# PROPOSAL FOR DERF SITE REMEDIATION BELOIT RD. VALET CLEANERS 

## WEST ALLIS, WISCONSIN

## PREPARED FOR:

## PREPARED BY:

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FIGURE
1 - Area of PCE Impacts in Unsaturated Soils

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### 1.0 INTRODUCTION

The Krikau, Pyles, Rysiewicz \& Associates, Inc. (KPR) is please to provide Mr. Norman Getz and Reinhart, Boerner, Van Dueren, S.C. with this proposal for the implementation of the chosen remedial alternative for the former dry cleaning facility located at 6854 West Beloit Road in West Allis, Wisconsin. To assist in the development of this proposal, the materials provided in the Request for Proposal (RFP) issued on November 22, 2002 were thoroughly reviewed and a windshield survey of the site was performed. KPR has developed a project team that includes the specialized injection remediation expertise of Orin Remediation Technologies of Madison, Wisconsin. Based on the information in the RFP and the KPR project team experience in evaluating and remediating chlorinated solvent impacted sites, we have developed a remedial action proposal that is streamlined, technically sound and focused on achieving the project objectives.

The remainder of this section provides a brief project background, identifies our understanding of project objectives and outlines the structure of the proposal as it pertains to the requirements set forth in the RFP.

### 1.1 Project Background

The subject property occupies an area of approximately 0.35 acres. The property is occupied by a single story masonry building that was formerly used as a dry cleaner. The building is currently vacant and the property is being considered for sale and redevelopment for other commercial uses. As part of the property transaction process, a Phase I Environmental Site Assessment (ESA) conducted in Spring of 2001. Potential environmental concerns identified in the Phase I ESA included a removed fuel oil tank and the former use of the facility as a "wet" dry cleaner (i.e., used tetrachloroethene (PCE) as a dry cleaning agent). The site was subsequently accepted into the Wisconsin Department of Natural Resources (WDNR) Dry Cleaner Environmental Response Program (DERP).

A site investigation was performed which identified PCE impacts to soil and ground water beneath the property at concentrations exceeding WDNR standards. Petroleum hydrocarbon impacts were not identified as an issue at this site. A site investigation was submitted to the WDNR in September, 2002 along with the Remedial Action Options Evaluation which outlines the proposed remedial action for the site. The WDNR has approved the site investigation report and proposed remedy. The remedy has been specified to include chemical oxidation of impacted, unsaturated zone soils with permanganate followed by natural attenuation monitoring of ground water.

Based on the site investigation data, KPR has generated a contour map of soil impacts ( 0 to 8 feet deep after which point the water table is encountered) defining the area requiring soil treatment (see Figure 1). This map has assumed a site cleanup standard for PCE of $500 \mathrm{ug} / \mathrm{kg}$. It is noted that a cleanup standard for the site has not been established. The use of $500 \mathrm{ug} / \mathrm{kg}$ is based on KPR's experience at other sites using site specific Total Organic Carbon (TOC) data. This data has not been generated as part of the site investigation and is included as a data need that will be fulfilled as part of the design process (see Section 2.1 of this proposal).

### 1.2 Project Objective

The objective of this project is to implement the recommended remedial alternative, and any modifications that may be requested by the WDNR upon completion of their review of the Design Report, in an efficient and expedient manner to facilitate the intended property transaction. The work is to be performed in a manner to maximize the DERF eligibility of project expenses by maintaining compliance with applicable requirements and guidelines in Wisconsin Statutes 292.65 and WAC Chapters NR 140, NR 169 and NR 700.

### 1.3 Organization of Proposal

The remainder of this proposal is organized to be responsive to the requirements of the RFP. Section 2.0 details our proposed technical approach by task. Section 3.0 outlines a proposed schedule to implement the project. Section 4.0 provides KPR's business proposal which details the anticipated project cost and includes a Certificate of Insurance. Section 5.0 provides the qualifications and experience of KPR and proposed project team members.



LEGEND

- MW-I MONITORING WELL LOCATION.

VALUES IN $\mu \mathrm{G} / \mathrm{KG}$.

| $\begin{aligned} & \text { ENVIAOWGENTAL CONSULTATION REMEDIATION } \\ & \text { KRIKAU PYLES RYSIEWICZ AND ASSOCIATES, INC. } \\ & \frac{\text { 14665 West Lisbon Road, Suite } 2 \text { B Brookfield, Wisconsin } 53005 \text { Telephone } 262-781-0475}{\text { Westmont, Illinois } 630-325-1300 \text { - Dyer, Indiana } 219-865-6848} \end{aligned}$ | BELOIT RD. VALET CLEANERS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | AREA OF PCE IMPACTS IN UNSATURATED SOILS. VALUES IN $\mu \mathrm{g} / \mathrm{kg}$ |  |  |  |
|  | Scale: $1^{\prime \prime}=40^{\circ}$ |  | Date: December 6, 2002 |  |
|  | KPR Proposal No. 21402 |  |  | FIGURE 1 |

### 2.0 TECHNICAL APPROACH

To fulfill the project objectives and requirements set forth in the RFP, KPR has developed a technical approach that consists of the following tasks:

- Task 1 - Design Data Generation and Design Report
- Task 2 - Permitting and Obtaining Commodity Bids/Contracting
- Task 3 - Initial Application/Injection
- Task 4 - Verification Sampling
- Task 5 - Supplemental Application/Injection and Verification Sampling (if necessary)
- Task 6 - Disposal of Investigation Derived Waste Drums
- Task 7 - Soil Cleanup Report
- Task 8 - Ground Water Natural Attenuation Monitoring
- Task 9 - Closure Request

The scope of each task is discussed separately below.

### 2.1 Task 1 - Design Data Generation and Design Report

### 2.1.1 Design Data Generation

To adequately develop a remedial design report for WDNR approval, the following design data gaps have been identified in the existing site characterization:

- Total organic carbon data for the soils needs to be generated to calculate a site specific cleanup standard for the PCE using WDNR accepted Soil Screening Level (SSL) equations. It has been KPR's experience that using site specific organic carbon data usually results in increased soil residual contaminant levels (RCLs) which will help in controlling remediation costs by decreasing the volume of soil requiring treatment.
- A chemical demand study for the soils to determine the amount of chemical that will need to be injected to treat the soil to the desired cleanup standard. It is KPR's experience that this will be substantially higher than just using established stoichiometric relationships from published sources. This is also recommended by the major supplier of permanganate chemical in the Midwest (Carus Chemical).
- A pilot injection test in the field to properly determine injection point spacing in the full system design. This will ensure a smooth and expedient full scale implementation and reduce the likelihood for the need for subsequent additional applications/injections.

To fulfill the noted additional data needs in support of the remedial design, KPR will perform an injection pilot test in the vicinity of existing monitoring well MW-3. The test will consist of the drilling of three to five test injection points spaced approximately 5 feet apart. A seven percent solution of sodium permanganate will be used in the pilot study. Concurrent with this effort, up to four soil samples will be collected for TOC analysis to assist in calculating a site specific RCL for PCE. In addition, a sufficient volume of impacted soil will be collected for the demand study bench test to determine the amount of chemical that will be needed for full scale implementation.

### 2.1.2 Design Report

Upon receipt of all analytical data from the design data generation activities, KPR will develop a Design Report for subsequent submittal to the WDNR for approval. The Design Report will include, but not be limited to:

- Information required in NR 724.05(2).
- Site description.
- Detailed description of the proposed remedial action.
- Engineering criteria and calculations used for the design.
- All treatability and pilot test information.
- Design plans and specifications.
- Permit requirements.
- Regulatory issue summary and proposed cleanup criteria.
- Verification sampling and monitoring plan.
- Operation and maintenance needs.
- An implementation schedule.

A draft of the Design Report will be provided to the client for review/comment. A final will be issued for submittal to the WDNR incorporating the comments, as appropriate.

As part of the design process, the owners of any underground utilities within the treatment area will be contacted to determine the nature of the construction material for the utility line. This will be done to check the compatibility of the material relative to the permanganate injection chemical proposed for this project.

### 2.2 Task 2 - Permitting and Obtaining Commodity Bids/Contracting

Upon approval of the design report KPR will initiate obtaining required permits and contracting support services. The primary permitting issue will be an underground injection permit. This should be readily obtained based on WDNR approval of the Design Report.

To maximize eligible reimbursable costs under DERP, all commodity services required for the implementation of the proposed remedy will need to be bid out in accordance with NR 169.21. KPR will obtain at least three competitive bids by qualified, Wisconsin licensed contractors for each commodity service. At this time these services are expected to include geoprobing/drilling and laboratory analysis. Each set of bids will be compared and evaluated. The most cost effective bidder will be identified and contracting recommendations will be provided to the client along
with comparison summary tables and copies of each bid. Orin Technologies is a highly specialized injection contractor and, therefore, not considered a commodity service.

### 2.3 Task 3 - Initial Application/Injection

Once WDNR approval of the Design Report is received the KPR team will initiate implementation of the proposed remedy. For the purposes of this proposal the remedy will consist of treating the PCE impacted, unsaturated soils by the injection of sodium permanganate. KPR proposes sodium permanganate as opposed to potassium permanganate specified in the proposed conceptual remedy because it can be delivered to the site already in liquid form and it can be used in more concentrated solution without precipitation issues. Potassium permanganate would need to be delivered to the site in powder form. The powder would then need to be solubilized and mixed on site. The solubility of potassium permanganate is very dependant on temperature so the injection fluid would need to be kept above a specific temperature for a desired injection fluid concentration. These issues become moot with the use of sodium permanganate. The oxidation effect on the PCE will be the same.

