VS

WORKPLAN FOR A DERP SITE INVESTIGATION AT MARTINO'S DRY CLEANERS

4700 7TH AVENUE
KENOSHA, WISCONSIN
FID#23007910
BRRTS#02-30-287150

PREPARED FOR:
MR. DANIEL MARTINO
C/O DONALD P. GALLO
REINHART, BOERNER, VAN DEUREN. S.C.
W233 N2080 RIDGEVIEW PARKWAY
P.O. BOX 2265
WAUKESHA, WI 53187-2265

PREPARED BY:
SIGMA ENVIRONMENTAL SERVICES, INC.
220 EAST RYAN ROAD
OAK CREEK, WISCONSIN 53154-4533

PROJECT REFERENCE #7354

JANUARY 2003

Martin D. Nessman, P.G.
Project Hydrogeologist

Randy E. Boness, P.G.
Geosciences Group Leader

1. INTRODUCTION

Sigma Environmental Services, Inc. (Sigma) was retained by Mr. Daniel Martino to conduct a subsurface investigation of chlorinated organic compounds in soil in association with the former dry cleaners establishment located at 4700 7th Avenue, Kenosha, Wisconsin (the site). The objective of this investigation is to define the degree and extent of dry cleaning-related impacts at the site and evaluate the risks to the surrounding environment and human health.

2. BACKGROUND

On December 21, 2001, Sigma Environmental Services, Inc., as part of a Petroleum Environmental Cleanup Fund Act (PECFA) subsurface investigation, drilled six soil borings in the vicinity of a former gasoline underground storage tank system (UST). The objective of the subsurface investigation was to identify the degree and extent of petroleum hydrocarbon contamination from the UST system that may be in the soil and determine whether the potential for contamination to the groundwater may exist. Soil boring GP-3 was placed between the gasoline UST and several tanks historically used to store Stoddard Solvents. A review of the soil analytical data indicated that Tetrachloroethene (PCE) and Stoddard Solvent related compounds were present in soil at the site. Accordingly, Sigma notified the Wisconsin Department of Natural Resources (WDNR) of the dry cleaning solvent release. A summary of soil analytical results is presented as Table 1.

3. PURPOSE AND SCOPE OF WORK

3.1 Purpose.

Recognizing that a substantial portion of site investigation and potential remediation activities associated with the site may be eligible for coverage under the (Dry Cleaner Environmental Repair Fund (DERF) program, a systematic and common sense investigation approach has been designed to meet the client's goals, satisfy regulatory requirements and optimize the client's reimbursement under the DERF program. The proposed activities and design of the scope of work presented in the following section is based on site history, on available site details, and on Sigma's experiences with similar projects conducted in the general vicinity of the subject site. The scope of work has been designed to meet the requirements of the DERF program, maximize the use of site environmental data generated to date, and to recoup financial costs incurred to the maximum amount under the DERF program.

3.2 Scope of Work.

In order to further delineate the extent of identified dry cleaning-related impacts at the site and assist in the evaluation of aquifer characteristics, Sigma proposes the following scope of work;

- The advancement of two hand auger soil borings in the area of former PCE drum storage area to identify potential PCE impacts in the shallow subsurface and one hand auger soil boring to the west of the former Stoddard Solvent Tank area to further define the extent of dry cleaner solvent impacts;

- The installation of four soil borings to a depth of 15 feet and the conversion of the borings to four groundwater monitoring wells to identify the vertical and lateral extent of dry cleaning-related impacts underlying the site, evaluate subsurface geology and evaluate aquifer characteristics beneath the site;

- The collection of one round of groundwater samples for laboratory analysis of EPA Method 8021 Volatile Organic Compounds (VOCs);

- The coordination of a site and monitoring well elevation survey to determine groundwater flow characteristics;

- The completion of a site investigation report and remediation plan, as appropriate.

It should be noted that the scope of work in Sigma's original cost estimate consisted of the installation of five soil borings and five groundwater monitoring wells. Due to site conditions, three hand auger borings will be advanced in lieu of the fifth soil boring/monitoring well. Commodity bids for hollow stem auger drilling activities and laboratory analysis are presented in Attachment A.

4. INVESTIGATIVE PROCEDURES

During the investigation, Sigma will supervise the advancement of soil borings, the installation of groundwater monitoring wells, and provide a quantitative and qualitative hydrogeologic assessment of the site. The procedures to be used by others and Sigma during the investigation are discussed in the following sections.

