

## Engineers • Land Surveyors • Environmental Scientists

August 31, 2006

Ms. Brenda Boyce Wisconsin Department of Natural Resources 141 NW Barstow Street, Room 180 Waukesha, Wisconsin 53188

Re: Change Order Proposal

Klinke Cleaners Fox Run Shopping Center Waukesha, Wisconsin

Dear Ms. Boyce:

Pursuant to our site meeting on August 11, 2006, along with subsequent communications, RSV Engineering, Inc. ("RSV") has prepared this proposed change order for additional sampling at the above site. Based on our discussions, RSV understands that the Wisconsin Department of Natural Resources ("WDNR") is requesting additional sampling of both soil and groundwater.

## Soil Sampling:

A concern exists that the northerly extent of soil impacts has not been adequately defined. Our past work has shown tetrachloroethene ("PCE") concentrations in the unpaved area adjacent to the transformer as being greater than 1 mg/kg (see Figure 1). RSV will mobilize a Geoprobe sampler to the site, and collect samples at approximately seven locations, as shown on Figure 1. Please note that due to buried utilities and trees, sample locations may need to be shifted slightly from those shown on the figure.

Continuous samples will be collected and screened using a photoionization detector ("PID"). Based on screening results, one sample from each boring will be forwarded to a WDNR-certified environmental laboratory for analyses of volatile organic compounds ("VOCs"). Typically, RSV will submit for analyses the sample which yields the highest PID result from each boring; however, in the event that a boring does not yield PID concentrations at significant levels (i.e., concentrations greater than 25 instrument units), a sample from a depth of 4 feet will be submitted for analyses. The reason for this is that we suspect that the impacts in this area are the result of over-pavement flow, and would therefore expect the impacts to be shallow.

## Groundwater Sampling:

RSV will mobilize a hollow stem auger drilling rig to drill and construct two additional monitoring wells, in the locations shown on Figure 2. These new wells will be constructed of 2-inch flush-threaded PVC, with 10-foot screens intersecting the water table. Wells will be constructed, developed and documented in accordance with Wisconsin Administrative Code ch. NR 141. After a period of 48 to 72 hours after well



development, RSV will return to the site. At that time, the elevations and locations of the new wells will be surveyed relative to the existing wells, and groundwater levels in all wells will be measured. At this time, RSV will purge the new wells and the existing wells, and collect groundwater samples from each well. These samples will be forwarded to an environmental laboratory for analyses of VOCs.

## Report:

After receiving the results of the soil and groundwater analyses, RSV will prepare and submit an updated report of the soil and groundwater quality at the site. At that time, we will also provide a re-evaluation of the location of the site piezometer, and provide a recommendation, as appropriate, as to the need to install an additional piezometer.

#### Costs:

Our estimated costs for completing the scope of work summarized above are tabulated in Table 1. Table 2 provides a listing of unit rates for the work to be completed.

We look forward to your review and comments. If you have any questions about this report, or require any further information, please call.

Sincerely,

RSV ENGINEERING, INC.

Robert J. Nauta, P.G.

Principal Hydrogeologist

cc: Mr. Richard Klinke



## TABLE 1 ESTIMATED FEES SITE INVESTIGATION - CHANGE REQUEST KLINKE CLEANERS FOX RUN SHOPPING CENTER WAUKESHA, WISCONSIN