For the purposes of this proposal, approximately 120 geoprobe injection points will be used for the initial application. The application will cover the area shown on Figure 1 within the 500 $\mathrm{ug} / \mathrm{kg}$ PCE contour. This basically allows for an off-set 10 -foot injection grid. Point locations will be marked in the field and moved accordingly based upon subsurface utility locations. The actual spacing may also be altered based on the results of the pilot test identified in Task 1, however, based on KPR's project team experience the proposed spacing is a reasonable costing assumption. The injection will target the 2 to 8 -feet depth interval which has been documented to be the impacted zone above ground water.

Assuming a $7 \%$ solution of sodium permanganate, a total of approximately 6,000 gallons of solution will be injected through the probes. This estimate is based on KPR project team experience at other similar sites. The actual amount of chemical that will be required will be determined based upon the demand study to be performed as part of Task 1. Exact procedures for the injections will be specified in the Design Report in Task 1.

Injections will proceed at one or two geoprobe locations at a time. Upon completion of injection, each geoprobe hole will be properly abandoned.

### 2.4 Task 4 - Verification Sampling

Approximately one week after the initial injection, a round of verification soil samples will be collected using a geoprobe sampler. The verification sampling will be done on a 20 square foot spacing over the treatment area resulting in approximately 35 verification soil samples. The samples will be collected with a geoprobe sampler. Geoprobe borings will extend to 8 feet in depth. Samples will be screened in the field for total volatile organic vapors using a photoionization detector (PID). The sample interval with the highest PID reading from each borehole will be collected for subsequent analysis. Samples will be weighed and placed directly into laboratory prepared containers for off-site analysis of target chlorinated compounds of PCE,
trichloroethene, cis-1,2-dichloroethene and vinyl chloride (i.e., PCE and its breakdown products).

A second round of verification sampling may also be necessary as discussed in Task 5 below. The second round of sampling assumes 9 additional samples for the purposes of this proposal.

### 2.5 Task 5 - Supplemental Application/Injection and Verification Sampling

Based on the results of the verification sampling, a second chemical injection may be needed over any remaining hotspot areas. This task may not be necessary, however, for the purposes of this proposal it is assumed that approximately 25 percent of the treatment area may need reinjection (i.e. 30 injection points). The supplemental injection area will be marked off in the field and the same procedures will be used as discussed in Task 3. This will be followed up by a second round of verification samples as discussed in Task 4.

### 2.6 Task 6 - Disposal of Investigation Derived Waste Drums

KPR will arrange for and coordinate the disposal of the investigation derived waste drums currently on site. Based on the information provided in the RFP, there are fifteen 55 -gallon drums of investigation derived waste soil and six 55 -gallon drums of water. The drums will be sampled and profiled for proper disposal. The soil drums will be emptied into a roll-off box for bulk disposal and a composite sample will be collected from the box. This proposal assumes that a Protocol B analysis will be required, however, this may be reduced based upon landfill requirements. One composite water sample will be collected from the water drums and analyzed for VOCs. Assuming the water can be disposal as non-hazardous, it will be bulked for transport to a local waste water treatment plant. Depending on the analytical results, the materials will either be transported and disposed as a non-hazardous special waste or as a hazardous waste based on characteristic. The disposal cost in this proposal assumes non-hazardous disposal.

### 2.7 Task 7 - Soil Cleanup Report

Upon successful completion of injection treatment activities and investigation derived waste disposal, a soil cleanup report will be issued documenting the remediation activities. The report will include:

- Project Background
- Project Objective(s)
- Description of Field Activities
- Summary of Verification Sampling Data
- Investigation Derived Waste Disposal Documentation

A draft of the report will be provided to the client for review/comment. A final will be issued for submittal to the WDNR incorporating the comments, as appropriate.

### 2.8 Task 8 - Ground Water Natural Attenuation Monitoring

Upon completion of soil remediation activities, natural attenuation monitoring of ground water will be initiated. The following scope of monitoring activities is included as part of this proposal:

- Existing monitoring wells MW-1, MW-2, MW-3, MW-4, MW-9, and MW-10 will be monitored on a quarterly basis for two years in accordance with WDNR guidance. In addition one duplicate and one field blank will be collected and analyzed for Quality Assurance/Quality Control purposes. This will yield 8 samples per round of sampling.
- Ground water sampling will be performed in accordance with industry standards.
- Field measurements of water table elevation, dissolved oxygen (DO), oxidation-reduction potential (ORP), pH , specific conductance and temperature will be collected from each well.
- All samples from each round will be analyzed for VOCs.
- All samples for the first two rounds of sampling will be additionally analyzed for nitrate, manganese, ferrous iron, sulfate, and alkalinity. After the first two rounds of sampling, these additional parameters will be analyzed only on an annual basis.

As noted above, this proposal assumes quarterly sampling for a two year period based on WDNR guidance. However, the second year of monitoring may be moved to semi-annual based on noted contaminant concentration trends after the first year of sampling.

Ground water monitoring data will be summarized and submitted to the WDNR using the Form 4400-194 submittal on a semi-annual basis.

### 2.9 Task 9 - Closure Request

Upon receipt of the ground water monitoring analytical data, an assessment will made to determine if it is appropriate to proceed with completing a Site Closure Request Package for submission to the WDNR. The closure package will consist of completing the required Case Summary and Closeout Form (Form 4400-202) along with the following information:

- Case History/Summary.
- Regional Location Map.
- Site Map.
- Certified Survey Map (provided by Client).
- Pre-Remedial Soil Sampling Locations.
- Post-Remedial Soil Sampling Locations.
- Geologic Cross-Sections.
- Ground Water Sample Locations.
- Ground Water Flow Map.
- Summary Soil Data Table(s).
- Summary Ground Water Data Table(s).
- Copy of Most Recent Deed (to be provided by Client).
- Other Pertinent Information.

A draft of the closure package will be provided to the Client for review/comment. A final will be issued for submittal to the WDNR incorporating the comments, as appropriate.

### 3.0 ANTICIPATED PROJECT SCHEDULE

A detailed project schedule will be provided as part of the Design Report submittal. An anticipated project schedule for the first seven tasks (i.e., through completion of the soil cleanup report) is provided in Table 3-1 at the end of this section. Ground water monitoring will require 2 years to complete as discussed in Section 2.8 of this proposal. This timeframe may be shortened or extended based upon the results of the monitoring. Once it is determined that it is appropriate to submit a Case Closure package, this task will require two to three weeks to complete.

Table 3-1. Anticipated Project Schedule for Tasks 1 through 7.

| TASK NO. | TASK DESCRIPTION | PROJECT WEEK | CUMULATIVE WEEKS <br> FROM AUTHORIZATION <br> TO PROCEED |
| :---: | :--- | :---: | :---: |
| 1 | Design Data Generation and Design Report | 1 to 4 | 4 |
| 2 | WDNR Design Report Review | 4 to 8 | 8 |
| 3 | Permitting and Obtaining Commodity Bids | 8 to 10 | 10 |
| 4 | Initial Application/Injection | 10 to 12 | 12 |
| 5 | Verification Sampling/Analysis <br> Applemental | 13 to 16 | 16 |
| 6 | Disposation/Injection/Verification/Analysis of Investigation Derived Waste | 17 to 21 | 21 |
| 7 | Soil Cleanup Report | 10 to 12 | No Change on Cumualtive <br> Number |

Note: If Task 5 is deterimined to be not necessary, the project duration for these tasks will be reduced by 4 weeks.

### 4.0 BUSINESS PROPOSAL

This section provides KPR's business proposal. Since the exact scope of remediation activities can not be determined until the completion of Task 1 , this cost is being provided as a good faith estimate. Commodity contractor costs provided in this proposal are based on individual bids from qualified firms to assist in providing a realistic, good faith cost estimate. These bids are provided in Appendix A as backup documentation to this bid. The following bids were obtained from commodity contractors to assist in this proposal:

- Transport and Disposal - North Shore Environmental Construction, Inc.
- Analytical Laboratory - TestAmerica, Inc.
- Geoprobe Drilling - Mid-America, Inc.

These services will be competitively bid as part of Task 2 activities when the scope of the remediation work is finalized and approve.

The Orin Remediation Technology bid is also provided in Appendix A. This is a highly specialized remediation firm focusing on chemical injection technology which includes specialized manufacturer equipment for the injection of permanganate. Due to the specialized nature of this work, it does not appear to fit the definition of a commodity service for the purposes of bidding.

