KPRG

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CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

VIRONMENTAL

ADDITIONAL WORK PLAN and BUDGET REQUEST

May 9, 2014

Mr. David Volkert Wisconsin Department of Natural Resources 141 NW Barstow Street, Room 180 Waukesha, WI 53188

VIA Email and US Mail

KPRG Project 10009

Re:

Revised Additional Work Plan and Budget Request

Former Bask Dry Cleaners – Waukesha, WI BRRTS# 02-68-297669, FID# 268188800

Dear Mr. Volkert:

The Wisconsin Department of Natural Resources (WDNR) issued a letter requesting subslab vapor sampling and ambient air sampling within three residences located to the east of the Former Bask Dry Cleaner in the Westbrook Shopping Center. Specifically, the three property addresses identified by WDNR are 2000, 2003 and 2004 Capella Court in Waukesha, Wisconsin. An initial proposed Work Plan was submitted to WDNR dated January 24, 2014. The WDNR issued a response letter dated February 19, 2014 adding four residences to the requested scope (see Figure 1). A meeting was held with WDNR on March 13, 2014 to further discuss the issue. Based on the WDNR letter and subsequent meeting, this revised Work Plan was submitted dated April 10, 2014. After a subsequent conference call on April 23, 2014, KPRG and Associates, Inc. (KPRG) on behalf of the former Bask Dry Cleaners (Bask), is submitting this revised Work Plan and budget for the additional work in order for the expenditures to qualify for reimbursement under the DERF program.

For budget estimating purposes, the additional work is divided into the following tasks and discussed separately below:

- Task 1 Additional Requested Work Planning/Coordination
- Task 2 Additional Soil Vapor Probe Installation and Sampling
- Task 3 Installation of Sub-Slab Depressurization Systems (SSDS)

- Task 4 Two Rounds of Additional Groundwater Monitoring
- Task 5 Preparation of Summary Report

SCOPE OF WORK

Task 1 – Additional Requested Work Planning/Coordination

The scope of this task includes the additional project management and planning that will be required for the successful completion of the additional work. This includes expanding the current property access agreement (or if necessary creating a new agreement(s)), with the City of Waukesha for the additional soil borings n their property within the right-of-way of Sunnyside Drive as well as the seven residences identified in the WDNR letter dated February 19th. Negotiations with some of the property owners are ongoing. At this point, it appears that the owners of 2000 Capella Court, 2003 Capella Court and 2004 Capella Court are willing to have sub-slab depressurization systems (SSDSs) installed, however, it is still uncertain whether they will allow for associated indoor air sampling. Three of the remaining four residents have also been contacted via telephone. A meeting with the residents at 2129 Sunnyside Drive (Sager Residence) was held on May 7th. No definitive responses have yet been provided for the work being requested and discussions are continuing. We will continue to keep the WDNR informed of progress.

<u>Task 2 – Additional Soil Vapor Probe Installation and Sampling</u>

Soil Vapor Probe Installation Procedure

Up to seven additional soil vapor probes will be installed using the direct push Geoprobe drilling method. The borings will be advanced in the vicinity of the residential properties and will be labeled SV-3 through SV-7 (see Figure 1). The locations of the probes are intended to assist in defining the potential extent of vapor impacts. It is noted that some of the probes are located on private property. These probes can only be installed if access is approved by the property owner. The probes will be targeted for location immediately adjacent to each residence, on the potential impact side of the house.

Each borehole will be advanced to a depth of approximately ten feet below ground surface (bgs), or groundwater, whichever is shallower. A 1-inch diameter, schedule 40 PVC probe will be placed down hole with 3-feet of 0.010-slot screen. Clean silica sand will be placed around the screen to approximately six inches above the top of the screen. The remainder of the borehole will be backfilled with bentonite pellets and hydrated. The surface casing will be completed as a flush mount and the top of the PVC riser will be finished with an air-tight cap having a fitting to allow for vapor sample collection.