DESCRIPTION	UNITS	RATE	QTY.	COSTS		
DESCRIPTION	UNITS	KATE	QII.	RSV	SUBCONT.	
Task 1: Site Investigation						
Project Manager <sup>1</sup>	Hours	\$110	6	\$660		
Staff Scientist/Hydrogeologist	Hours	\$85	30	\$2,550		
Survey Technician	Hours	\$55	3	\$165		
Equipment	Days	\$125	1	\$125		
Expenses	Days	\$100	1	\$100		
Laboratory - Soil	Sample	\$55	7		\$385	
Laboratory - Groundwater <sup>2</sup>	Sample	\$55	10		\$550	
Laboratory - Waste characterization	Sample	\$880	1		\$880	
Driller/Geoprobe contractor	Quote	\$1,793	1		\$1,793	
Site Investigation Waste - Drums & Disposal						
3	Estimate	\$1,450	1		\$1,450	
XX / 1 1	Transport	\$200	1		\$200	
Water disposal	Gallon	\$0.25	100		\$25	
			Subtotal:	\$3,600	\$5,283	
Task 2 - Report						
Principal Hydrogeologist	Hours	\$125	1	\$125		
Project Manager	Hours	\$110	8	\$880		
Staff Scientist/Hydrogeologist	Hours	\$85	4	\$340		
CADD Operator	Hours	\$75	4	\$300		
Accounting/Clerical	Hours	\$45	2	\$90		
Expenses	Estimate	\$250	1	\$250		
			Subtotal:	\$1,985	\$0	
					\$5,283	
	\$10,868					

<sup>&</sup>lt;sup>1</sup> Includes time for contacting adjacent property owner and preparing access agreement.

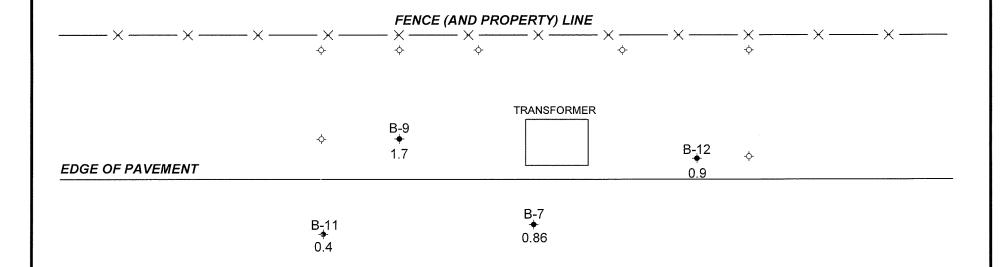
<sup>&</sup>lt;sup>2</sup> Includes one duplicate.

<sup>&</sup>lt;sup>3</sup> Well drilling and construction costs are based on assumption that groundwater will be encountered at approximately 15 feet below ground surface.

# TABLE 2 UNIT RATES SITE INVESTIGATION - FEE ADDENDUM KLINKE CLEANERS FOX RUN SHOPPING CENTER WAUKESHA, WISCONSIN

DESCRIPTION	UNITS	RATE			
RSV Labor					
Principal Hydrogeologist	Hour	\$125			
Project Manager	Hour	\$110			
Staff Scientist/Hydrogeologist	1 TT	\$85			
Environmental Scientist	I II arm	\$75			
Survey Technician	Houn	\$55			
CADD Operator	Hour	\$75			
Accounting/Clerical	Hour	\$45			
Subcontractors					
Drilling services					
Mobilization	Each	\$200			
Direct push borings	Foot	\$5			
Direct push boring abandonment	Foot	\$0.50			
Auger drilling	Foot	\$11			
Well construction	Foot	\$11			
Stand-pipe protective coverings	Each	\$100			
Decontamination	Lump sum	\$100			
Drums	Each	\$35			
Soil Disposal	Drum	\$145			
Laboratory services					
Laboratory Analyses - Soil VOCs	Each	\$55			
Laboratory Analyses - Characterization	Each	\$880			
Laboratory Analyses - Groundwater VOCs	Each	\$55			

## **MOWED GRASS AREA**



- PREVIOUS BORING LOCATION WITH PCE CONCENTRATION IN mg/kg
- ♦ PROPOSED BORING (APPROX. LOCATION)





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KLINKE CLEANERS
FOX RUN - WAUKESHA, WISCONSIN
PROPOSED SOIL BORING LOCATIONS

FIGURE

DRAWN BY	PROJ. No.	DATE	FILE NAME
RN	05-529	13 AUG 06	PROP BORINGS

SCALE IN FEET
0 5 10









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KLINKE CLEANERS FOX RUN - WAUKESHA, WISCONSIN PROPOSED MONITOR WELL LOCATIONS FIGURE

 DRAWN BY
 PROJ. No.
 DATE
 FILE NAME

 RN
 05-529
 13 AUG 06
 PROP WELLS