4.1 Hand Auger Boring Advancement.

A total of two hand auger soil borings will be advanced at the site in the former PCE drum storage area. The locations are immediately south of the existing dry cleaning equipment locations within the building. In addition, one hand auger soil boring will be installed to the west of the former Stoddard Solvent USTs to further define the extent of Stoddard solvent impacts in the shallow subsurface. The hand auger soil boring locations are shown on Figure 2. Due to the narrow space between the northern and

southern portions of the building and the existence of overhead electric lines and an underground gas line, the installation of NR 140 compliant monitoring wells is not feasible in this area. In order to collect water quality information in this area, Sigma will install one inch diameter temporary monitoring points to attempt to collect a groundwater water sample. Continuous soil samples will be collected from each soil boring and classified in accordance with the Unified Soil Classification System (USCS). Two soil samples from each boring will be submitted for analysis of EPA Method 8021 VOCs. The grain size, moisture content, plasticity, and color description will be recorded on Soil Boring Log Information Forms (Form 4400-122).

4.2 Soil Boring/Monitoring Well Installation.

A total of four hollow stem auger soil borings will be advanced at the site. The placement of the soil borings/monitoring wells will be based on the known locations of potential source areas and the apparent groundwater flow direction to the east, toward Lake Michigan, which is located approximately 500 feet east of the property (Figure 1). Continuous soil samples will be collected from each soil boring and classified in accordance with the Unified Soil Classification System (USCS). Two soil samples from each boring will be submitted for analysis of EPA Method 8021 VOC. The grain size, moisture content, plasticity, and color description will be recorded on Soil Boring Log Information Forms (Form 4400-122). Groundwater monitoring wells will be constructed in accordance with Wisconsin Administrative Code, Chapter NR 141 (NR 141) Groundwater Monitoring Well Requirement. Upon completion, Monitoring Well Construction forms (WDNR Form 4400-113A) will be prepared to document the construction of the monitoring wells.

Auger soil cuttings brought to the ground surface during drilling procedures will be placed in DOT approved 55-gallon drums and temporarily stored on-site until the appropriate final disposal location can be determined.

4.3 Monitoring Well Development.

At least 48 hours after installation and prior to sampling, each groundwater monitoring well installed by Sigma will be developed in accordance with NR 141 requirements by alternatively surging and purging the well to remove sediment and drill cuttings. The purge water will place in WDOT approved 55-gallon drums and temporarily stored on-site until the appropriate final disposal location can be determined. Monitoring Well Development Forms (WDNR Form 4400-113B) will be completed as required.

4.4 Monitoring Well Sampling.

At least 48 hours after development, each groundwater monitoring well installed by Sigma will be sampled in accordance with WDNR Guidance. Each well will be purged prior to sampling to ensure that a representative groundwater sample is collected. Dedicated Teflon bailers or single use

bailers will be used to collect the groundwater samples to prevent cross contamination. A chain-of-custody will be completed and accompany all samples. Groundwater samples will be submitted to the project laboratory for VOC analysis.

5. REPORT PREPARATION

Upon completion of the proposed investigation activities, Sigma will complete a site investigation report in accordance with NR 716.15 requirements. The report will discuss the types, degree and extent of subsurface soil and groundwater contamination and provide recommendations for further site activities, remedial alternatives or case closure, if applicable.

TABLE OF CONTENTS

1. INTRODUCTION 1
2. BACKGROUND 1
3. PURPOSE AND SCOPE OF WORK 1
3.1 Purpose. 1
3.2 Scope of Work. 1
4. INVESTIGATIVE PROCEDURES 2
4.1 Hand Auger Boring Advancement. 2
4.2 Soil Boring/Monitoring Well Installation. 3
4.3 Monitoring Well Development. 3
4.4 Monitoring Well Sampling. 3
5. REPORT PREPARATION 4

LIST OF TABLES

Table
1. Soil Analytical Results

LIST OF FIGURES

Figure
1. Site Location Map
2. Proposed Monitoring Well and Soil Boring Location Map