Approximately 24 hours after probe installation, the integrity of the probe seal will be tested by placing a 4' by 4' section of visqueen over the ground with a hole placed over the probe. A plastic pail will be secured to the visqueen over the hole and vapor probe and the atmosphere within the pail will be enriched with helium. Two probe volumes of

air will be purged and a vapor sample will be monitored directly for the presence of helium using an Alcatel ASM 142S, or equivalent, detector/field monitor. If no helium is detected, the probe construction will be deemed adequate for subsequent vapor sampling. If helium is detected, the probe surface seal will be re-enforced with bentonite and tested again until a sufficient seal is documented. If for some reason the seal can not be adequately completed, the vapor point will be properly abandoned and redrilled/constructed within five feet of the original location.

Vapor Probe Sampling Procedure

Once an adequate surface seal is documented, a soil vapor sample will be collected from all new and existing vapor points using a Summa canister with a one-hour flow control valve. Approximately two vapor probe volumes of air will be purged from the probe. A disposable polyethylene sampling tube will then be connected from the probe sampling fitting to the Summa canister. The canister valve will be opened and a one-hour vapor sample will be collected. Once the canister is full, the valve will be closed and the canister will be disconnected from the sampling tube. The Summa canisters will then be shipped under a properly completed chain-of-custody (COC) for analysis to TestAmerica Laboratories. A total of up to ten soil vapor samples, three existing plus up to seven new, will be collected. WDNR has requested up to four rounds of vapor probe sampling to be assumed.

Field notes will be maintained during each sampling event which will include the weather conditions, ambient air photoionization detector (PID) measurements and a description of any potential odors in the ambient air or other conditions that may be deemed pertinent.

Analytical Requirements

The Summa canister samples will be analyzed using the TO15 analytical method. Since the constituent of concern at this site is tetrachloroethene (PCE), the lab will be requested to only report the chlorinated volatile organic portion of the TO15 scan which will include PCE and its breakdown products of TCE, cis-1,2-dichloroethene (DCE) and vinyl chloride as well as 1,1,1-TCA and its breakdown product of 1,1-dichoroethane (DCA) and 1,1-DCE.

As noted above, all sample collection, handling and analysis will be performed in accordance with the approved Work Plan for the work previously completed. The results of the sampling will be included in the monitoring summary/status report for the groundwater sampling.

<u>Task 3 – Installation of Sub-Slab Depressurization Systems (SSDS)</u>

Following the execution of the property access agreements, KPRG will meet with Radon Measurement & Elimination Services (RMES), a radon venting contractor that we have used extensively in the past, at the sites to obtain a more accurate cost estimate for the work. However, based on standard residential construction, RMES is anticipating

installing up to two vapor extraction points along the wall facing the dry cleaning facility at each residence. The points will be manifolded to one inline fan and vented outside. If a sump/sump crock is present, RMES will install a new sump pump (if necessary), seal the crock with a clear see-thru lid, and use the crock and associated weeping tile system as the vapor depressurization system. A "point" will then be installed into the sealed crock and vented outside with an inline fan. Pressure Field Extension (PFE) testing will be performed to verify that the footprint of the structure is being sufficiently vented. The RMES estimated cost for each SSDS, including electrical hookups and subsequent pressure/vacuum testing beneath the floor slab to document the effectiveness of the system to draw vapor, is \$2,700. The detailed cost breakdown sheets uses \$3,700 for contractor cost allowing for some additional money in case of unexpected field installation condition/issues (see Attachment 1; assumes seven systems). It is KPRG's understanding that due to the nature of this response action, obtaining three bids for this work will not be required. Each system installation will require up to two days to install and one day for testing.

The WDNR has also requested that a follow-up indoor air sample be collected from within each basement approximately three months after SSDS installations. The cost of seven ambient air samples is included within the proposed budget, however, at this time it is uncertain how many of the residents may be willing to allow for the sampling.

