lab GW					900	900
Task 105 Well Installation and GW Sampling to Delineate Extent	See Table A			2414	3812	3812
Task 6 GW Monitoring	See Table A			300	6700	6700
Task F Addl Assessment Utility Corridors					3903	3903
Task H Soil Excvn and Disposal					31195	31195
Task I Contingency Chemical Addn under Building Post Excvn					6375	6375
<b>Total Contractor</b>				<b>2714</b>	<b>122776</b>	<b>125490</b>
<b>TOTALS</b>				<b>10969</b>	<b>260072</b>	<b>271041</b>

Master Drycleaners Inc. approves of the site remediation costs described above and authorizes Fehr Graham to proceed with these activities. Fehr Graham shall not exceed any of these costs without receiving written authorization. The terms and conditions of the original contract for this project will apply to these services.

\_\_\_\_\_  
 Master Drycleaners Inc. 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.

\_\_\_\_\_  
 Mr. J. Hnat, WDNR Project Manager Date

\_\_\_\_\_  
 Mr. Matt Dahlem, Fehr Graham 13-May-20