The total contract bid summary is provided on Table 4-1 at the end of this section. The bid summary is supported by individual task costing sheets also provided at the end of this section. The overall KPR cost estimate is based on the following assumptions:

- The Client will contract and be billed directly by all contractors. If KPR is requested to contract these services, a 15 percent fee will be charged for the administration and additional potential liability incurred. This fee is not reimbursable to the client under the DERF program.
- Task 1 - One day of pilot test field activities. With 100 gallons of sodium permanganate injection into three to five probes.
- Task 2 - The only required permit is for underground injection.
- Task 3 - A total of 10 days in the field with a total of 6,000 gallons of sodium permanganate ( 7 percent solution) being injected into 120 geoprobe injection points. A cleanup standard of $500 \mathrm{ug} / \mathrm{kg}$. No injection points will be required off the property (i.e., no injection points within the streets).
- Task 4 - Two days of geoprobe sampling after the initial injection with a total of 35 verification samples collected for target chlorinated VOC compound analysis. Standard analytical turn around.
- Task 5 - A total of three days in the field with 1,500 gallons of sodium permanganate injected into approximately 30 injection points. One day of additional geoprobe sampling activities for the collection of 9 verification soil samples to be analyzed for target chlorinated VOC compounds.
- Task 6 - Transport and disposal of 15 drums of investigation derived waste soils and 6 drums of investigation derived waste water for disposal as non-hazardous waste.
- Task 7 - One round of revisions based on Client review comments.
- Task 8 - Eight rounds of quarterly ground water sampling from 6 wells with 1 duplicate and 1 field blank sample per round for QA/QC purposes. This yields a total of 8 ground water samples per round. The samples will be analyzed for the parameters and frequencies defined in Section 2.8 above. Two annual monitoring reports.
- Task 9 - One round of revisions based on Client review comments.

Any additional meetings or agency negotiations, etc., will be charged on a time and materials basis in accordance with the rates provided on our costing sheets. This includes any changes or revisions beyond those covered in the assumptions above.

As required in the RFP, a copy of our Certificate of Insurance is provided in Appendix B. We have also included a copy of KPR's standard Environmental Services Contract in Appendix B. The following certifications are also made:

- KPR certifies that the contracts services will comply with all applicable requirements under state statutes 292.65 and WAC chapters NR 700 through 728.
- KPR will make available to the WDNR upon request, for inspection and copying, all of our documents and records related to this project.

Table 4-1. Estimated Project Cost Summary

|  |  |  | Contractors |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Task | KPR Labor | Ext.Expenses | Orin <br> Remediation | Analytical | Chem. Demand Study | Geoprobe | Transport/ Disposal | Totals |
| 1) Design Data Generation and design | \$4,615 | \$250 | \$10,446 | \$135 | \$100 | \$1,487 | \$0 | \$17,033 |
| 2) Permitting and Commodity Bids | \$975 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$975 |
| 3) Initial <br> Application/Injection | \$8,045 | \$1,550 | \$78,913 | \$0 | \$0 | \$17,338 | \$0 | \$105,846 |
| 4) Verification Sampling | \$2,645 | \$525 | \$0 | \$1,925 | \$0 | \$4,424 | \$0 | \$9,519 |
| 5) Supplemental Application/Injection | \$3,845 | \$620 | \$25,828 | \$495 | \$0 | \$6,808 | \$0 | \$37,596 |
| 6) Disposal of Investigation Drived | \$405 | \$0 | \$0 | \$825 | \$0 | \$0 | \$3,750 | \$4,980 |
| 7) Soil Cleanup Report | \$2,155 | \$75 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,230 |
| 8) Ground Water Natural Attenuation Monitoring | \$9,015 | \$1,970 | \$0 | \$6,400 | \$0 | \$0 | \$0 | \$17,385 |
| 9) Closure Report | \$2,435 | \$75 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,510 |
| Totals | \$34,135 | \$5,065 | \$115,187 | \$9,780 | \$100 | \$30,057 | \$3,750 | \$198,074 |

## KPR TASK COSTING SHEET

Project: Beloit Rd. Valet Cleaners
Task: 1 - Design Data Generation and Design Report

| Professional Labor | Rate (\$/Hr.) |  | Units | Total |
| :---: | :---: | :---: | :---: | :---: |
| Principal/Proj. Mgr. | \$125 |  | 16 | \$2,000 |
| Sr. Eng./Sci. | \$85 |  | 0 | \$0 |
| Project Eng./Sci. | \$70 |  | 32 | \$2,240 |
| CADD | \$60 |  | 4 | \$240 |
| Admin. Asst/ Word Proc. | \$45 |  | 3 | \$135 |
|  |  |  | tal Labor | \$4,615 |
| External Expenses | Rate | Type | Units | Total |
| Photoionization Detector | \$75 | Daily | 1 | \$75 |
| Field Vehicle | \$65 | Daily | 1 | \$65 |
| Sampling Supplies | \$20 | Daily | 1 | \$20 |
| Reproduction | \$75 | Each | 1 | \$75 |
| PPE - Modified Level D | \$15 | Daily | 1 | \$15 |
| PPE - Level C | \$35 | Daily | 0 | \$0 |
|  |  |  | otal Exp. | \$250 |
| Contractors | Rate | Type | Units | Total |
| Orin Rem. Tech. | \$10,446 | See | dix A | \$10,446 |
| Analytical | \$45 | TOC | 3 | \$135 |
| Carus Chem. Demand Study | \$100 | Each | 1 | \$100 |
| Geoprobe | \$1,487 | See | dix A | \$1,487 |
|  |  |  | Contractors | \$12,168 |
|  |  |  | SK TOTAL: | \$17,033 |

## KPR TASK COSTING SHEET

Project: Beloit Rd. Valet Cleaners
Task: 2 - Permitting and Commodity Bids


## KPR TASK COSTING SHEET

Project: Beloit Rd. Valet Cleaners
Task: 3 - Initial Application/InjectionPermitting and Commodity Bids

| Professional Labor | Rate (\$/Hr.) | Units | Total |
| :---: | :---: | :---: | :---: |
| Principal/Proj. Mgr. | \$125 | 8 | \$1,000 |
| Sr. Eng./Sci. | \$85 | 0 | \$0 |
| Project Eng./Sci. | \$70 | 100 | \$7,000 |
| CADD | \$60 | 0 | \$0 |
| Admin. Asst/ Word Proc. | \$45 | 1 | \$45 |
|  |  | Total Labor | \$8,045 |
| External Expenses | Rate | Type Units | Total |
| Photoionization Detector | \$75 | Daily 10 | \$750 |
| Field Vehicle | \$65 | Daily 10 | \$650 |
| Sampling Supplies | \$20 | Daily | \$0 |
| Drums | \$55 | Each | \$0 |
| PPE - Modified Level D | \$15 | Daily 10 | \$150 |
| PPE - Level C | \$35 | Daily 0 | \$0 |
|  |  | Total Exp. | \$1,550 |
| Contractors | Rate | Type Units | Total |
| Orin Rem. Tech. | \$78,913 | See Appendix A | \$78,913 |
| Analytical | \$0 |  | \$0 |
| Geoprobe | \$11,000 | See Appendix A | $\begin{gathered} \$ 17,338 \\ \$ 0 \\ \hline \end{gathered}$ |
|  |  | Subtotal Contractors | \$96,251 |
|  |  | TASK TOTAL: | \$105,84 |

## KPR TASK COSTING SHEET

Project: Beloit Rd. Valet Cleaners
Task: 4 - Verification Sampling

| Professional Labor | Rate (\$/Hr.) | Units | Total |
| :---: | :---: | :---: | :---: |
| Principal/Proj. Mgr. | \$125 | 4 | \$500 |
| Sr. Eng./Sci. | \$85 | 0 | \$0 |
| Project Eng./Sci. | \$70 | 30 | \$2,100 |
| CADD | \$60 | 0 | \$0 |
| Admin. Asst/ Word Proc. | \$45 | 1 | \$45 |
|  |  | Total Labor | \$2,645 |
| External Expenses | Rate | Type Units | Total |
| Photoionization Detector | \$75 | Daily | \$225 |
| Field Vehicle | \$65 | Daily | \$195 |
| Sampling Supplies | \$20 | Daily | \$60 |
| Drums | \$55 | Each 0 | \$0 |
| PPE - Modified Level D | \$15 | Daily | \$45 |
| PPE - Level C | \$35 | Daily 0 | \$0 |
|  |  | Total Exp. | \$525 |
| Contractors | Rate | Type Units | Total |
| Orin Rem. Tech. | \$0 | See Appendix A | \$0 |
| Analytical | \$55 | Target VOC 35 | \$1,925 |
| Geoprobe | \$3,000 | See Appendix A | $\begin{gathered} \$ 4,424 \\ \$ 0 \end{gathered}$ |
|  |  | Subtotal Contractors | \$6,349 |

## KPR TASK COSTING SHEET

Project: Beloit Rd. Valet Cleaners
Task: 5 - Supplemental Injection and Verification Sampling (if needed)

| Professional Labor | Rate (\$/Hr.) | Units | Total |
| :---: | :---: | :---: | :---: |
| Principal/Proj. Mgr. | \$125 | 8 | \$1,000 |
| Sr. Eng./Sci. | \$85 | 0 | \$0 |
| Project Eng./Sci. | \$70 | 40 | \$2,800 |
| CADD | \$60 | 0 | \$0 |
| Admin. Asst/ Word Proc. | \$45 | 1 | \$45 |
|  |  | Total Labor | \$3,845 |
| External Expenses | Rate | Type Units | Total |
| Photoionization Detector | \$75 | Daily | \$300 |
| Field Vehicle | \$65 | Daily | \$260 |
| Sampling Supplies | \$20 | Daily | \$0 |
| Drums | \$55 | Each | \$0 |
| PPE - Modified Level D | \$15 | Daily 4 | \$60 |
| PPE - Level C | \$35 | Daily 0 | \$0 |
|  |  | Total Exp. | \$620 |
| Contractors | Rate | Type Units | Total |
| Orin Rem. Tech. | \$25,828 | See Appendix A | \$25,828 |
| Geoprobe - Injection | \$4,500 | See Appendix A | \$5,308 |
| Geoprobe - Verif. Sampling | \$1,500 | See Appendix A | \$1,500 |
| Analytical | \$55 | Target VOC 9 | \$495 |
|  |  | Subtotal Contractors | \$33,131 |

