

Hnat, John J - DNR

From: Ken Ebbott <kebbott@fehr-graham.com>
Sent: Tuesday, September 27, 2016 10:59 AM
To: Hnat, John J - DNR
Subject: FW: Master Cleaners Scope Modifications and Cost Changes Letter
Attachments: CO 3 signed by client.pdf; Modifications Sept 26 to July 2016 Scope.pdf

John,

Attached is a response to your letter - a couple quick notes. I'm gonna be on vacation Thursday till Oct 10, and want this to be moving forward while I'm gone, so I'll give you a call after you have a chance to review this, maybe later today.

- 1) Police Assn building- is it OK to do subslab vapor of the building instead of soil gas? It's easier, and directly assesses what the concern is. The building does not have a basement- is slab on grade. I was thinking two subslab points on the drycleaner side of the structure- locations to be determined based on office configurations. 30 minute summa canister grabs. ~~you find?~~ **OK**
- 2) The WDNR form is attached in the letter. The \$700 fee for the haz waste determination criteria is coming - I'm waiting on a check. You can hold off on issuing the review of the haz waste situation until the check arrives, but can we get the OK on the scope of work and cost estimate- / Change Order # 3 - so we can start the rest of this work?
- 3) Vapor mitigation system - testing looks OK. I have modified costs to address those requirements. Keep your fingers crossed the inside of the building doesn't have chemical issues after the work is all done, not sure what the plan would be then.
- 4) Excavation limits and sampling - the limits were shown on **Figure 6** of the last report, and there are physical limitations indoors - based on the excavator - estimated at 6 to 8 feet. We'll also know more based on the 16 soil samples obtained from the proposed 6 more soil borings.

Dig threshold value issue - not really how this is designed - more of a mass removal effort than a dig to the threshold value effort. Also, there are budget restraints. Again, we'll know more once we get the 16 soil samples from the 6 additional borings.

Unless obvious point of strong odors at wall along excavation, will not extend the excavation laterally along the walls to chase contamination. Don't expect to see that either, given the expected source from leaky sewer lines at depth of 4 to 5 feet.

- 5) Confirmation samples- in addition to what is remaining from the 16 samples from 6 borings, we also planned for 9 grabs from the excavation walls / floor as needed. I've bumped that up to 12 - to include 3 more inside ones around the hot soil dig, despite the small area, I've included more from those walls.

Can you approve the cost on Change Order 3 so we can line up the initial tasks - video, drilling, Police Building subslab vapor testing...and then when the check for the haz waste determination arrives, that can be a separate approval?

Thanks,

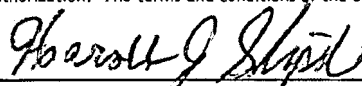
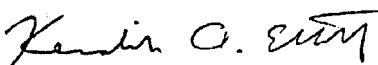
Ken

KENDRICK EBBOTT | P.G. Branch Manager
Fehr Graham - Engineering & Environmental

1237 Pilgrim Road
Plymouth, WI 53073
P: 920.892.2444
C: 920-980-4231
F: 920.892.2620
www.fehr-graham.com

KENDRICK EBBOTT | P.G. Branch Manager
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1237 Pilgrim Road
Plymouth, WI 53073
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C: 920-980-4231
F: 920.892.2620
www.fehr-graham.com

TABLE 1A: Revised Supplemental Source Removal Remedial Action Cost Estimate					
September 27, 2016					
Master Drycleaner, 6326 W. Bluemound Road, Wauwatosa, WI					
ITEM DESCRIPTION	Unit Price	Quantity	Units	Total Cost	
<i>Included in Task 3 Costs and Prior Approved Budget for System Install</i>					
Task 6 Addl GW Monitoring 6 Events W Email Report					
<i>Addl 16 Wells and Addl Time for Off-Site Info to Owners</i>					
Laboratory	\$50.00	16	each	\$800.00	\$800.00
Subtotal Task				\$800.00	\$800.00
CONTRACTOR SERVICES TOTAL				\$43,424.80	\$43,424.80
TOTAL ESTIMATED COST				\$73,989.80	\$73,989.80
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.					
			<u>9/27/16</u>		
Master Cleaners 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		
			<u>27-Sep-16</u>		
Mr. Kendrick A. Ebbott, Fehr Graham			Date		

September 27, 2016

Mr. John Hnat
WDNR
2300 N Dr. Martin Luther King Jr Dr.
Milwaukee, WI 53212

RE: Scope Modifications to July 16, 2016 Additional investigation and Remedial Action Proposal, Master Dry Cleaners DERF Site, 6326 W. Bluemound Road, Wauwatosa, WI, BRRTS # 02-41-545142

Dear Mr. Hnat:

Thank you for the reply dated September 21, 2016 to the July 16, 2016 Proposed Additional Investigation Activities Report for the Master Cleaner Site.