Task 4 – Additional Groundwater Sampling

Since the last round of groundwater monitoring occurred two years ago, the WDNR has requested two additional rounds of groundwater monitoring to update the data. Additional groundwater sampling is proposed to further monitor water quality conditions and enhanced natural attenuation. This proposal assumes one year of semi-annual monitoring to include the monitoring wells previously sampled (MW-1, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11 and PZ-1). PZ-2 which is clustered adjacent to well MW-5 has been historically dry. This well will be checked for the presence of water during each round of sampling. If water is encountered, it will also be sampled. All samples will be analyzed for VOCs at the laboratory and field measurements of dissolved oxygen (DO), temperature, pH, specific conductivity and oxidation-reduction potential (ORP) will be gathered and recorded. One duplicate sample will be analyzed for VOCs per sampling event for quality assurance/quality control purposes. Another monitoring summary/status report will be issued upon completion of the additional monitoring.

Task 5 – Preparation of Summary/As-Built Report and Data Summary

The following additional reporting will be performed:

- Soil vapor probe installation and sampling
- Sub-slab depressurization system installation and testing documentation.
- Summary of Groundwater Data

COST ESTIMATE

Costs are detailed on the attached costing sheets and are presented in five tasks: Site Meetings/Planning, Additional Vapor Probe Installation/Sampling, SSDS Installations/Testing, Groundwater Sampling and Reporting (see Attachment 1). The estimated cost for the additional closure request work is based on the costing sheets included in Attachment 1.

The budget for this additional soil vapor study and SSDS installations is \$86,987. The unit rates used in this cost estimate are consistent with previous KPRG rates.

Only those costs incurred will be billed. All billing will be performed on a monthly basis and will be broken down by task and unit rates. No additional work will be performed until formal WDNR approval of the proposed budget is received. If there are any questions, please contact me at 262-781-0475.

Sincerely,

KPRG and Associates, Inc.

Richard R. Gnat, P.G.