LIST OF ATTACHMENTS

Attachment
A. Commodity Bids

TABLES

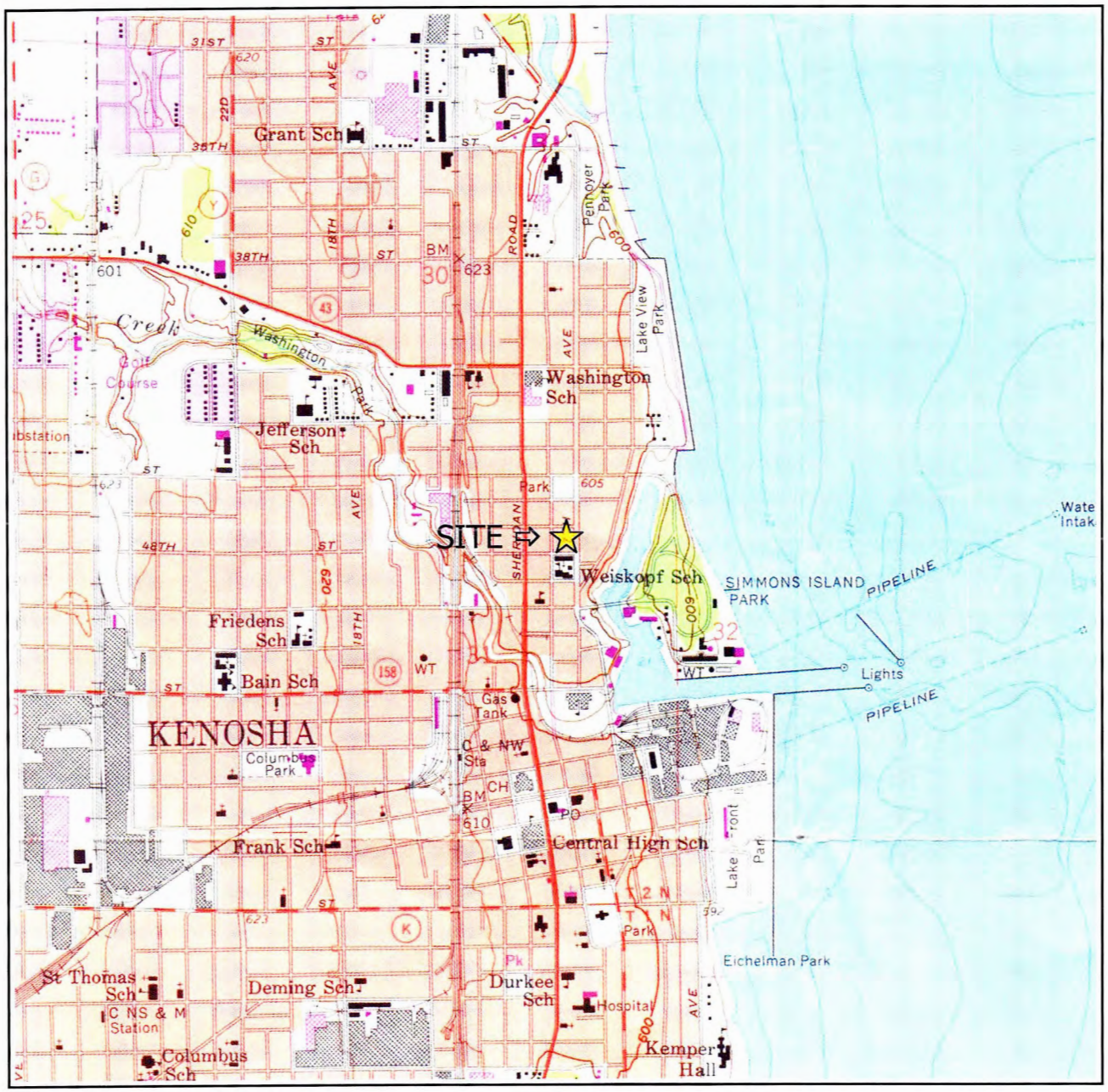
Table 1
Soil Quality Results - Geoprobe Borings
Martino's Master Dry Cleaners
4700 47th Avenue
Kenosha, WI

Boring ID		GP-1	GP-2	GP-3	GP-4	GP-5	GP-6	NR 720 RCL	NR 746 Table 1	NR 746 Table 2
Depth (feet bgs)		6-8	6-8	4-8	4-8	8-12	8-12			
Date	Units	12/18/2001	12/18/2001	12/21/2001	12/21/2001	12/21/2001	12/21/2001			
GRO	mg/kg	<6.0	<6.09	NA	NA	NA	NA	100	---	---
Volatile Organic Compounds										
Benzene	µg/kg	<25	<25	<25	<25	<25	<25	5.5	8,500	1,100
Ethylbenzene	µg/kg	<25	<25	<25	<25	<25	<25	2,900	4,600	---
Toluene	µg/kg	<25	<25	<25	<25	<25	<25	1,500	38,000	---
Xylenes	µg/kg	**37.1**	<25	<25	<25	<25	<25	4,100	42,000	---
1,2,4-Trimethylbenzene	µg/kg	<25	<25	**410**	<25	<25	<25	---	83,000	---
1,3,5-Trimethylbenzene	µg/kg	<25	<25	**639**	<25	<25	<25	---	11,000	---
n-Butylbenzene	µg/kg	NA	NA	**1330**	NA	NA	NA	---	---	---
sec-Butylbenzene	µg/kg	NA	NA	**2550**	NA	NA	NA	---	---	---
tert-Butylbenzene	µg/kg	NA	NA	**397**	NA	NA	NA	---	---	---
Isopropylbenzene	µg/kg	NA	NA	**99.3**	NA	NA	NA	---	---	---
p-Isopropyltoluene	µg/kg	NA	NA	**1430**	NA	NA	NA	---	---	---
Naphthalene	µg/kg	NA	NA	**457**	NA	NA	NA	---	2,700	---
n-Propylbenzene	µg/kg	NA	NA	**368**	NA	NA	NA	---	---	---
cis-1,2-Dichloroethene	µg/kg	NA	NA	<25	NA	NA	NA	---	---	---
trans-1,2-Dichloroethene	µg/kg	NA	NA	<25	NA	NA	NA	---	---	---
Tetrachloroethene	µg/kg	NA	NA	**355**	NA	NA	NA	---	---	---