This letter includes the following:

- Responses to clarify the scope of work, as requested in the WDNR letter
- Optional WDNR Form 4430-019, Hazardous Waste Site Determination and \$700 check
- Change Order for Completion of the Proposed Work, per DERF requirements

WDNR Questions / Clarifications and Responses

- 1) The WDNR requested a soil gas evaluation be conducted to evaluate potential vapor impacts to the adjacent Milwaukee Police Association building at 6310 W. Bluemound Road.

Although Fehr Graham presented arguments that demonstrate impacts are not expected at the building Milwaukee Police Association building, Fehr Graham will install two subslab vapor probes through the floor of the building. The building has no basement, and is a slab on grade structure. The subslab sample locations will be advanced on the west (drycleaner) side of the building at two locations, one approximately due east of monitoring well MW-3, and the other approximately 50 feet north, approximately half way from the first sample location and the north building wall. Exact sample locations may vary based on building interior layout, with efforts taken to minimize damage to interior floor coverings.

The samples will consist of Cox-Colvin stainless steel subslab vapor probes installed through the concrete floor of the building. Testing to demonstrate sample integrity will be performed prior to sampling. One six-liter Summa canister sample will be obtained from each sample location (two total), using a 30-minute sample regulator, and laboratory analysis performed for the short list of chlorinated VOCs.

Upon sampling, the vapor probe will be removed and the hole patched. The results will be tabulated and compared to indoor air standards. A brief letter will be prepared that presents the results to the property owner and the WDNR. If impacts are present, further activities will be discussed.

2) Hazardous Waste Determination

Attached is the WDNR Form 4430-019 and a \$700 Technical Review fee. Approval of the waste determination is requested.

In summary, the criteria for soil as they relate to this soil disposal situation are:

*Soil type
 Sample for TCLP TO
 Confine.*

Compound	Direct Contact Industrial (protect landfill worker) (mg/kg)	Land Disposal Restriction (LDR) (mg/kg)	20X TCLP Limit (mg/kg) - TCLP testing not needed if below this value	TCLP Concentration in leachate from soil (mg/l)
Tetrachloroethene (PCE)	153	60	14	0.7
Trichloroethene (TCE)	8.81	60	10	0.5
Vinyl Chloride	2.03	60	4	0.2

It is anticipated total VOC testing will be performed as part of the assessment of the sewer laterals inside and outside the building. Soil samples have been proposed from 16 locations along the pathway of the proposed indoor and outdoor sewer lateral excavations. Six soil borings are proposed, with testing from the samples retained beneath the sewer laterals used to help define the handling of the soil for disposal. Representative soil samples will be retained from various depths, as previously noted for assessment of total VOCs. Up to two TCLP analyses will be performed upon receipt of the initial VOC results, if necessary for landfill disposal assessment purposes.

The decision-making process will be as follows:

- a) Soil containing more than 60 mg/kg of any of the three compounds will be considered hazardous waste upon excavation.
- b) Soil containing more than the direct contact industrial exposure values will be considered hazardous waste upon excavation.
- c) Soil containing less than the industrial values for TCE (8.81 mg/kg) and VC (2.03 mg/kg) will be considered solid waste, and soil with less than 14 mg/kg PCE and will be acceptable for landfill disposal as solid waste. This is because the concentrations are below 20 times the TCLP values as shown above, and TCLP leach testing will not be necessary for those soils.
- d) Soil containing concentrations of PCE between 14 and 60 mg/kg, will be tested for TCLP analysis to evaluate if the PCE in the sample will leach. TCLP analysis will

*if VC+TCE exceeds
TCLP x 20
screening value
VC + TCE?*

only be performed for PCE, no other compounds will be evaluated. If the TCLP value is below 0.7 mg/l, the soil can be discarded as solid waste at a licensed subtitle D landfill.