## KPR TASK COSTING SHEET

## Project: Beloit Rd. Valet Cleaners

Task: 6 - Disposal of Investigation Derived Waste
Professional Labor
Principal/Proj. Mgr.
Sr. Eng./Sci.

| KPR TASK COSTING SHEET |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Project: Beloit Rd. Valet Cleaners |  |  |  |  |
| Task: 6 - Disposal of Investigation Derived Waste |  |  |  |  |
| Professional Labor | Rate (\$/Hr.) |  | Units | Total |
| Principal/Proj. Mgr. | \$125 |  | 1 | \$125 |
| Sr. Eng./Sci. | \$85 |  | 0 | \$0 |
| Project Eng./Sci. | \$70 |  | 4 | \$280 |
| CADD | \$60 |  | 0 | \$0 |
| Admin. Asst/ Word Proc. | \$45 |  | 0 | \$0 |
|  |  | Total Labor |  | \$405 |
| External Expenses | Rate | Type | Units | Total |
| Photoionization Detector | \$75 | Daily | 0 | \$0 |
| Field Vehicle | \$65 | Daily | 0 | \$0 |
| Sampling Supplies | \$20 | Daily | 0 | \$0 |
| Drums | \$55 | Each | 0 | \$0 |
| PPE - Modified Level D | \$15 | Daily | 0 | \$0 |
| PPE - Level C | \$35 | Daily | 0 | \$0 |
|  | Total Exp. |  |  | \$0 |
| Contractors | Rate | Type | Units | Total |
| North Shore Env. Constr, Analytical Profile Sampling | \$0 | See A | ndix A | \$3,750 |
|  | \$825 | Prot. B | 1 | $\$ 825$ |
|  |  | Subtotal Contractors |  | \$4,575 |
|  | TASK TOTAL: |  |  | \$4,980 |

Project Eng./Sci. $\$ 70$
CADD
$\$ 60$
Admin. Asst/ Word Proc.

External Expenses
Photoionization Detector
Field Vehicle
Sampling Supplies
Drums
PPE - Modified Level D
PPE - Level C

Contractors
North Shore Env. Constr,
Analytical Profile Sampling

## KPR TASK COSTING SHEET

Project: Beloit Rd. Valet Cleaners
Task: 7 - Soil Cleanup Report
Professional Labor
Principal/Proj. Mgr.
Sr. Eng./Sci.
Rate (\$/Hr.)
\$125
Project Eng./Sci.
CADD
\$85

Admin. Asst/ Word Proc.
$\$ 70$
$\$ 60$
Ad Ast Word Pro

External Expenses
Photoionization Detector
Field Vehicle
Sampling Supplies
Reproduction
PPE - Modified Level D
PPE - Level C

Contractors
\$45

## Rate

\$75
\$65
$\$ 20$
\$75
\$15
\$35

Rate

$$
\begin{aligned}
& \frac{\text { Type }}{\text { Daily }} \\
& \text { Daily } \\
& \text { Daily } \\
& \text { Each } \\
& \text { Daily } \\
& \text { Daily }
\end{aligned}
$$

| Units | Total |
| :---: | :---: |
| 8 | \$1,000 |
| 0 | \$0 |
| 12 | \$840 |
| 3 | \$180 |
| 3 | \$135 |
| Total Labor | \$2,155 |
| Units | Total |
| 0 | \$0 |
| 0 | \$0 |
| 0 | \$0 |
| 1 | \$75 |
| 0 | \$0 |
| 0 | \$0 |
| Total Exp. | \$75 |
| Units | Total |


|  | $\$ 0$ |
| :--- | :--- |
| Subtotal Contractors | $\$ 0$ |

TASK TOTAL: $\$ 2,230$

## KPR TASK COSTING SHEET

## Project: Beloit Rd. Valet Cleaners

Task: 8 - Ground Water Natural Attenuation Monitoring (8 Quarters plus reporting)

| Professional Labor | Rate (\$/Hr.) |  | Units | Total |
| :---: | :---: | :---: | :---: | :---: |
| Principal/Proj. Mgr. | \$125 |  | 8 | \$1,000 |
| Sr. Eng./Sci. | \$85 |  | 0 | \$0 |
| Project Eng./Sci. | \$70 |  | 110 | \$7,700 |
| CADD | \$60 |  | 3 | \$180 |
| Admin. Asst/ Word Proc. | \$45 |  | 3 | \$135 |
|  |  |  | Total Labor | \$9,015 |
| External Expenses | Rate | Type | Units | Total |
| Photoionization Detector | \$75 | Daily | 8 | \$600 |
| Field Vehicle | \$65 | Daily | 8 | \$520 |
| Sampling Supplies | \$50 | Event | 8 | \$400 |
| Meters | \$50 | Event | 8 | \$400 |
| Reproduction | \$25 | Ea | 2 | \$50 |
| PPE - Level C | \$35 | Daily | 0 | \$0 |
|  |  |  | Total Exp. | \$1,970 |
| Contractors | Rate | Type | Units | Total |
| Analytical | \$85 | VOC | 64 | \$5,440 |
|  | \$8 | Nitrate | 24 | \$192 |
|  | \$8 | Mn | 24 | \$192 |
|  | \$8 | Fe | 24 | \$192 |
|  | \$8 | Sulfate | 24 | \$192 |
|  | \$8 | Alkalinity | 24 | $\begin{gathered} \$ 192 \\ \$ 0 \end{gathered}$ |
|  |  | Subtotal Contractors |  | \$6,400 |
|  |  | TASK TOTAL: |  | \$17, |

## KPR TASK COSTING SHEET

Project: Beloit Rd. Valet Cleaners
Task:9-Closure Request

| Professional Labor | Rate $(\$ / \mathrm{Hr}$ |
| :--- | :---: |
| Principal/Proj. Mgr. | $\$ 125$ |
| Sr. Eng./Sci. | $\$ 85$ |
| Project Eng./Sci. | $\$ 70$ |
| CADD | $\$ 60$ |
| Admin. Asst/ Word Proc. | $\$ 45$ |

Photoionization Detector $\quad \frac{\text { Rate }}{}$
Field Vehicle \$65
Sampling Supplies $\$ 100$
Reproduction \$75
PPE - Modified Level D
PPE - Level C

Contractors

| Rate (\$/Hr.) |  | Units |
| :---: | :---: | :---: |
| \$125 |  | 8 |
| \$85 |  | 0 |
| \$70 |  | 16 |
| \$60 |  | 3 |
| \$45 |  | 3 |
|  |  | Total Labor |
| Rate | Type | Units |
| \$75 | Daily | 0 |
| \$65 | Daily | 0 |
| \$100 | Daily | 0 |
| \$75 | Each | 1 |
| \$15 | Daily | 0 |
| \$35 | Daily | 0 |
|  |  | Total Exp. |
| Rate | Type | Units |


| Total |
| :---: |
| $\$ 1,000$ |
| $\$ 0$ |
| $\$ 1,120$ |
| $\$ 180$ |
| $\$ 135$ |
| $\$ 2,435$ |

TASK TOTAL:
\$2,510

### 5.0 QUALIFICATIONS AND EXPERIENCE

### 5.1 Company Overview

Krikau, Pyles, Rysiewicz \& Associates, Inc. (KPR) is a multi-disciplinary firm providing high quality environmental consulting and remediation services to a wide variety of clients. KPR has the ability to provide complete turn-key environmental services to address our client's needs. We have extensive experience in all phases of environmental compliance, site investigation, evaluation of remedial alternatives, remedial design and remedial construction.

KPR was founded in 1993 by three highly experienced individuals (Fred Krikau, David Pyles and Thomas Rysiewicz) from the steel manufacturing and environmental remediation industries. In 2002, Richard Gnat joined the firm as a principal with over 19 years of professional experience in environmental consulting and remediation expanding our services to the Wisconsin market. The combined industrial and consulting/remediation backgrounds of these individuals coupled with their technical expertise has enabled KPR to develop a reputation for innovation and excellence that has resulted in practical and cost-effective solutions to complex environmental problems.

KPR currently has offices in Illinois, Indiana and Wisconsin performing work for clients across the United States. Our clientele include, but are not limited to, the industrial manufacturing sector (steel, electronics and automotive), the energy sector (natural gas and electrical energy producers and distributors), the chemical and bulk liquid storage sector (tank terminals), the real estate sector (property transaction support) and the legal sector (litigation support and expert witness). All of our technical staff have advanced technical degrees and/or professional certifications in their discipline.

Our Mission is: $\quad$ To provide our clients with high quality technical services to assist in solving their environmental problems to eliminate, minimize and/or manage their short and long term environmental liabilities.