KEY:

GRO	Gasoline Range Organics
µg/kg	micrograms per kilogram
---	No standard established
BOLD	Analyte detected above laboratory detection limit.
NA	Analyte not analyzed.
NR 720 RCL	Chapter NR 720 Generic Resudual Contaminant Limit
NR 746 Table 1	Chapter NR 746 Table 1, Indicators of Residual Petroleum Products.
NR 746 Table 2	Chapter NR 746 Table 2, Protection of Human Health from Direct Contact with Contaminated Soil.

FIGURES



SW ¼ of the NE ¼ of Sec. 31, T2N, R23E. Adapted from U.S.G.S. 7.5 minute series, Kenosha, Wisconsin, quadrangle (dated 1958, photorevised 1971, photoinspected 1976).

SCALE 1:24 000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

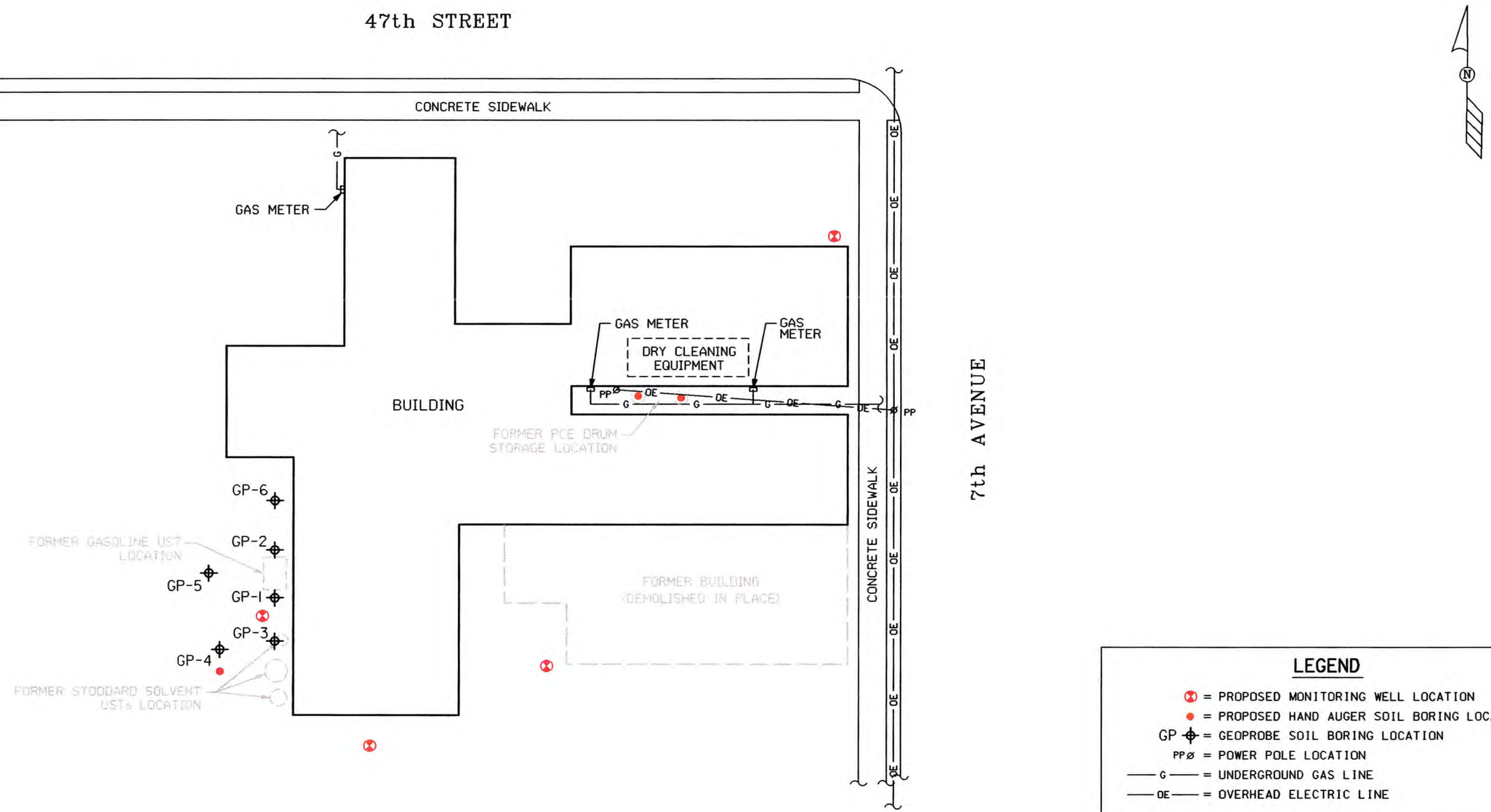
CONTOUR INTERVAL 10 FEET
DOTTED LINES REPRESENT 5-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