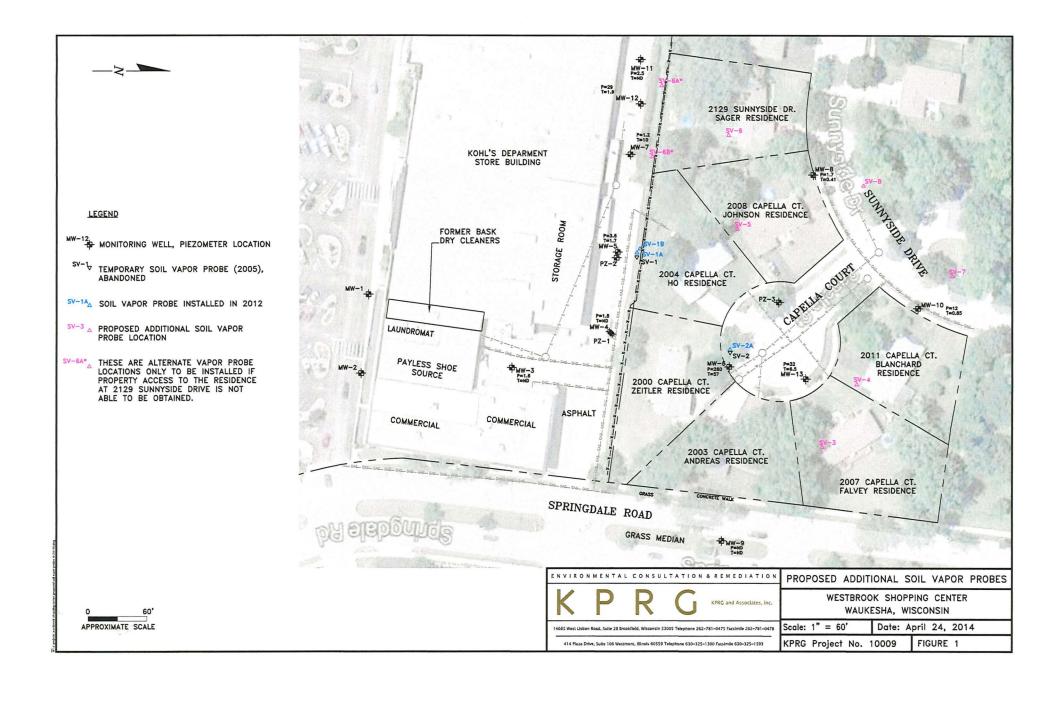
Richard R

Principal

cc: Mr. Greg Butts, former Bask Dry Cleaners

Ms. Michelle Williams, Reinhart, Boerner, Van Deuren, sc

Mr. Donald Gallo, Reinhart, Boerner, Van Deuren, sc



ATTACHMENT 1 Budget Table and Costing Sheets

Table 1. Revised Estimated Additional Budget Summary - Former Bask Dry Celaners, Waukesha WI 4-30-14

				Contractors		
Task	KPRG Labor	Expenses	Analytical	Driller	SSDS	Totals
1) Site Meetings and Planning	\$7,666	\$120	\$0	\$0	\$0	\$7,786
Soil Vapor Probe and Sub-slab Probe Installation and Sampling	\$7,607	\$1,915	\$6,580	\$10,500	\$0	\$26,602
Sub-slab Depressurization System Installation and Testing	\$12,594	\$840	\$1,645	\$0	\$25,900	\$40,979
4) Groundwater sampling (2 rounds)	\$2,382	\$935	\$1,690	\$0	\$0	\$5,007
5) Reporting	\$6,463	\$150	\$0	\$0	\$0	\$6,613
Totals	\$36,712	\$3,960	\$9,915	\$10,500	\$25,900	\$86,987

Project: Former Bask Dry Cleaner - Westbrook Shopping Center - Waukesha, WI

Task: 1 - Site Meetings and Planning

Professional Labor Principal/Proj. Mgr. Field Eng./Sci. CADD Admin. Asst/ Word Proc.	Rate (\$/Hr.) \$135 \$68 \$60 \$45		<u>Units</u> 40 32 0 2 Total Labor	Total \$5,400.00 \$2,176.00 \$0.00 \$90.00 \$7,666.00
External Expenses Reproduction Field Vehicle Sampling Supplies Drums PPE - Modified Level D PPE - Level C	Rate \$50 \$60 \$20 \$55 \$15 \$35	Type Est. Daily Daily Each Daily Daily	Units 0 2 0 0 0 0 Total Expenses	Total \$0.00 \$120.00 \$0.00 \$0.00 \$0.00 \$120.00
<u>Contractors</u> None.	<u>Rate</u>	<u>Type</u>	<u>Units</u> Total Contractors	<u>Total</u> \$0.00 \$0.00

TASK TOTAL: \$7,786.00

Project: Former Bask Dry Cleaner - Westbrook Shopping Center - Waukesha, WI

Task: 2 - Additional Soil Vapor Probe Installation, Testing and Sampling

Professional Labor Principal/Proj. Mgr. Field Eng./Sci. CADD Admin. Asst/ Word Proc.	<u>Rate (\$/Hr.)</u> \$135 \$68 \$60 \$45		<u>Units</u> 8 94 0 3 Total Labor	Total \$1,080.00 \$6,392.00 \$0.00 \$135.00 \$7,607.00
External Expenses Photoionization Detector Field Vehicle Sub-slab Probes Concrete Drill Setup PPE - Modified Level D Helium Detection Kit	Rate \$75 \$60 \$850 \$100 \$15 \$145	Type Daily Daily Kit Daily Daily Daily	Units 4 10 0 0 0 7 Total Expenses	Total \$300.00 \$600.00 \$0.00 \$0.00 \$1,015.00 \$1,915.00
Contractors Driller Laboratory Rental Laboratory Analytical	<u>Rate</u> \$3,500 \$60 \$175	<u>Type</u> Est. Each Each	Units 3 28 28 Total Contractors	Total \$10,500.00 \$1,680.00 \$4,900.00