### 5.2 Project Team

## Krikau, Pyles, Rysiewicz \& Associates, Inc.

Richard R. Gnat, P.G. - Richard will be the assigned project manager. He is a Senior Project Manager and corporate principal in the Brookfield, Wisconsin office. He has over 19 years of professional experience in the environmental site investigation and remediation industry and is a Wisconsin registered Professional Geologist. Soil remediation experience has included developing and managing a variety of large-scale projects including both in-situ and ex-situ soil treatment technologies such as solidification, stabilization chemical oxidation and bioremediation. Among the most recent were the in-situ treatment of approximately 11,000 cubic yards of metals and volatile organic solvent impacted soils using a combination of stabilization, enhanced
thermal stripping and chemical oxidation using potassium permanganate. Groundwater remediation projects have included interceptor trenches, augmentation of in-situ biodegradation, pump and treat systems, in-situ chemical oxidation and the use of natural attenuation evaluations to meet cleanup objectives.

Site investigation experience has included over 100 projects as the technical lead for the planning and implementation of CERCLA Remedial Investigations/Feasibility Studies (RI/FSs), RCRA Facility Investigations (RFIs), site investigations in support of industrial/brownfield property transactions, UST investigations and landfill siting studies. Investigation methods have included soil/bedrock drilling, monitoring well installation/sampling, use of field screening technologies and in-field analytical laboratories to guide real-time field decisions, well tests (single and multiple well) and geophysical surveys.

Impaired property transfer/transaction support includes over 100 Phase I/II ESAs for clients throughout the country, Central America and England. Currently also involved with a number of Brownfield property transaction projects in southeastern Wisconsin including a condominium conversion planned for a former tannery. Actively involved in the National Brownfield Association and is part of a Wisconsin Department of Natural Resources rule making committee associated with the development of brownfield grant eligibility requirements and scoring guidelines for evaluating grant submittals.

Thomas J. Rysiewicz, P.E. - Tom will provide the engineering QA/QC for this project. Tom Rysiewicz is a corporate founder and a Wisconsin registered Professional Engineer. He has over twenty-seven (27) years of experience in the environmental field, including significant industrial experience as an environmental professional for a Fortune 500 company that had facilities located throughout the United States. Specifically involved in the development of environmental regulations (air, water, waste and toxic substances) affecting operations, determining their ultimate impact on the company, and developing measures to maintain compliance to resulting standards. Interfaced and negotiated with governmental agencies on all levels; federal, state, county and local, during various technical/legal environmental matters. Obtained necessary construction and operating permits for a wide range of industrial operations. Implemented sampling and monitoring programs of air and water discharges. Performed regulatory compliance audits and site assessments for a wide variety of industrial and commercial clients. Managed and coordinated the cost effective removal and closure of a multitude of underground tank and associated fuel piping systems and remediation of a variety of contaminated sites including superfund sites.

Timothy Stohner - Tim will assist the project manager as the field engineer/scientist. He has over two (2) years of environmental consulting experience in all facets of the field. Tim routinely performs site investigation and remediation projects for private sector clients that participate within state environmental programs.

## ORIN Remediation Technologies

Larry Kinsman - Larry is an injection remediation technology specialist that will be contracted to augment KPR team capabilities regarding oxidation chemical injection. Larry and his firm will supply the proprietary injection equipment to convert the geoprobe points for chemical injection. His expertise will also be used for input into the Design Report and in the field during the pilot test and full scale injection. Larry has over 7 years of professional experience and has successfully treated PCE impacted soils with permanganate at dry cleaner sites at various locations throughout the Midwest. He is part of the Interstate Technology Regulator Corporation (ITRC) which is an organization that writes guidance documents and provides internet training to regulator groups and the public about chemical oxidation.

### 5.3 Relevant KPR Team Project Descriptions

The following are descriptions of some ongoing, or recently completed, projects by KPR. Additional information can be provided upon request.

## Former Dry Cleaner Soil Remediation - Hartford, Wisconsin

Facility Description: The subject property occupies an area of approximately one-half acre. The southwest portion of the property is occupied by a single story commercial building (strip mall). The northern portion of the property includes a dry cleaning operation (Clothes Clinic Dry Cleaners). The remainder of the property is either asphalted for parking or grass covered. The dry cleaner has been in operation since 1989, with "wet" dry cleaning operations (i.e., use of perchloroethene (PCE) in the cleaning operation) being performed until 1997. A site investigation and remedial action options evaluation was completed and negotiated identifying the soils to be excavated and disposed as a delisted, non-hazardous waste and the ground water to be addressed through natural attenuation.

Project Activities: KPR was contracted to develop and oversee the implementation of the Remedial Action Plan for the site based on the previously negotiated preferred remedial alternative defined above. The remedial action included the excavation and disposal of approximately 1500 tons of PCE impacted soils as a non-hazardous special waste. The soils were transported for disposal to the Superior/Onyx Glacier Ridge Landfill (subtitle D facility) near Horicon, Wisconsin. This was the first dry cleaner soil remediation which was negotiated with the WDNR to be delisted and disposed as a non-hazardous waste providing for substantial cost savings over disposal as a hazardous waste.

Impacted ground water remediation will be addressed through monitored natural attenuation. The project is ongoing.

## Former Small Engine Manufacturing Facility - Milwaukee, Wisconsin

Facility Description: This facility occupies one square block of property on the northwest side of Milwaukee. The facility was used to manufacture small engines from 1936 to 1984, and leather luggage from 1910 to 1936. A small portion of the building is currently used for cold warehouse storage and the remainder of the facility is vacant. The owner is currently evaluating redevelopment options.

Project Activities: KPR has been contracted to complete a Phase II site characterization of the property and develop/implement the remedial action plan. The site characterization includes both soil and groundwater. An initial phase of site investigation has identified soil and groundwater impacts with various volatile organics including aromatics and chlorinated solvents. Metals have been shown not to be an issue at this site. KPR has also been requested to develop and implement various other focused remedial activities including a transformer station decommissioning and remediation of associated impacted soils. The remedial action plan for the VOC impacted soils has been submitted to the WDNR and is currently being negotiated. The project is ongoing.

## Bulk Liquid Tank Terminal - Lemont, Illinois

Facility Description: This property contains over 145 aboveground chemical storage tanks ranging in size from 60 K to 2.5 million gallons of capacity. The facility terminals barge, rail-tankers and semi-tanker truck volumes and also blends and packages a variety of chemical products including, chlorinated solvents, ethylene glycols, petroleum solvents, acids, caustics and asphalt. In addition, historical operations have managed and included on-site treatment of steel mill wastes, liquors and heavy end petroleum byproducts.

Project Activities: KPR has been contracted to develop and implement a detailed subsurface characterization of the facility as a result of the release of various chemicals, including free-phase chlorinated solvents. We assisted in assembling a multi-agency work regulatory group involving the Illinois EPA, Illinois Attorney General, Army Corp of Engineers, MWRDGC, and Village of Lemont to conduct a comprehensive site assessment of soil and groundwater throughout the 170 acre terminal. To date, this project required the characterization and sampling of unconsolidated glacial sediments and over 600 -feet of continuous bedrock core, both analytical chemical analysis and geotechnical soil testing, construction of 45 monitoring wells, groundwater sampling and analysis, hydraulic conductivity testing, integration of surface water relationships to the groundwater conditions using a 3 -dimensional groundwater model (MOD-FLOW), surface water modeling (HydroCAD and HEC-RAS ) and a variety of risk assessment tools (Tier III TACO analysis). In addition to these characterization activities, KPR has performed a regional water well survey to identify and sample potable wells that may potentially affected by the past releases. This issue also required the development of a community relations program to address concerned citizens and media inquiries. This project is regarded by the regulatory agencies involved to be a "Model Project" and other
similar projects within Illinois will be fashioned in accordance with the technical merits and protocols developed for this project.

## Redevelopment of a Cement Plant Into Casino Gaming Facility - Gary, Indiana

Facility Description: This property was a 117 acre Lumnite and Portland cement manufacturing facility once owned by U.S. Steel. This facility contained a 100 K -ton rotary kiln, ore milling equipment, packaging operations, numerous large concrete product holding bins and structures, conveyor equipment, a power generation plant with underground substations, a water intake servicing this facility and surrounding refineries and steel mills, a private wastewater treatment plant, and a 109 acre harbor on Lake Michigan.

Project Activities: The subject property was sold in divided sections over a five-year period which allowed for the systematic transition of a 100-year old industrial facility to be redeveloped into a casino gaming complex. KPR conducted a comprehensive assessment of all known environmentally related processes. KPR utilized both conventional drilling technology as well as innovative means to characterize and assess over thirty areas of environmental concern. KPR's assessment work spanned from resolving closure related issues associated with a former RCRA "Chem-fuel" system to the delineation of a variety of hydraulic oil releases, UST issues, a large scale PCB assessment of electrical equipment both within an obsolete five-story powerhouse and flooded subsurface vaults and conduits, KPR also conducted a comprehensive asbestos assessment to quantify materials throughout the plant. KPR managed the regulatory close-out of environmental permits, banked air emission credits and systematically coordinated the removal of manufacturing equipment. Throughout this process KPR was routinely asked to develop planning, cost and related strategy documents to facilitate the real estate negotiations and transactional issues for ownership and legal counsel.