N

Figure 1. Site Location Map
Martino's Master Dry Cleaners
4700-7th St., Kenosha, Wisconsin

SIGMA ENVIRONMENTAL SERVICES INC.

7354fig1.ppt



NOTE:
DIMENSIONS DEPICTED ON MAP ARE FOR REFERENCE ONLY - SITE HAS NOT BEEN SURVEYED.

MARTINO'S MASTER DRY CLEANERS 4700 7th AVENUE, KENOSHA, WI			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 12-23-02	DR. BY: BEB	DR.# 7354-001	SCALE: 1" = 20'
PROPOSED MONITORING WELL AND SOIL BORING LOCATION MAP			FIGURE 2

ATTACHMENT A

SIGMA ENVIRONMENTAL SERVICES, INC.

REQUEST FOR COST ESTIMATE ANALYTICAL SERVICES

Sigma Project # 7354 Cost Estimate Required By 1-15-03
Project Manager Marty Nessman Date Samples Expected 1-30-03
Phone No. (414) Fax No. (414)

NOTE: THE BELOW UNIT COSTS WILL BE HONORED FOR ONE (1) CALENDAR YEAR STARTING ON THE DATE THE FIRST SAMPLE IS SUBMITTED. ALL BIDS WILL FOLLOW/ FAX REQUESTS/RESPONSE WITH A SIGNED HARD COPY TO BE CONSIDERED.

Analytical Parameters Requested	Soil			Water					Analytical Method	Detection Limit
	Number of Samples	Unit Cost	Total Cost	Number of Samples per Sampling Round	Number of Sampling Rounds	Total Number of Samples	Unit Cost	Total Cost		
VOC (8021)	10	55.00	550.00	6	1	6	55.00	330.00	8021	
VOC (8021)				Trip Blank	1	1	-0-	-0-		
				Equip. Blank	1	1	-0-	-0-		
↓	MeOH Blank			Duplicate	1	1	55.00	55.00		

Revised 1/27/99 f:\sigma\forms\analytic.bid

Turnaround Time (Working Days) 5

Cost for Sample Bottles –

Cost for Shipping –

Cost for Chromatograms –

Courier Service Provided Yes

Courier Service Provider GLA
(Attach Sheet with Procedures/Directions)

Cost for Courier Service –

Cost for Soil/Water Disposal –

1. (Laboratory) warrants and represents that all times while providing services under this Agreement, it shall maintain in place errors and omissions (professional liability) insurance coverage of no less than $1,000,000 per claim; $1,000,000 annual aggregate and a deductible of no more than $100,000 per claim. The insurance coverage shall be provided by a firm that has an A.M. Best rating of at least "A-".

2. Laboratory shall notify (Consultant) immediately if the insurance coverage required in paragraph 1 above is interrupted, suspended, lapsed or terminated for any reason

3. Laboratory shall indemnify Consultant or (Owner) for all laboratory costs determined to be ineligible for PECFA reimbursement by the PECFA staff due to Laboratory's failure to maintain the insurance coverage required in paragraph 1 above.

Andrea Stotts
Signature

SUBTOTAL SOIL ANALYSIS	560.00	QUOTE # –
SUBTOTAL WATER ANALYSIS	380.00	
SUBTOTAL OTHER (BOTTLES, ETC.)	–	
SHIPPING CHARGES	–	
TOTAL PROJECT BID	$ 935.00	

Signature	Title	Company	Date
Andrea Stotts	Project Manager	Great Lakes Analytical	1-14-03

SIGMA ENVIRONMENTAL SERVICES, INC.