Based on existing results, soil from the four-foot square excavation at the former sump will be considered hazardous waste, with no further testing planned.

3) Master Cleaners Building Proposed Vapor Mitigation System Performance Testing

The specified vapor system communication testing will be completed once the system is installed and the floor repaired. As noted, the pressure test measurements will be performed over the entire area of the approximately 30 by 50-foot building. Testing will be performed on three monitoring events, with at least one in summer and one in winter, with successful communication requiring observation of a pressure differential of -0.004 inches water column or greater.

-OK

In addition, the requested indoor air chemical testing will be performed on two occasions, once after system installation, and once six months after occupancy, for a total of two samples. Testing will include deployment of a 6-liter summa canister at the breathing height of building occupants, using a 24-hour integrated sampler, and laboratory analysis of PCE, TCE, and VC.

→ Home to the North = chel system monitor air + possible subslab

4) Clarification of Utility Corridor Excavation Limits and Sampling

If necessary, excavation and proper disposal of soil from beneath the building and around the sewer / water lateral has been proposed. The proposed extent of the excavation has been previously identified on Figure 6 of the July submittal, and includes a four-foot square by eight-foot deep hazardous waste excavation area around the former sump, an indoor 40-foot long by two-foot wide by six-foot deep indoor sewer excavation, and a 40-foot long by four-foot wide by eight-foot deep outside sewer excavation.

At all excavation areas, the intention is to remove as much contaminant mass as economically and physically possible. We have chosen an approach that has identified one area of highly contaminated soil, and the six soil borings with 16 laboratory samples have been proposed to evaluate if soil at and beneath the sewer laterals may contain other accessible and relatively elevated contaminants that could be removed. There is no plan to establish a threshold value for this soil remediation, and track in real time the excavation perimeter to verify removal of soil to that concentration. Instead, we plan to remove areas with elevated levels of contaminant mass, and document what was not able to be removed.

↙

If the soil boring results indicate hazardous waste levels of contamination are more widespread than anticipated, and are present beneath the sewer laterals, the excavation plan will have to be reconsidered due to cost issues.

As for documentation of final limit soil chemistry, we anticipate some of the 16 soil boring samples that will be obtained from this relatively small area may be useful as wall and floor samples to define the remaining in place soil chemistry. Prior to excavation, we will not be drilling through the sewer lines for fear of striking the utilities (sewer and water

lateral), so with a four-foot and two-foot wide excavation, and with soil borings needing to stay off the lines by a Diggers Hotline required 18 inches, the soil boring data will provide some approximate wall and floor limit remaining in place soil chemistry results.

→ In addition, we proposed obtaining nine additional final limit soil samples during the excavation, with locations to be determined based on observations. We anticipate those samples will be at the approximate depth of the sewer laterals or below, and spaced roughly 20 to 25 feet apart, on both sides of the excavation walls. Actual locations will depend on the location of the soil borings / remaining soil chemistry samples, and observations during excavation. Efforts will be made to sample at intervals that may be more likely to allow horizontal migration, if variations in the encountered soils are observed during the trench excavation activities.

Of the nine previously proposed final limit excavation limit soil samples, only one post-excavation sample was anticipated from the hazardous waste four-foot by four-foot square indoor excavation base at eight feet. To address this concern, three additional samples will be obtained from this area, from the north, west, and south walls, at a depth of approximately seven feet below grade. Information already exists from the east wall, at investigation boring HA-2. No figure is provided to show these sample locations, as the spacing would be too close to be represented on current drawing scales.

Cost Estimate

The estimated cost for the proposed work has been adjusted to reflect the additional scope of work, and is provided on Table 1A, and totals \$73,990.

Please review the costs, and provide approval of the attached Change Order # 3.

As required by the DERF program bidding requirements, we certify that we will complete services in compliance with ch NR 169, NR 140, and the NR 700 to NR 754 rule series. We will make available to the WDNR for inspection and copying, upon request, all documents and records related to the contract services. We have not prepared this bid in collusion with any other consultant submitting a bid on this site. We will perform all services in an ethical, professional and timely manner. Insurance information for Fehr Graham has previously been provided. We have and will maintain the necessary insurance and deductible coverages specified by NR169.