## Wire Manufacturer - Sterling, Illinois

Facility Description: This facility manufactured a variety of similar products to the Waukegan facility, including rolled bar stock, formed construction metal products, a multitude of wire products and coated steel goods. The facility is over 100 years old, approximately 500 acres in size, contains a RCRA landfill and is located along the Rock River. (The facility is currently non-operational and is idled as it has filed for bankruptcy protection.)

Project Activities: KPR assisted in a negotiated settlement of RCRA related violations, developed, submitted and implement a RCRA facility investigation to characterize RCRA units and areas where hazardous materials were believed to have been released. Based upon the results of this environmental assessment, KPR prepared a RCRA closure plan to close the area of issue. KPR utilized TACO Tier II calculations to adjust closure criteria, identified target parameters for the closure sampling program, implemented closure activities, performed sampling with associated QA/QC protocols. These activities
were thoroughly documented in a P.E. Certified Closure report that successfully closed out the outstanding environmental issues and legal obligations of a consent order.

## Dry Cleaner Facility - Columbus, Ohio

Orin Remediation Technologies conducted an in-situ soil and ground water treatment using sodium permanganate to reduce PCE and associated degradation product concentrations. The site consisted of silty clays in a shallow perched water zone. The treatment area was located both inside and outside the dry cleaner facility.

## Dry Cleaning Facility - Detroit, Michigan

Orin Remediation Technologies conducted an in-situ soil and ground water treatment using sodium permanganate to reduce PCE and associated degradation product concentrations. The site consisted of sandy silts in a shallow aquifer. The treatment area was located outside the dry cleaner facility within an area of underground utilities. PCE impacts averaged between 50 and 60 parts per million. After treatment ground water cleanup standards were met.

## Metal Plating Facility - Chicago, Illinois

Orin Remediation Technologies conducted a successful in-situ potassium permanganate remediation of chlorinated solvents at an abandoned plating facility. The treated soil matrix consisted of glacial tills and clays.

### 5.4 References

As requested in the RFP , the following client references are provided:

1) Clothes Clinic, Inc.
P.O. Box 955

West Bend, WI 53095
262-338-5225
Contact: Gerald Butz
2) Jonas Builders, Inc.

3939 W. McKinley Blvd.
Milwaukee, WI 53208
414-342-9201
Contact: Gerald Jonas or Tom Maye
3) Motorola, Inc.

1303 E. Algonquin Rd., $6^{\text {th }}$ Floor
Schaumburg, IL 60196
847-538-4493
Contact: Michael Loch

## APPENDIX A

## Preliminary Contractor Bids Used for Cost Estimating

## Facsimile Transmittal

Date：December 6， 2002
To：Rich Gnat

Company：KPR \＆Associates，Inc．
Phone： 262 781－0475
Fax： 262 781－0478
Total Pages： 5
From：Micheal A Crimaldi
Reference：Dry Cleaner Site，West Allis，Wisconsin．
Message：Attached is the revised cost estimate that you requested． Please give me a call if you have any questions．

Job Scheduled：TBA
Time：TBA

Thank you，
Micheal A Crimaldi
Field Operations Manager
$\qquad$

## Privilege and confidentiallty notlce

This message is intended only for the use of the individual to whom it is addressed and may contain information that is privileged and／or confidential．If the reader of this message is not the intended recipient or the employee or agent responsible for delivering the message to the intended recipient，you are hereby notified that any dissemination， distribution，or copying of this communication is strictly prohibited．If you have received this communication in error， please notify us immediately at（630）365－0600 and return the original message to us at the address above via the U．S． Postal Service．Thank You．

Pilot Testing and Design Data Generation
Phone（630）365－0600 • Fax（630）365－1650 • Toll Free（877）587－9800 • www．madrilling．com

Deotmber 6， 2002
Rich Gnat
KPR \＆Assocince，Inc．
14665 W．Lisbon Road，Sure 28

14665 W．Lisbon Road，Suite 28
Brookfiald，Wisconsin 5300S

Proposal No ：KPR120302－PHC
Client Project $\begin{gathered}\# \text { ：} \\ \text { ：}\end{gathered}$
Phons： 262 781－0475 Fax： $262781-0478$


Location：Dry Cleaner Site，West Allies，Wisconsin．


Payment Terms：Net 30 Days This pmparal is valid for 45 days．
luis proposal is being submitted as an estimate，wifi quantities many vary．A monthly interest change of
$1.5 \%$ will be added to past due invoices．Client is responsible for providing Contractor with informmion pertinent to the project in order to asur proper utility clasnonce．Contractor will contact JUIE for
all work in the Stu i of Nimes，excluding me City of Chicago，unless other arrangements are made．Utility locates
for drilling indoor excavating projects ouxide of illinois will be manged by the Client unless other ammocmertes
are made．Chico will inform Contractor of any known or suspected site hazards or risky．
Your signature below affirms your agreerient to all the aforementioned terms．


Accepted by：
（print name／tute）

Decomber 6， 2002

Rich Gnat
KTR \＆Associates，Ine．
14665 W．Lisbon Road，Suite 28
Brookfield，Wisconsin 53005

Proposal No：KPR1203n2－PHS
Client Project ii：
Phone： $262781-0475$
Fax：$\quad 262781-10478$

Scope of Work：Aclvancice 120 Greoprobeos soil borings to 7th blind drill．mject chemical

> slurry into each boring in quantities as specificd by cliont.

All locations sro insido o Pa strip mill and require concrete coring and the Geoprobeer Hand Care
Chemicals in injoction puurp to be provided by others contract by Client
Level C PPE may be required periodically，bat protective clothing will bo mandatory daily．
NOTE：Client mut give a detailed railgate Heald is Surety roview of the chernicals boing used，bow they must be handled and what firss sid procedures must be administered for say possible expomures to workers．

Location：Dry Cleanor Site West Allia Wiscousin
Location：Midwest Genoration 401 Grecawood Avenue，Waukegan，Mlinois

| Description |  | Amount | Unit | Quantisy |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Public Utility Locate＊ | \＄ | 125.00 | lump sum | CIIENT |  |  |
| Geoprobeth Services－3 Man Creq＇ |  |  |  |  |  |  |
| Mobilization | \＄ | 250.00 | lump | 1 | \＄ | 250.00 |
| 8 hour min © \＄1 $15.00 / \mathrm{kr}$ |  | 960.00 | day | 10 |  | 9，600．00 |
| Aller 8 hours（a）\＄155．00／hr |  | 120.00 | hour |  |  |  |
| Docon Equipment |  | 120.00 | day | 10 |  | 1，200．00 |
| Mascrocare Lincrs |  | 4.00 | pach |  |  |  |
| Knockout Poinls |  | 20.00 | each | 120 |  | 2，400．00 |
| Coring Machinc and Gcnerntor |  | 150.00 | lump | 10 |  | 1，500．00 |
| Bentomite Chips／Granular |  | 12.00 | bag | 60 |  | 720.00 |
| Concrete |  | 10.00 | bag | 1 |  | 10.00 |
| 55 Gallon Drum |  | 35.00 | each |  |  |  |
| Polycoated Tyvek＊Suites |  | 22.00 | eich | 14 |  | 308.00 |
| Per Dicm－ 2 Men |  | 150.00 | day | 9 |  | 1，350．00 |
| Lovel C Surcharge |  | 150.00 | day | 10 |  | ＋1，500．00 |
| Estimsted＇Total |  |  |  |  |  | 18，838．00 |
| ${ }^{\prime \prime}$ As of July 1st，2002，excavators（and drilcrs），according to 刀linois Law，must call in ail locates for intrusive work． |  |  |  |  |  |  |
| Pleuse see unnu，julielcall．com for |  | details． |  |  |  |  |

Psyment Terns：Net 30 Days This proposal ts yald for 45 days，
This proposal is being submitted as an astimate，unil quiurtities may vary．A monthly interest charge of $1.5 \%$ will be added to past dwe invoices．Client is responsible for providing Contractor with information pertingat to the project in order to asaus proper urility clyatrave．Contanctor will contact JULE for all work in the State of Ilinois，excluding the City of Chicago，unlesa other arrangements ase mads．Utility locites for drilling and／or excovating projects outside of Dlimuis will be managed by the Client unlesa othes arangements जre made．Client will intorm Contractor of any known or suspected site hazards or risks
Your signature below affirms your agreempentionall the aforementionod terns．


Micheal A Crimaldi
Field Opcrations Menager
Mid－America Drilling Services，Inc．

Aecepleal by：
（signature／date）
（print namctitle）

# Mid-America DRILLING SERVICES, INC. 



Phone (630) 365-0600 • Fax (630) 365-1650 • Toll Free (877) 587-9800 • www.madrilling.com

December 6, 2002

Rich Gat
KTR \& Associates, Inc.
14665 W. Lisbon Road, Suite 2B
Brookfield, Wisconsin 53005

Proposal No: KPR120302-PHC
Client Project \#:

| Phone: | $262781-0475$ |
| ---: | :--- |
| Fax: | $262781-0478$ |

Scope of Work: Advance 35 Geoprobe soil bearings to 8 fl , collect continouos soil samples. backfill all brings with chips and patch surface

Location: Dry Cleaner Site, West Allis, Wisconsin.