REQUEST FOR COST ESTIMATE ANALYTICAL SERVICES

Sigma Project # 7354 Cost Estimate Required By 1-15-03

Project Manager Marty Nessman Date Samples Expected 1-30-03

Phone No. (414) Fax No. (414)

NOTE: THE BELOW UNIT COSTS WILL BE HONORED FOR ONE (1) CALENDAR YEAR STARTING ON THE DATE THE FIRST SAMPLE IS SUBMITTED. ALL BIDS WILL FOLLOW FAX REQUESTS/RESPONSE WITH A SIGNED HARD COPY TO BE CONSIDERED.

Analytical Parameters Requested	Soil			Water					Analytical Method	Detection Limit
	Number of Samples	Unit Cost	Total Cost	Number of Samples per Sampling Round	Number of Sampling Rounds	Total Number of Samples	Unit Cost	Total Cost		
VOC(8021)	10	55	550	6	1	6	55	330		
VOC(8021)				Trip Blank	1	1	N/C	—		
↓				Equip. Blank	1	1	55	55		
↓	Me OH Blank (1)	N/C		Duplicate	1	1	55	55		

Revised 1/27/99 f:\sigma\forms\analytic.bid

7354

SUBTOTAL - OTHER (BOTTLES, ETC.)	
SHIPPING CHARGES	
TOTAL PROJECT BID	990.

Signature	Title	Company	Date
Laurie Wolfel		EnChem	1/15/03

SIGMA ENVIRONMENTAL SERVICES, INC.

REQUEST FOR COST ESTIMATE ANALYTICAL SERVICES

Sigma Project # 7354 Cost Estimate Required By 1-15-03

Project Manager Marty Nessman Date Samples Expected 1-30-03

Phone No. (414) Fax No. (414)

NOTE: THE BELOW UNIT COSTS WILL BE HONORED FOR ONE (1) CALENDAR YEAR STARTING ON THE DATE THE FIRST SAMPLE IS SUBMITTED. ALL BIDS WILL FOLLOW FAX REQUESTS/RESPONSE WITH A SIGNED HARD COPY TO BE CONSIDERED.

Analytical Parameters Requested	Soil			Water					Analytical Method	Detection Limit
	Number of Samples	Unit Cost	Total Cost	Number of Samples per Sampling Round	Number of Sampling Rounds	Total Number of Samples	Unit Cost	Total Cost		
VOC(8021)	10	60.00	600.00	6	1	6	60.00	360.00	8260	
VOC(8021)		—	—	Trip Blank	1	1	—	—		
↓				Equip. Blank	1	1	20	20		
↓	Me OH Blank			Duplicate	1	1	20	20		

Turnaround Time (Working Days) _____

Cost for Sample Bottles _____

Cost for Shipping _____

Cost for Chromatograms _____

Courier Service Provided _____

Courier Service Provided _____
(Attach Sheet with Procedures/Directions)

Cost for Courier Service _____

Cost for Soil/Water Disposal _____

1. (Laboratory) warrants and represents that all times while providing services under this Agreement, it shall maintain in place errors and omissions (professional liability) insurance coverage of no less than $1,000,000 per claim; $1,000,000 annual aggregate and a deductible of no more than $100,000 per claim. The insurance coverage shall be provided by a firm that has an A.M. Best rating of at least "A-".

2. Laboratory shall notify (Consultant) immediately if the insurance coverage required in paragraph 1 above is interrupted, suspended, lapsed or terminated for any reason.

3. Laboratory shall indemnify Consultant or (Owner) for all laboratory costs determined to be ineligible for PECFA reimbursement by the PECFA [illegible] required in paragraph 1 above.

Warren Topel
Signature

SUBTOTAL SOIL ANALYSIS	600.00	QUOTE # _
SUBTOTAL WATER ANALYSIS	400.00	
SUBTOTAL - OTHER (BOTTLES, ETC.)		
SHIPPING CHARGES		
TOTAL PROJECT BID	1,000.00	

Signature	Title	Company	Date
Warren Topel	CSR	TESTAMERICA, DVC	1-14-03

Sigma Environmental Services, Inc.