Schedule

The anticipated project schedule for the proposed supplemental source removal work is laid out below, with the work to commence shortly after WDNR approval of the Change Order and scope.

In conjunction with this work, we will also obtain the next round of groundwater samples from 14 of the site monitoring wells in October 2016, with further groundwater sampling to follow in January, April, July, October 2017, and January 2018.

Activity	Duration
Sewer Video and Evaluation	1 day
Geoprobe Borings	1 day
Subslab Vapor Sampling to East	1 day
Soil and Vapor Lab Analysis	2 weeks
Landfill Approval	2 weeks
Excvn Inside w/ Chemical Addn	1 week
Excavation Outside	1 week
Vapor Mitigation System Install	1 day
Vapor Communication Testing	1 day
Data Evaluation and Interpretation	On-Going
Documentation Report	4 weeks
Total	12 to 14 weeks

I trust this information meets your needs. If you have any questions, please give me a call.



Kendrick A. Ebbott, P.G.
Branch Manager

Attachments:

WDNR Form 4430-019 Remediation Site Hazardous Waste Determination
Table 1A: Cost Estimate
Change Order 3
Check for \$700 WDNR Review Fee

CC: Mr. Harold Shipshock, Master Cleaners, c/o Mr. Tom Shipshock, via email
Mr. Don Gallo, Husch Blackwell, LLP, via email only

Remediation Site Hazardous Waste Determination

Notice: This voluntary form is intended as an aid for use by Generators and Responsible Parties in determining whether *contaminated soil or groundwater and wastes* encountered or generated during the remediation of contaminated sites in Wisconsin are or would be listed or characteristic hazardous wastes subject to regulation under ch. 291, Wis. Stats. and chs. NR 600 to 690, Wis. Adm. Code. There are no penalties for failure to provide information requested. Personally identifiable information collected will be used for program management. Wisconsin's Open Records law requires the Department to provide this information upon request [ss. 19.31 - 19.69, Wis. Stats.].

Listing determinations are often particularly difficult in the remedial context because the listings are generally identified by the sources of the hazardous wastes rather than the concentrations of various hazardous constituents. Therefore, analytical testing alone, without information on a waste's source, will not generally produce information that will conclusively indicate whether a given waste is a listed hazardous waste. Generators and Responsible Parties should use available site information such as material safety data sheets (MSDS's), manifests, vouchers, bills of lading, sales and inventory records, accident reports, spill reports, inspection reports, and other available information. It may also be necessary to conduct interviews of current or former personnel who would have knowledge of the processes and hazardous materials used including waste handling or past spills in an effort to ascertain the sources of wastes or contaminants.

Where a person makes a good faith effort to determine if a material is a listed hazardous waste but cannot make such a determination because documentation regarding a source of contamination, contaminant, or waste is unavailable or inconclusive, EPA has stated that one may assume the source, contaminant or waste is not listed hazardous waste and, therefore, provided the material in question does not exhibit a characteristic of hazardous waste, RCRA requirements do not apply.

Generator Information

Generator's Name Master Dry Cleaners Inc.	Preparer's Name Kendrick Ebbott, Fehr Graham, Inc.
Address 6326 W. Bluemound Road	Address 1237 Pilgrim Road
City, State and ZIP Code Wauwatosa, WI 53213	City, State and ZIP Code Plymouth, WI 53073
Telephone Number Care of Tom Shipshock, 414 313-9168	Telephone Number 920 892-2444

Site Information

Site Name Master Dry Cleaners Inc.	Other name(s) site is known by N / A
Address 6326 W. Bluemound Road	County Milwaukee
Located in the City, Town or Village ZIP Code City of Wauwatosa, 53213	

Hazardous Waste Determination Information Reviewed

Listed Hazardous Waste Determination

Manifests reviewed <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Found <input checked="" type="checkbox"/> None Available	Vouchers reviewed <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Found <input checked="" type="checkbox"/> None Available
Bills of lading reviewed <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Found <input checked="" type="checkbox"/> None Available	Sales and inventory records reviewed <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Found <input checked="" type="checkbox"/> None Available
Material safety data sheets <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Found <input checked="" type="checkbox"/> None Available	Accident reports reviewed <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Found <input checked="" type="checkbox"/> None Available
Spill reports reviewed <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Found <input checked="" type="checkbox"/> None Available	Inspection reports reviewed <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Found <input checked="" type="checkbox"/> None Available
DNR's case files reviewed <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Found <input type="checkbox"/> None Available	Interviewed current and/or former employees who are likely to know about the use and/or disposal of the chemical or waste of concern (not just managers). <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Found <input type="checkbox"/> None Available