*As of July hst, 2002, excavators (and drillers), according to Illinois Law, must call in all locales for intrusive work.
Please see www.julielcall. com for more details.
Payment Terms: Net 30 Days This proposal is valid for 45 days.
This proposal is being submitted as an estimate, unit quantities may vary. A monthly interest charge of $1.5 \%$ will be added to past due invoices. Client is responsible for providing Contractor with information pertinent to the project in order to assure proper utility clearance. Contractor will contact JULE for all work in the Stare of Illinois, excluding the City of Chicago, unless other arrangements are made. Utility locates for drilling and/or excavating projects outside of Illinois will be managed by the Clint unless other arrangements are made. Client will inform Contractor of any known or suspected site hazards or risks.
Your signature below affirms your agreement to all the aforementioned terms.


Miclical A Grimaldi
Field Operations Manager
Mid-America Drilling Services, Inc.

Accepted by:
(sigmulure/date)
(print namc/title)

# Mid－America DRILLING SERVICES，INC． 

Second injection (if needed)
Phone（630）365－0600－Fax（630）365－1650－Toll Free（877）587．9800 • www．madrilling．com

December 3， 2002

Rich Gnat
KPR \＆Associates，Inc 14665 W．Lisbon Rash，Suite 2B Brookfield，Wisconsin 53005

Proposal No：K ${ }^{2} \mathrm{PR} 120302$－PHO
Client Project \＃：
Hone： 262 781－0475
Fax： $262781-0478$

Scope of Work：Advance 30 Geoproberg soil boring to ft，blind drill．Inject chemical slurry into each boring in quantities as specified by cion
All locations are inside of a strip mall and require concrete coring
and the Ceoprober Hand Cart．
Chemicents in injection pump to be provided by others
Level C PPE may be required periodically，bur protective clothing will be mandatory daily．
NOTE：Client must give a detailed tailgrae Health \＆Safety review of the chemiculs being used，how boy must be handled and what fins aid procedures mure he administered for any possible exposures to workers．


Payment Terms：Net 30 Days This proposal is valid for 75 days．

$1.5 \%$ wall be added to past che inviviues．Client is responsible for providing Contivotor will information pertinent to the project in order to assure proper unity clearance．Contractor will contact JULIE for all work in the State of Minors，excluding the City of Chicago，unlus\％other arrangements are made．Utility located for drilling and er excavating projects outside of Bigots will be managed by the Client unless otha＇arrangements art made．Client will inform Conorscoror of gil low n or suspected site hazards or risks．
Your signature below affirms your iquecruent to all the aforementioned terns．


Asocpled by：
（8ignatare／dula）
Field Operations Manager
Mid－America Da ding Sonics，inc．
（print namc／tilc）

# Test／America <br>  

602 Commerce Drive／Watertown，WI 53094 ／（920）261－1660／Fax：（920）261－8120

Date： $\qquad$
Client：KPR \＆Assoc．
Contact：Rich Gnat
Project Name／Number：DERF site
Date of Delivery： $\qquad$

| Analysis | Sample Type | \＃of Samples | Method | Net \＄／Sample | Total Price |
| :---: | :---: | :---: | :---: | :---: | :---: |
| VOC | Water | 56 | 8260 | \＄ 85.00 | \＄4，760．00 |
| Nitrate＋nitrite | Water | 48 | 353.2 | \＄ 8.00 | \＄384．00 |
| Diss．Mn | Water | 48 | 243.1 | \＄ 8.00 | \＄384．00 |
| Diss．Fe | Water | 48 | 236.1 | \＄ 8.00 | \＄384．00 |
| Sulfate | Water | 48 | 300.0 | \＄ 8.00 | \＄384．00 |
| Alkalinity | Water | 48 | 310.2 | \＄ 8.00 | \＄384．00 |
| Methane | Water | 48 | GCFID | \＄ 45.00 | \＄2，160．00 |
| select VOC＊ | Soil | 20 | 8260 | \＄ 55.00 | \＄1，100．00 |
| VOC | Trip Blank | 8 | 8260 | no charge | \＄－ |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| 45 verbal 12／6／02 Grand Total： |  |  |  |  | \＄9，940．00 |

Prot．B－Soil $\$ 825$ Verbal D．
Turn around time：standard
QA Requirements：standard

Notes：＂cis－1，2－DCE，PCE．TCE，vinyl chloride

Authorized by：


N117 W18493 Fulton Drive
Germantown, WI
PH: 262-255-4488
FAX: 262-255-6993

## North Shore <br> Environmental Construction, Inc.

| To: | Rich Gnat |
| :--- | :--- |
| Fax: $\quad(262) 781-0478$ | Prom: |
| Chuck Scheffer |  |
| Phone: | Date: $12 / 06 / 02$ |
| Re: $\quad$ Disposel | CC: |

$\square$ Urgent $\boxtimes$ For Review $\square$ Please Comment $\square$ Please Reply $\square$ Please Recycle

## - Comments:

Budget costs for your Dry Cleaner project:
Soil disposal - Deliver 10 to 20 cubic yard roll-off container w/liner \& consolidate drums into roll-off: $\$ 900$
Sampling \& -analyticat: $\$ 300$ -
Non-hazardous: $\quad \$ 1,200$ transportation \& disposal
Hazardous: $\quad \$ 150 /$ ton disposal $+\$ 1,600$ transportation
Water disposal - Non-hazardous: \$275/drum
Hazardous: $\quad \$ 595 /$ drum
Sampling \& analytical. $\$ 300$ ( 1 composite sample)
Assumptions: PCE is sole contaminant at the site.

$$
\begin{array}{ll}
\text { Soil } & \$ 900 \\
& \frac{\$ 1200}{\$ 2100} \\
\text { Wat } & \$ 275 \times 6=\$ 1650 \\
\text { Total } & \$ 1650+\$ 2100=\$ 3750
\end{array}
$$

# ORIN Remediation Technologies 



| To： | Rich | Fax： | $1-262-781-() 478$ |
| :--- | :--- | :--- | :--- |
| From： | Larry Kinsman | Date： | $12 / 5 / 2002$ |
| Re： |  | Pages： | 7（including cover） |

CC：


Thanks

Larry Kinsman

## PROJECT PRICE BREAKDOWN

Site Name ：West Allis Dry Cleaner
Bench Test Price Breakdown
Lump Sum（Includes labor and analytical）

## Pilot Scale Injection Price Breakdown

Project Design and permitsing ..... $\$ 2.500$
Onsito Injection Program ..... \＄2，790
－Labor
－Equipment and Subcontractors
Chemicals（NaMnO4） ..... $\$ 1,936$
Documentation ..... \＄1，800
Per diem and mobilization and demobilization ..... $\$ 1,420$
Estimared Prica of Pilot Scale Injection ..... 310,446
Basis of Price

| Days on site | 1 | days |
| :--- | :---: | :--- |
| Concentration of reagents | $7.00 \%$ | perceent |
| Number of injection points | 3 | points |
| Gallons per injection point | 100 | gallons |
| Area to be treated | 100 | sa．feet |
| Thickness to be reated | 5 | feet |

## Full Scale Injection Price Breakdown

| Project Design and permitting | $\$ 2,500$ |
| :--- | ---: |
| Onsits Injecrion Program | $\$ 33, \mathbf{3 0 0}$ |
| - Labor |  |
| －Equipment | $\$ 36,113$ |
| Chemicals $(\mathbf{N a M n O 4 )}$ | $\$ 1,800$ |
| Documentation | $\$ 5,200$ |
| Per diem and mobilization and demobilization | $\$ 78,913$ |

## Basis of Price

| Days on site | 10 | days |
| :--- | :---: | :--- |
| Concentration of reagents | $7.00 \%$ | percent |
| Number of injection points | 120 | points |
| Gallons per injection point | 50 | gallons |
| Area to be treated | 14400 | sq．feet |
| Thickness to be treated | 5 | foet |

## PROJECT PRICE BREAKDOWN

Site Name : West Allis Dry Cleaner

## Bench Test Price Breakdown

Lump Sum (includes labor and analytical)

## Hot Spot Injection Price Breakdown

| Project Design and permitting | $\$ 2,500$ |
| :--- | ---: |
| Onsite Injection Program | $\$ 9,870$ |
| - Labor |  |
| - Equipment and Subcontractors | $\$ 9,398$ |
| Chensicals (NaMnO4) | $\$ 1,800$ |
| Documentation | $\$ 2,260$ |
| Per diem and mobilization and demobilization | $\$ 25,828$ |

## Basis of Price

| Days on site | 3 | days |
| :--- | :---: | :--- |
| Concentration of reagents | $7.00 \%$ | percent |
| Number of injection points | 30 | points |
| Gallons per injection point | 50 | galions |
| Area to be treated | 500 | sq, fest |
| Thickness to be treated | 5 | feet |

## EXPERIENCE

KEY PROJECTS

Larry has several years of experience as a geologist in project design，cost estimation，field supervision，and technical support of environmental remediation projects for industrial，government，military，and municipal concerns．His prior experience includes design and implementation of soil vapor extraction，air sparging，bio－venting，groundwater recovery，chemical oxidation，and separate phase product recovery systems．

He has also participated in several remedial investigations of leaking underground storage tanks at former industrial sites．Larry serves as technologies director of the innovative technologies group specializes in in situ and ex situ chemical oxidation of organics using peroxy compounds such as hydrogen peroxide（fenton＇s chemistry），permanganate，persulfate，and calcium peroxide in soils and groundwater．Larry assists in the design and planning of field operations and then implements these operations in the field．He is also responsible for the design， construction，and maintenance of specialized injection vehicles．