REQUEST FOR COST ESTIMATE - DRILLING SERVICES Page 1 of 2

Sigma Project # 7354 Project Location: 4700 7th Avenue, Kenosha, WI

Project Manager NESSMAN

Phone # 414-768-7144 Cost Estimate Required by: 01/15/03

Fax # 414-768-7144 Anticipated Start Date: 01/30/03

1. **Project Summary/ Conditions:** Drill 4 soil borings to 15' and convert to monitoring wells.
2. **Responsible for Utility Clearance:** Sigma X / Drilling Contractor
3. **Water Provided by:** Site Owner / Drilling Contractor X
4. **Electric Provided by:** Site Owner / Drilling Contractor X
5. **Drilling Method:** Geoprobe ____ Air Rotary ____ Hollow Stem Auger X Mud Rotary
6. **Drilling Surface:** Asphalt and concrete.
7. **Sampling Interval:** Continuous X 2½ ft. ____ Other
   Explain:
8. **Estimated Depth to Groundwater:** 8 ft.
9. **Cost Estimate:** This bid form must be used. All costs must be included in the lump sums or unit rates for the tasks listed below. No exceptions or substitutions will be considered.

Task	Quantity	Unit Rate	Cost
Mobilization (includes support vehicles)	1	Lump Sum	$ 200.00
Soil Boring Drilling	60 /feet	10.00 /foot	600.00
Borehole Abandonment	~~0~~ /feet	4.50 /foot	~~0~~
Well Installation (includes all well supplies)	60 /feet	10.00 /foot	600.00
Well Protective Covers ■ Flush Mount (2) ■ Above Ground (1)	4	75.00 /each	300.00
Decon/Steam Cleaning	1	Lump Sum	100.00
55- Gallon Drums	5	25.00 /Drum	125.00
Visqueen	/Rolls	/Rolls	NA
Traffic Control			NA
TOTAL COST			$ 1925.00

Sigma Project # 7364

REQUEST FOR COST ESTIMATE - DRILLING SERVICES
(CONTINUED)

10. Conditions:

1. Drilling Contractor warrants and represents that all times while providing services under this Agreement, it shall maintain general liability coverage including, pollution impairment liability coverage of no less than $1,000,000 per claim; $1,000,000 annual aggregate and a deductible of no more than $100,000 per claim. The insurance coverage shall be provided by a firm that has an A.M. Best rating of at least "A-".

2. Drilling Contractor shall notify (Consultant) immediately if the insurance coverage required in paragraph 1 above is interrupted, suspended, lapsed or terminated for any reason.

3. Drilling Contractor shall indemnify Consultant or (Owner) for all drilling costs determined to be ineligible for PECFA reimbursement by the PECFA staff due to Contractor's failure to maintain the insurance coverage required in paragraph 1 above.

4. The above unit costs will be honored for one (1) calendar year starting on the date of the first mobilization.

5. All bids will follow fax requests/responses with a signed hard copy of this form to be considered.

6. All drilling equipment will be decontaminated before arrival on-site.

Kim Kapugi
Name (Print)

Kim Kapugi President
Signature Title

608-837-8992
Phone

On-Site Environmental
Company Date

Sigma Environmental Services, Inc.

REQUEST FOR COST ESTIMATE - DRILLING SERVICES Page 1 of 2

Sigma Project # 7354 Project Location: 4700 7th Avenue, Kenosha, WI

Project Manager NESSMAN

Phone # 414-768-7144 Cost Estimate Required by: 01/15/03

Fax # 414-768-7144 Anticipated Start Date: 01/30/03

1. **Project Summary/ Conditions:** Drill 4 soil borings to 15' and convert to monitoring wells.
2. **Responsible for Utility Clearance:** Sigma X / Drilling Contractor
3. **Water Provided by:** Site Owner / Drilling Contractor X
4. **Electric Provided by:** Site Owner / Drilling Contractor X
5. **Drilling Method:** Geoprobe ____ / Air Rotary ____ / Hollow Stem Auger X / Mud Rotary
6. **Drilling Surface:** Asphalt and concrete.
7. **Sampling Interval:** Continuous X 2½ ft. ____ Other ____

   Explain:
8. **Estimated Depth to Groundwater:** 8 ft.
9. **Cost Estimate:** This bid form must be used. All costs must be included in the lump sums or unit rates for the tasks listed below. No exceptions or substitutions will be considered.

Task	Quantity	Unit Rate	Cost
Mobilization (includes support vehicles)	1	Lump Sum	$ 375.00
Soil Boring Drilling	60 /feet	12.00 /foot	720.00
Borehole Abandonment	0 /feet	4.00 /foot	
Well Installation (Includes all well supplies)	60 /feet	12.00 /foot	720.00
Well Protective Covers ■ Flush Mount (3) ■ Above Ground (1)	4	130.00 /each	520.00
Decon/Steam Cleaning	1	Lump Sum	150.00
55- Gallon Drums	5	35.00 /Drum	175.00
Visqueen	/Rolls	/Rolls	
Traffic Control			
TOTAL COST			$ 2660.00

Sigma Project # 7354

REQUEST FOR COST ESTIMATE - DRILLING SERVICES
(CONTINUED)

10. Conditions:

1. Drilling Contractor warrants and represents that all times while providing services under this Agreement, it shall maintain general liability coverage including, pollution impairment liability coverage of no less than $1,000,000 per claim; $1,000,000 annual aggregate and a deductible of no more than $100,000 per claim. The insurance coverage shall be provided by a firm that has an A.M. Best rating of at least "A-".