**Remediation Site
Hazardous Waste Determination**

Form 4430-019 (R 4/03)

Page 2 of 2

Hazardous Waste Determination Information Reviewed (continued)

Other information considered (provide description)

Yes No None Found None Available

Drycleaner operated from 1970's until ceased operations in 2015. Soil and groundwater detected with elevated levels of tetrachloroethene (PCE) related to incidental historic releases of drycleaning chemicals. Contained out rule will be used to help define the hazardous waste handling requirements.

Proposed handling criteria for evaluation of whether soil is hazardous or not hazardous:

Soil with PCE above 60 mg/kg (Land Ban Limit) will be hazardous waste. Soil with PCE below 14 mg/kg (20X the TCLP leach value of 0.7 mg/l) will be considered solid waste, suitable for disposal at a subtitle D landfill in Wisconsin. Soil with PCE levels between 14 mg/kg and 60 mg/kg will be tested using TCLP to evaluate if pass the 0.7 mg/l threshold value. If soil exceeds 0.7 mg/l, it will be classified as hazardous waste upon excavation.

Soil with trichloroethene (TCE) above 8.81 mg/kg (industrial direct contact value) will be classified as hazardous waste, and soil below will be considered solid waste, eligible for landfill disposal in WI. Levels of Land Ban (60 mg/kg) and 20X TCLP (10 mg/kg) are higher, so those thresholds don't apply for evaluation of TCE.

Soil with vinyl chloride (VC) above 2.03 mg/kg (industrial direct contact value) will be classified as hazardous waste, and soil below will be considered solid waste, eligible for landfill disposal in WI. Levels of Land Ban (60 mg/kg) and 20X TCLP (4.0 mg/kg) are higher, so those thresholds don't apply for evaluation for VC.

Characteristic Hazardous Waste Determination

Identified location(s)	Testing results
Soil beneath former sump, 5.5 feet below grade Plan to excavate to 8 feet and discard soil as hazardous waste from this area Soil from sewer line areas to be investigated further, and soil handled per criteria above.	PCE 3,160 mg/kg and 10,800 mg/kg, two samples, no detections TCE and VC

Certification

I certify that the information documented above in the "Information reviewed to make a hazardous waste determination" section was developed and used as part of a good faith effort to make a hazardous waste determination. Reasonable diligence was used in collecting the information, evaluating the information, and using the compiled information. I certify that this document is true and correct to the best of my knowledge, and that I have authority to make this certification.

Name and Title

Kendrick Ebbott, Project Manager

Signature

Kendrick Ebbott

Date

Sept 27, 2016

TABLE 1A: Revised Supplemental Source Removal Remedial Action Cost Estimate
 September 27, 2016
 Master Drycleaner, 6326 W. Bluemound Road, Wauwatosa, WI

