

Mr. David G. Volkert, P.G. Bureau of Remediation and Redevelopment Department of Natural Resources 141 NW Barstow Street, Room 180 Waukesha, WI 53188

Subject:

Scope of Work and Cost Estimate for Additional Groundwater Sampling Event, Former Bask Dry Cleaner/West Brook Shopping Center, 2136 East Moreland Boulevard, Waukesha, Wisconsin. BRRTS# 02-68-297669

#### Dear Mr. Volkert:

ARCADIS has received a copy of the August 19, 2008 letter issued for the subject site by the Wisconsin Department of Natural Resources (WDNR) regarding the *Remedial Progress Report and Pilot Test Work Plan*, dated August 8, 2008. It is understood that the WDNR agrees with ARCADIS' conclusion that above-normal precipitation had resulted in a rise of the groundwater table, which has saturated a portion of the vadose zone targeted for remediation by soil vapor extraction, resulting in an increase in groundwater concentrations. However, the WDNR has requested additional groundwater monitoring to check groundwater elevations and concentrations rather than immediately changing remedial strategy to an active groundwater remedial action. Based on the August 19, 2008 letter, the WDNR is requesting the completion of one additional groundwater sampling event before active groundwater remediation can be considered.

This letter presents a scope of work and cost estimate to conduct the additional groundwater sampling event requested by WDNR. This work plan was prepared in accordance with ch. NR 169 (Dry Cleaner Environmental Response Program [DERP]), Wis adm code. Costs associated with this investigation should be eligible for reimbursement under the DERP.

## **Scope of Work**

In accordance with the August 19, 2008 WDNR letter, ARCADIS will complete the following tasks as part of the additional groundwater sampling event:

• Collection of one round of water table elevations and groundwater samples from the monitoring wells.

ARCADIS 126 North Jefferson Street Suite 400 Milwaukee Wisconsin 53202 Tel 414.276.7742 Fax 414.276.7603

#### ENVIRONMENT

Date: 27 August 2008

<sup>Contact:</sup> Brian Maillet Jim Bannantine

Phone: 414 276 7742

Email: bmaillet@arcadis-us.com jbannantine@arcadisus.com

Our ref: WI001147.0001

## ARCADIS

• Submittal of a letter with tables and drawings showing the results of the sample collection event.

#### **Collection of Groundwater Samples and Water Table Elevations**

ARCADIS will complete one additional groundwater sampling event. The event will consist of sampling the thirteen groundwater monitoring wells using low-flow sampling techniques. Depth to groundwater measurements will be recorded prior to collection of the groundwater samples to evaluate the depth to the groundwater table and groundwater flow direction. Groundwater samples will be submitted for laboratory analysis of volatile organic compounds (VOCs).

#### **Data Presentation**

Based on the results of the groundwater sampling event, ARCADIS will prepare an addendum to the August 2008 progress report and work plan. The addendum will evaluate groundwater elevation data, analytical results, and flow direction. ARCADIS and West Brook Limited Partnership would like to meet with WDNR to discuss the sample results and strategies for bringing the project to closure. It is understood that if elevated groundwater concentrations persist, either the enhanced remedial dechlorination or chemical oxidation groundwater remedial options discussed in the August 2008 progress report and work plan may be implemented, following WDNR approval.

### **Project Schedule**

ARCADIS began the additional groundwater sampling event on August 25, 2008. Following a telephone conversation with you on August 26, 2008, it was decided that this scope of work and cost estimate should be submitted to preserve reimbursement eligibility under the DERP.

### **Estimated Costs**

ARCADIS will conduct the supplemental scope of work for an estimated cost of \$5,913. Table 1 includes a breakdown of the project costs for the proposed work and the unit rates and estimates of hours to be worked by ARCADIS. In addition, Table 1 also presents unit rates and the estimated number of units (i.e., number of samples for analysis) for the subcontracted services.

## ARCADIS

## Closing

ARCADIS appreciate the opportunity to assist with this project. If the additional scope of work and associated costs are acceptable, please provide us with authorization to proceed. If you have any questions or require additional information, please contact us at your earliest convenience.

Sincerely,

ARCADIS

Brian J. Maillet

Project Scientist

Bannantus

James E. Bannantine, PG Senior Hydrogeologist

Greg Butts – West Brook Delaware Limited Partnership Don Gallo - Reinhart, Boerner, Van Deuren, S.C.

# ARCADIS

0

 Table 1. Estimated Costs for Additional Groundwater Sampling Event, Former Bask Dry Cleaner,

 Waukesha, Wisconsin.

	Number	Unit		Rate	Unit	Totals
Groundwater Sampling Event						
Scientist I	26	Hrs	@	\$70	/Hr	\$1,820
Project Staff II	3	Hrs	@	\$114	/Hr	\$342
Sr. Staff II	1	Hrs	@	\$155	/Hr	\$155
VOC Analysis	13	Samples	@	\$60	/Hr	\$780
Misc Equipment/Expenses						\$350
					Subtotal	\$3,447
Letter Report Addendum						
Project Staff II	12	Hrs	@	\$114	/Hr	\$1,368
Sr. Staff II	4	Hrs	@	\$155	/Hr	\$620
Project Assistant	4	Hrs	@	\$68	/Hr	\$272
Database	2	Hrs	@	\$78	/Hr	\$156
Misc Equipment/Expenses						\$50
					Subtotal	\$2,466
Total Estimated Cost for Additional Groundwater Sampling Event						\$5,913