TASK TOTAL:	\$26,602.00

Project: Former Bask Dry Cleaner - Westbrook Shopping Center - Waukesha, WI

Task: 3 - Sub-slab Depressurization System Installation/Testing

Professional Labor Principal/Proj. Mgr. Field Eng./Sci. GADD Admin. Asst/ Word Proc.	Rate (\$/Hr.) \$135 \$68 \$60 \$45		Units 6 168 6 0 Total Labor	Total \$810.00 \$11,424.00 \$360.00 \$0.00 \$12,594.00
External Expenses Reproduction Field Vehicle Sampling Supplies Drums PPE - Modified Level D PPE - Level C	Rate \$50 \$60 \$20 \$55 \$15 \$35	Type Est. Daily Daily Each Daily Daily	Units 0 14 0 0 0 0 otal Expenses	Total \$0.00 \$840.00 \$0.00 \$0.00 \$0.00 \$840.00
Contractors RMES Laboratory Rental Laboratory Analytical	<u>Rate</u> \$3,700 \$60 \$175	Type Est. Each Each Total Contractors		Total \$25,900.00 \$420.00 \$1,225.00 \$27,545.00

TASK TOTAL:

\$40,979.00

Project: Former Bask Dry Cleaner - Westbrook Shopping Center - Waukesha, WI

Task: 4 - Groundwater Sampling - 2 Rounds

Professional Labor Principal/Proj. Mgr. Field Eng./Sci. CADD Admin. Asst/ Word Proc.	Rate (\$/Hr.) \$135 \$68 \$60 \$45		Units 4 24 2 2 2 Total Labor	Total \$540.00 \$1,632.00 \$120.00 \$90.00 \$2,382.00
External Expenses Reproduction Field Vehicle Disposable bailers Drums Water Meter (W/DO/ORP) PPE - Level C	Rate \$50 \$60 \$15 \$55 \$200 \$35	Type Est. Daily Each Each Daily Daily	Units 0 2 24 1 2 0 Total Expenses	Total \$0.00 \$120.00 \$360.00 \$55.00 \$400.00 \$0.00
Contractors Laboratory Analytical	<u>Rate</u> \$65	<u>Type</u> Each	Units 26 Total Contractors	Total \$1,690.00 \$1,690.00

TASK TOTAL:	55,007.00

Project: Former Bask Dry Cleaner - Westbrook Shopping Center - Waukesha, WI

Task: 5 - Reporting

Professional Labor	<u>Rate (\$/Hr.)</u>		<u>Units</u>	<u>Total</u>
Principal/Proj. Mgr.	\$135		16	\$2,160.00
Field Eng./Sci.	\$68		56	\$3,808.00
CADD	\$60		6	\$360.00
Admin. Asst/ Word Proc.	\$45		3	\$135.00
			Total Labor	\$6,463.00
External Expanses	Data	Tuno	Linito	Total
External Expenses	Rate	<u>Type</u>	<u>Units</u>	<u>Total</u>
Reproduction	\$50	Est.	3	\$150.00
Field Vehicle	\$60	Daily	0	\$0.00
Sampling Supplies	\$20	Daily	0	\$0.00
Drums	\$55	Each	0	\$0.00
PPE - Modified Level D	\$15	Daily	0	\$0.00
PPE - Level C	\$35	Daily	0	\$0.00
			Total Expenses	\$150.00
Contractors	Rate	<u>Туре</u>	<u>Units</u>	<u>Total</u>
None.				\$0.00
			Total Contractors	\$0.00

TASK TOTAL:	\$6,613.00

PROJECT TOTAL: \$86,987.00