ITEM DESCRIPTION	Unit Price	Quantity	Units	Total Cost
CONTRACTOR				
Task C1: Subslab Vapor Chemistry Sampling and Analysis Neighbor to East				
Laboratory				
VOCs Vapor	\$288.00	2	each	\$576.00
Subtotal Task				\$576.00
Task E: Building Restoration with Subslab Vapor Mitigation System Installation				
Laboratory				
VOCs Vapor	\$288.00	2	each	\$576.00
Subtotal Task				\$576.00
Task F: Addl Assessment Utility Corridors				
<i>Video Sewer, Six Geoprobos w 12 soil samples</i>				
Video Sewer Line	750	1	lump	750
Private Utility Locate	350	1	lump	350
Geoprobe Mobilize	500	1	lump	500
Drill / Sample Interior	9.5	20	foot	190
Drill / Sample Exterior	7.5	40	foot	300
Abandon	1.2	60	foot	72
Decon	75	1	hour	75
Conc Penetrations	50	2	each	100
Laboratory				
Soil VOCs	52	16	each	832
TCLP VOC	117	2	each	234
Landfill Criteria Testing	500	1	each	500
TASK SUBTOTAL				3903
Task H: Soil Excavation and Disposal				
Environmental Contractor				
Mobilization indoor	1600	1	lump	\$1,600.00
Concrete Saw / Break Inside	4.2	102	feet	\$428.40
Concrete Disposal Inside	3.5	136	sf	\$476.00
Concrete Load / Haul	500	1	lump	\$500.00
Mini Excvator w/ Operator	135	32	hour	\$4,320.00
Crew / Equipment Per Day Charge	636	3	day	\$1,908.00
Non-Haz Soil Load, Haul out of bldg	35	30	ton	\$1,050.00
Haz Soil Load and Haul out of Bldg,	100	5	drum	\$500.00
Drums	60	5	each	\$300.00
Haz Soil Disposal	450	5	drum	\$2,250.00
Non-Haz Soil Displ Indoor Tip Fee	34	30	ton	\$1,020.00
Non-Haz Soil Displ Haul	16	30	ton	\$480.00
Indoor Lateral Replacement	14.8	20	foot	\$296.00
Vapor Pipe and Install	10	30	foot	\$300.00
Stego Wrap Barrier	627	1	lump	\$627.00
Pea Gravel Backfill	31	30	ton	\$930.00
Concrete Resurfacing	6.5	136	SF	\$884.00
Shipping	275	1	Ground	\$275.00
Outdoor Excavation				
City Permit / Water Shur off	150	1	lump	\$150.00
Mobilization Outdoor	1550	1	lump	\$1,550.00
Asphalt Saw	4.2	86	ft	\$361.20
Asphalt Remove	2.5	160	SF	\$400.00
Asphalt Load / Haul / Dispose - lump	500	1	lump	\$500.00
Non-Haz Soil Load and Haul	16	40	ton	\$640.00
Outdoor Lateral Replacement	14.8	40	foot	\$592.00
Outdoor Water Replacement	10.33	40	foot	\$413.20
Excavation and Operator	135	16	hour	\$2,160.00
Trench Box Install and Use	1500	1	lump	\$1,500.00
Resurface Asphalt	11	200	SF	\$2,200.00
Pea Gravel Backfill	15	40	ton	\$600.00
Landfill Tip Fee Outsdie	34	40		\$1,360.00
Laboratory Analyses				
Soil VOC	52	12	each	\$624.00
Subtotal Task				\$31,194.80
Task I: Contingency Addition of Chemicals				
One Day Mix and Deliver				
Contractor				
Mix Equipment Mob	\$900.00	1	lump	\$900.00
Decon Equipment	\$150.00	1	lump	\$150.00
2 man Crew 1 day	\$1,000.00	1	day	\$1,000.00
Water Truck with Water	\$0.50	200	gallon	\$100.00
PPE	\$100.00	2	man day	\$200.00
Chemicals				
Delivery	\$500.00	1	lump	\$500.00
Nano EZVI	\$23.50	150	gallon	\$3,525.00
Subtotal Task				\$6,375.00

Task 5: Building Restoration with Subslab Vapor Mitigation System Installation

OK
 plus use form
 No cost

OK

Pre

- No

- No

POST

Chemical?
 Addition?

What is
 Nano EZVI?

- No

- No

TABLE 1A: Revised Supplemental Source Removal Remedial Action Cost Estimate
 September 27, 2016
 Master Drycleaner, 6326 W. Bluemound Road, Wauwatosa, WI

