KPRG and Associates, Inc.

## **ADDITIONAL WORK PLAN and BUDGET REQUEST**

November 5, 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:

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. A meeting was held with WDNR on March 13, 2014 to further discuss the issue. Based on the WDNR meeting and subsequent letter, a revised Work Plan was submitted dated April 10, 2014. After a subsequent conference call on April 23, 2014, KPRG and Associates, Inc. (KPRG) submitted another revised Work Plan which was approved by WDNR on May 16, 2014. The approved work was completed through the initial round of soil vapor probe sampling.

Following a conference call on October 30, 2014 during which the results of the above mentioned work were discussed, the WDNR requested that an additional two residences be added to the study (now a total of nine residences). These residences are 2151 Rambling Rose Road (Stockinger Residence) and 2157 Rambling Rose Road (Lex Residence) and are included on Figure 1. Also, another vapor probe is to be installed in the right-of-way along Sunnyside Drive. KPRG, on behalf of the former Bask Dry Cleaners, is submitting this additional Work Plan and budget for the added work requested 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:

- Task 1 Additional Requested Work Planning/Coordination
- Task 2 Additional Soil Vapor Probe Installation and Sampling
- Task 3 Additional Reporting

Each task is discussed separately below.

### SCOPE OF WORK

## <u>Task 1 – Additional Requested Work Planning/Coordination</u>

The scope of this task includes the 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 creating a new agreement(s)), with the City of Waukesha for the additional soil borings in their property within the right-of-way of Sunnyside Drive as well as creating new property access agreements with the additional two residences identified during the WDNR conference call October 30<sup>th</sup>.

## Task 2 – Additional Soil Vapor Probe Installation and Sampling

## Soil Vapor Probe Installation Procedure

Three additional soil vapor probes will be installed using the direct push Geoprobe drilling method. One boring, SV-10, will be advanced within the right-of-way of Sunnyside Drive. The remaining two borings will be advanced in the vicinity of the two additional residential properties previously discussed and will be labeled SV-11 and SV-12 (see Figure 1). The locations of the probes are intended to assist in defining the potential extent of soil 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 an approximately 4' by 4' section of visqueen over the ground with a hole in the center placed over the vapor probe. A plastic pail will be sealed with the

visqueen over the hole and vapor probe and the atmosphere within the pail will be enriched with helium covering the entire sampling apparatus. Approximately 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 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 the new 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 a Wisconsin certified laboratory. A total of up to six soil vapor samples, two rounds of three, will be collected.

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.

## Task 3 – Additional Reporting

This task covers the additional effort in tabulating, evaluating and reporting the added data. This includes tables, figures and text discussions.

#### **COST ESTIMATE**

Costs are summarized In Table 1 and detailed on the attached costing sheets. The budget for this additional soil vapor study does not include sub-slab system depressurization system (SSDS) installations at these locations. If the data determines that SSDS systems may need to be installed at the two additional property locations, a separate budget request will be submitted at that time. The additional requested budget for the above defined scope of work is \$14,175. The unit rates used in this cost estimate are consistent with previous KPRG rates. Two rounds of soil vapor probe sampling are assumed.

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 Snot

Richard R. Gnat, P.G.

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

Table 1. Additional Probe Install and Sampling Budget Summary - Former Bask Dry Celaners, Waukesha WI 11-4-14

			Cont	ractors	
Task	KPRG Labor	Expenses	Analytical	Driller	Totals
1) Site Meetings and Planning	\$3,606	\$60	<b>\$</b> 0	\$0	\$3,666
Soil Vapor Probe Installation and Sampling	\$3,935	\$460	\$1,410	\$3,500	\$9,305
3) Additional Reporting	\$1,204	\$0	\$0	\$0	\$1,204
Totals	\$8,745	\$520	\$1,410	\$3,500	\$14,175

# KPRG TASK COSTING SHEET

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> 20 12 0 2 Total Labor	Total \$2,700.00 \$816.00 \$0.00 \$90.00 \$3,606.00
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 1 0 0 0 0 Total Expenses	Total \$0.00 \$60.00 \$0.00 \$0.00 \$0.00 \$60.00
Contractors None.	Rate	<u>Type</u>	<u>Units</u> Total Contractors	<u>Total</u> \$0.00 \$0.00

TAS	SK TOTAL:	\$3,666.00

# KPRG TASK COSTING SHEET

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.	Rate (\$/Hr.) \$135 \$68 \$60 \$45		Units 8 40 0 3 Total Labor	Total \$1,080.00 \$2,720.00 \$0.00 \$135.00 \$3,935.00
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 Daily	Units 1 4 0 0 0 1 Total Expenses	Total \$75.00 \$240.00 \$0.00 \$0.00 \$0.00 \$145.00 \$460.00
Contractors Driller Laboratory Rental (canisters) Laboratory Analytical	<u>Rate</u> \$3,500 \$60 \$175	<u>Type</u> Est. Daily Each Each	<u>Units</u> 1 6 6 otal Contractors	Total \$3,500.00 \$360.00 \$1,050.00 \$4,910.00

TASK TOTAL:	\$9,305.00

# KPRG TASK COSTING SHEET

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

Task: 3 - Additional Reporting

Professional Labor Principal/Proj. Mgr. Field Eng./Sci. CADD Admin. Asst/ Word Proc.	Rate (\$/Hr.) \$135 \$68 \$60 \$45		<u>Units</u> 4 8 2 0 Total Labor	Total \$540.00 \$544.00 \$120.00 \$0.00 \$1,204.00
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 0 0 0 0 0 0 Total Expenses	Total \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00
Contractors None.	<u>Rate</u>	<u>Type</u>	<u>Units</u> Total Contractors	<u>Total</u> \$0.00 \$0.00

TASK TOTAL:	\$1,204.00

PROJECT TOTAL: \$14,175.00