2. Drilling Contractor shall notify (Consultant) immediately if the insurance coverage required in paragraph 1 above is interrupted, suspended, lapsed or terminated for any reason.

3. Drilling Contractor shall indemnify Consultant or (Owner) for all drilling costs determined to be ineligible for PECFA reimbursement by the PECFA staff due to Contractor's failure to maintain the insurance coverage required in paragraph 1 above.

4. The above unit costs will be honored for one (1) calendar year starting on the date of the first mobilization.

5. All bids will follow fax requests/responses with a signed hard copy of this form to be considered.

6. All drilling equipment will be decontaminated before arrival on-site.

Mark Garwick
Name (Print)

Signature Title

608-877-9770
Phone

Badger State Drilling, Inc. 1/14/03
Company Date

Sigma Environmental Services, Inc.

REQUEST FOR COST ESTIMATE - DRILLING SERVICES Page 1 of 2

Sigma Project # 7354 Project Location: 4700 7th Avenue, Kenosha, WI

Project Manager NESSMAN

Phone # 414-768-7144 Cost Estimate Required by: 01/15/03

Fax # 414-768-7144 Anticipated Start Date: 01/30/03

1. Project Summary/ Conditions: Drill 4 soil borings to 15' and convert to monitoring wells.

Post-it® Fax Note 7671	Date 1-14	# of pages ▶ 2
To Marty Nessman	From Ron Thalacker	
Co./Dept. Sigma	Co. Soil Conservation	
Phone #	Phone # 715 359 7040	
Fax # 4147687144	Fax # 715 355 5715	

Sigma X
Drilling Contractor

Site Owner
Drilling Contractor X

Site Owner
Drilling Contractor X

Hollow Stem Auger X
Mud Rotary

Air Rotary

6. Drilling Surface: Asphalt and concrete.

7. Sampling Interval: Continuous X 2½ ft. _____ Other

Explain:

8. Estimated Depth to Groundwater: 8 ft.

9. Cost Estimate: This bid form must be used. All costs must be included in the lump sums or unit rates for the tasks listed below. No exceptions or substitutions will be considered.

Task	Quantity	Unit Rate	Cost
Mobilization (includes support vehicles)	1	Lump Sum	$ 500
Soil Boring Drilling	60 /feet	12 /foot	720
Borehole Abandonment	0 /feet	5 /foot	0
Well Installation (includes all well supplies)	60 /feet	11 /foot	660
Well Protective Covers ☒ Flush Mount (3) ☒ Above Ground (1)	3 1	160 /each 135	480 135
Decon/Steam Cleaning	1	Lump Sum	125
55- Gallon Drums	5	35 /Drum	175
Visqueen	0 /Rolls	(cc /Rolls	0
Traffic Control	NA	NA	NA
TOTAL COST			$ 2795

Sigma Project # 7354

REQUEST FOR COST ESTIMATE - DRILLING SERVICES
(CONTINUED)

10. Conditions:

1. Drilling Contractor warrants and represents that all times while providing services under this Agreement, it shall maintain general liability coverage including, pollution impairment liability coverage of no less than $1,000,000 per claim; $1,000,000 annual aggregate and a deductible of no more than $100,000 per claim. The insurance coverage shall be provided by a firm that has an A.M. Best rating of at least "A-".

2. Drilling Contractor shall notify (Consultant) immediately if the insurance coverage required in paragraph 1 above is interrupted, suspended, lapsed or terminated for any reason.

3. Drilling Contractor shall indemnify Consultant or (Owner) for all drilling costs determined to be ineligible for PECFA reimbursement by the PECFA staff due to Contractor's failure to maintain the insurance coverage required in paragraph 1 above.

4. The above unit costs will be honored for one (1) calendar year starting on the date of the first mobilization.

5. All bids will follow fax requests/responses with a signed hard copy of this form to be considered.

6. All drilling equipment will be decontaminated before arrival on-site.

Ron Thalacker
Name (Print)

Zone Manager
Signature Title

715.359 7090
Phone

Boart Longyear 1/14/03
Company Date