ITEM DESCRIPTION	Unit Price	Quantity	Units	Total Cost
CONSULTING SERVICES				
Task 0: Project Management (addl actions)				
Sr. Hydrogeologist or Engineer	\$100.00	36	hour	\$3,600.00
Administrative	\$60.00	10	hour	\$600.00
Subtotal Task				\$4,200.00
Task C1: Subslab Vapor Chemistry Sampling and Analysis Neighbor to East				
Sr. Hydrogeologist (PM and letter rpt)	\$100.00	6	hour	\$600.00
Field Technician / Geologist	\$70.00	7	hour	\$490.00
Field Technician / Geologist (rpt)	\$70.00	4	hour	\$280.00
Drafting	\$60.00	2	hour	\$120.00
PID	\$100.00	1	day	\$100.00
Vapor Pins	\$50.00	2	day	\$100.00
Field Supplies	\$25.00	1	lump	\$25.00
Hammer Drill	\$100.00	0.5	day	\$50.00
Subtotal Task				\$1,765.00
Task E: Building Restoration with Subslab Vapor Mitigation System Installation				
<i>Communication Testing - three events - one winter, one summer, one other</i>				
Sr. Hydrogeologist	\$100.00	4	hour	\$400.00
Field Technician 3 days	\$70.00	12	hour	\$840.00
Technician - table, report	\$70.00	3	hour	\$210.00
Induced Vacuum Meter Rental	\$50.00	3	day	\$150.00
<i>Chemical Testing - two Events- one pre-occupancy, one post-occupancy</i>				
Sr. Hydrogeologist	\$100.00	4	hour	\$400.00
Field Technician 4 visits - deploy, pickup	\$70.00	6	hour	\$420.00
Field Technician - report	\$70.00	2	hour	\$140.00
PID	\$100.00	2	day	\$200.00
Subtotal Task				\$2,760.00
Task F: Addl Assessment Utility Corridors				
<i>Video Sewer, Six Geoproses w 12 soil samples</i>				
Sr. Hydrogeologist or Engineer	\$100.00	6	hour	\$600.00
Field Technician Drill, Soil Sample	\$70.00	12	hour	\$840.00
Field Technician Prep, Logs, COC, Ship	\$70.00	4	hour	\$280.00
Drafting	\$60.00	3	hour	\$180.00
Field Supplies	\$50.00	1	day	\$50.00
Subtotal Task				\$1,950.00
Task G: Landfill Disposal Approval				
Sr. Hydrogeologist or Engineer	\$100.00	10	hour	\$1,000.00
Field Technician	\$70.00	12	hour	\$840.00
Subtotal Task				\$1,840.00
Task H: Soil Excavation and Disposal				
<i>Indoor 3 days, Outdoor 2 days</i>				
Sr. Hydrogeologist	\$100.00	10	hour	\$1,000.00
Field Technician 5 days	\$70.00	50	hour	\$3,500.00
Field Technician (Prep, notes, COC)	\$70.00	10	hour	\$700.00
PID Meter	\$100.00	5	day	\$500.00
Field Supplies	\$50.00	2	day	\$100.00
Subtotal Task				\$5,800.00
Task I: Contingency Addition Chemicals in Excvn Base				
<i>Oversight of Mixing, Monitor Well Headspace, Permit Amendment</i>				
Sr. Hydrogeologist (Permit, Correspondence)	\$100.00	10	hour	\$1,000.00
Sr. Hydrogeologist (Field PM)	\$100.00	6	hour	\$600.00
Field Technician Mix Assist, Monitoring	\$70.00	10	hour	\$700.00
Field Technician Data Eval / process	\$70.00	10	hour	\$700.00
Four Gas Meter	\$150.00	2	day	\$300.00
PID Meter	\$100.00	2	day	\$200.00
Field Supplies	\$50.00	1	day	\$50.00
Subtotal Task				\$3,550.00
Task J: Documentation Report				
Sr. Hydrogeologist or Engineer	\$100.00	24	hour	\$2,400.00
Field Technician Data Entry, Tables	\$70.00	12	hour	\$840.00
Drafting	\$60.00	16	hour	\$960.00
Project Assistant	\$60.00	5	hour	\$300.00
Subtotal Task				\$4,500.00
Task 6 GW Monitoring 6 Events W Email Report				
<i>Add 16 Wells and Addl Time for Off-Site Info to Owners</i>				
Sr. Hydrogeologist - letters to off site	\$100.00	12	hour	\$1,200.00
Field Technician Sample Addl Wells	\$70.00	16	hour	\$1,120.00
Technician Addl Data Process	\$70.00	12	hour	\$840.00
Drafting	\$60.00	12	hour	\$720.00
Field Supplies	\$20.00	16	well	\$320.00
Subtotal Task				\$4,200.00
CONSULTING SERVICES TOTAL				\$30,565.00

~~OK~~

OK -

OK -

OK

~~Access as needed~~
 - later approval
 - later approval
 after SI

- NO

- NO

- NO

- NO

- NO

- wait
 until SI +
 removal

REMEDIAL ACTION CHANGE ORDER # 3: Sept 27, 2016
 Master Cleaners, Wauwatosa, WI BRRTS # 02-41-545142

DESCRIPTION	Unit Price	Quantity	Units	Total ADDL Cost	Prior Apprvd Cost	TOTAL COST
CONSULTANT SERVICES						
Task O: Project Management	See Table 1A			4200	4420	8620
Task A : Remove DCM				0	0	0
Task B: Geoprobe Borings Inside Bldg				0	1685	1685
Task C: Subslab Vapor Sample / Analysis				0	1765	1765
Task C1: Subslab Vapor Sample / Analysis Neighbor to East	See Table 1A			1765	0	1765
Task D Floor Drain Removal, Chem Treat Sub Building				0	2390	2390
Task E Vapor Mit System Instln with three comm tests and two chem tests	See Table 1A			2760	1460	4220
Task 1 RA Report, WPDES Permit, Notifications, Access				0	5280	5280
Task 2 Pre-Inj. Baseline GW Sampling (18 wells) Indoor Util Locate				0	3087	3087
Task 3 Injection				0	10760	10760
Task 4 Post Inj GW Monitor 4 months				0	3431	3431
Task 5 Inj Doc Report				0	2880	2880
Task 6 GW Monitoring 6 events at 12 wells	See Table 1A			4200	8718	12918
Task 7 GW Monitor Status				0	4140	4140
Task 8 Closure Request w DNR Fees				0	6120	6120
Task 9 Well Abandonment				0	2450	2450
Task F Addl Assessment Utility Corridors	See Table 1A			1950	0	1950
Task G Landfill Disposal Approval	See Table 1A			1840	0	1840
Task H Soil Excvn and Disposal	See Table 1A			5800	0	5800
Task I Contingency Chemical Addn under Building Post Excvn	See Table 1A			3550	0	3550
Task J Documentation Report	See Table 1A			4500	0	4500
Total Consultant				30565	58586	89151

CONTRACTOR SERVICES						
Task A Remove DCM				0	0	0
Task B Geoprobe Borings inside Bldg				0	1853	1853
Task C Subslab Vapor Sample / Analysis				0	576	576
Task C1 Subslab Vapor Sample / Analysis Neighbor to East				576	0	576
Task D Floor Drain Removal, Chem Treat Sub-Building				0	8473.5	8473.5
Task E Vapor Mit System Instln with three comm tests and two chem tests				576	2500	3076
Task 2 Pre-Inj Baseline GW Sample (18 wells) Indoor Util locate				0	1300	1300
Task 3 Injection Outside				0	14723.5	14723.5
Task 4 Post Inj Monitor 4 months Lab GW				0	900	900
Task 6 GW Monitoring 6 Events, 12 wells	See Table 1A			800	5100	5900
Task F Addl Assessment Utility Corridors	See Table 1A			3903	0	3903
Task G Landfill Disposal Approval				0	0	0
Task H Soil Excvn and Disposal	See Table 1A			31195	0	31195
Task I Contingency Chemical Addn under Building Post Excvn	See Table 1A			6375	0	6375
Total Contractor				43425	35426	78851

TOTALS				73990	94012	168002
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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 Cleaners 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 _____



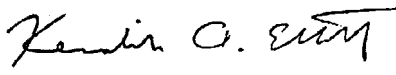

 Mr. Kendrick A. Ebbott, Fehr Graham _____ Date 27-Sep-16

TABLE 1A: Revised Supplemental Source Removal Remedial Action Cost Estimate					
September 27, 2016					
Master Drycleaner, 6326 W. Bluemound Road, Wauwatosa, WI					
ITEM DESCRIPTION	Unit Price	Quantity	Units	Total Cost	
<i>Included in Task 3 Costs and Prior Approved Budget for System Install</i>					
Task 6 Addl GW Monitoring 6 Events W Email Report					
<i>Addl 16 Wells and Addl Time for Off-Site Info to Owners</i>					
Laboratory	\$50.00	16	each	\$800.00	\$800.00
Subtotal Task				\$800.00	\$800.00
CONTRACTOR SERVICES TOTAL				\$43,424.80	\$43,424.80
TOTAL ESTIMATED COST				\$73,989.80	\$73,989.80
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.					
			<u>9/27/16</u>		
Master Cleaners 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		
			<u>27-Sep-16</u>		
Mr. Kendrick A. Ebbott, Fehr Graham			Date		