In addition，Larry is part of the Interstate Technology Regulator Corporation（ITRC） which is an organization that writes guidance documents and provides internet training to regulator groups and the public about chemical oxidation．

## Soil and Groundwater Remediation and Decontamination－In situ Chemical Oxidation Process

Navy Base－In situ Remediation of Chlorinated Solvents（Pensacola，Florida）． Performed chemical in situ oxidation for field demonstration for the Navy．Treated chlorinated solvents and groundwater for TCE and PCE．As a result of in situ treatment，levels were reduced from several PPM to minimal PPM．

## Remediation of Coal Tar Contaminants（Burlington，Wisconsin）．

Conducted successful in situ remediation of coal tars at this abandoned manufacturing gas plant．Treated soil matrix consisting of glacial till and groundwater．Project included injection oversight，site management，supervision of personnel，and health and safety requirements．

Local Gas Station－Remediation of BTEX Compounds and Chlorinated Solvents（Madison，Wisconsin）．Performed in situ remediation using chemical oxidation on BTEX compounds（including MTBE）and chlorinated solvents in weathered sandstone bedrock．After one year of treatment，the site has been submitted for closure．Levels were reduced from $20-30 \mathrm{PPMs}$ to enforcement－level standards．

Dry Cleaning Facility－Remediation of PCE（Mercer Island，Washington）． Applied in situ chemical oxidation in groundwater for PCE and daughter products． The site consisted of silty clay with trace sand in shallow groundwater．The treatment area was located in an alley next to several utilities．Treatment was applied without disrupting the utilities．Contamination averaged 5－7 PPMs．After treatment，the PPM levels were brought down to risk－based closure standards and an application for closure was made．

Army Depot Waste Pit Burning Facility－Remediation of Chlorinated Solvents and Mixed Waste Contaminants（Anniston，Alabama）．Treated the vadose and saturated zone，which contained chlorinated solvents and mixed waste remediation in the red－clay soil of an abandoned burn and waste pit．Contaminants consisted mainly of chlorinated solvents（TCE）and several other low－level contaminants． Initial treatment was successful and is presently ongoing．

TRAINING B．S．，environmental geology and earth resources，University of Wisconsin－Eau Claire， 1995.

REGISTRATIONS／
CERTIFICATIONS 40－hour Site Worker／Health and Safety Training（29CFR 1910．120）
8－hour Annual Health and Safety Refresher
Registered PECFA consultant

PATENT PENDING＂Apparatus and Method for In－situ Remediation＂

## APPENDIX B

## Certificate of Insurance and General Terms and Conditions

| $\triangle C O R D$ | 1 N | RANCE | DATE（MADDOMTM） $10 / 07 / 02$ |
| :---: | :---: | :---: | :---: |
| producer <br> T．M．Edwards Asmoc．，Inc． 648 Joliet St．P．O．Box 146 <br> DYex IN 46311 <br> Phond：219－865－2221 Fax：219－865－1245 | THIS CERTIFICATE IS ISSUED A8 A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER．THIS CERTIFICATE DOES NOT AMEND，EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW． |  |  |
|  | INSURER | AFFORDING COVERAGE | NAIC＊ |
|  | INSURERA： | Everest Indemnit |  |
|  | INSURER ©； | Safeco Insuranco |  |
|  | Insurer C： |  |  |
|  | INSURER D： |  |  |
|  | INSURERE： |  |  |

 MAY PERTAIN，THE INSURANCE AFFORDED GY THE POLICIES DESCRIBED HEREIN IS SUBECT TO ALL THE TERMS，EXCLUSIONS AND CONDITIONS OF SUCH POLICIEG．AGGREGATE LIMATE SHOWN MAY HAVE BEEN REDUCED BY PAID CLAMS．


DESCRIPTION OF OPERATONS ILOCATIOHS IVEHICLEB／EXCLUEKONS ADDED BY ENDOREEMENT／BPECIAL PROVISUONB


1. Parties. References herein to KPR mean the entity, division, affiliate or subsidiary corporation of Krikau, Pyles, Rysiewicz and Associates, Inc. with whom CLIENT has entered into an Agreement to which these General Terms and Conditions are attached.
2. Contract Documents/Order of Precedence. The Contract Documents consist of the Agreement (the term "Agreement" is defined as the document containing the written understanding of the Parties and may solely comprise KPR's Proposal Letter in situations where no other formal agreement is executed by the Parties), Addenda, KPR General Terms and Conditions, Special Terms and Conditions, Change Orders or other written modifications to the Agreement, Specifications, and Drawings. In the event of any ambiguity and/or inconsistency between the various Contract Documents, the following descending order of precedence shall apply:
(a) Change Orders or other written modifications to this Agreement.
(b) Agreement, (Scope of Work, Special Terms and Conditions.

General Terms and Conditions and Addenda.)
(c) Specifications.
(d) Drawings.

In the event of any ambiguity and/or inconsistency between or among Change Orders, Addenda or written modification, a later dated document will take precedence over an earlier dated document.
3. Changes. CLIENT may make changes within the general scope of the Agreement in the Work and Services (as described in the Scope of Work) to be performed. All oral changes to this Agreement must be confirmed in writing and signed by the Parties. If any such changes cause an increase in KPR's costs and/or increase the time required for or the nature of performance of the Agreement (require Additional Work or Extra Work), KPR shall so notify CLIENT within five (5) business days of receipt of the change order notification and an equitable adjustment in compensation shall be made through a Change Order or Modification signed by KPR and CLIENT. KPR shall have no obligation to proceed with such Additional or Extra Work until all appropriate Change Orders or Modifications have been signed by the parties. KPR shall not be in default hereunder for any such refusal to proceed with Additional or Extra Work.

Additional Work means the services and/or equipment provided at CLIENT's direction and/or request or with CLIENT's consent that are quantitatively in addition to the amount of such services and/or equipment described in the Contract Documents and that produce additional costs and/or labor and/or labor inefficiency for which KPR will receive additional compensation.

Extra Work means services and/or equipment provided at CLIENT's direction and/or request or with CLIENT's consent that differ qualitatively or in character from services and/or equipment described in the Contract Documents and that produce additional costs and/or labor and/or labor inefficiency for which KPR will receive additional compensation.
4. Litigation Support. CLIENT and KPR agree that hazardous waste projects may involve some form of legal process or proceedings during or after performance of the project. Such legal process or proceedings normally include production of records, forms of discovery such as depositions and interrogatories, filings and court testimony.

CLIENT agrees that if KPR participates in such legal process or proceedings to which KPR is not a party, CLIENT shall reimburse KPR for such participation. KPR shall be reimbursed for labor, reproduction costs, travel expenses, legal fees and such other expenses as are reasonable and necessary in connection with the legal process or proceedings.

Prior to any participation, KPR shall notify CLIENT and advise CLIENT of the estimated cost.
5. Force Majeure. KPR will not be responsible for delays attributable to acts of God, acts of third parties, weather, intervention of public authorities, work stoppages, changes in applicable laws or
regulations after the date of commencement of performance hereunder or any other acts or omissions or events which are beyond the control of KPR. Costs and schedule commitments shall be subject to renegotiation for unreasonable delays caused by CLIENT's or third party's failure to provide specified facilities or information. The time for performance of this Agreement shall be extended proportionately in the event KPR is delayed in the performance of this Agreement by such causes. Additional compensation may be due KPR in accordance with the provisions of Article 3 hereof.
6. Payments. Invoices will be submitted periodically(customarily on a monthly basis), and terms are net cash in U.S. dollars, due and payable upon receipt of each invoice. Invoices not paid within fifteen (15) days of receipt by CLIENT are considered overdue and shall be subject to an additional charge at the rate of one and one-half percent $\left(1 \frac{1}{2} \%\right)$ per month or the maximum charge legally permissible. Invoices which remain unpaid after 60 days from the date of invoice, will be subject to appropriate action under the Statutory Mechanics Lien Act(s). Nothing in this paragraph should be considered to be a waiver by KPR of its right to perfect claims under the Statutory Mechanics Lien Act(s) prior to 60 days from the date of invoice when KPR in its discretion deems it necessary to do so. In addition, KPR may, after giving ten (10) days written notice to CLIENT, suspend services without liability until CLIENT has paid in full all amounts due KPR on account of services rendered and expenses incurred, including interest on past-due invoices. For purposes of this Article "days" means calendar days. Payment of invoices is not subject to discounting by CLIENT. Time is of the essence in payment of invoices, and timely payment is a material part of the consideration of any Agreement between KPR and CLIENT. All attorneys fees and collection agency costs incurred in order to collect overdue and unpaid accounts will become the responsibility of the CLIENT.

Invoice amounts in dispute shall not affect CLIENT's obligation to pay remaining invoice charges.

Where the method of contract payment is based on a cost reimbursement, time and material, labor hour, or fixed rate basis, the following provisions shall apply:
(a) The minimum time segment for charging of field work is four (4) hours. Where applicable, rental charges will be applied to the Project to cover the cost of pilot-scale facilities or equipment, apparatus, instrumentation, or other technical machinery. When such charges are applicable, CLIENT will be advised at the start of an assignment, task, or phase.
(b) Expenses properly chargeable to the Work which are reimbursable at cost shall include but are not limited to: travel and subsistence expenses of personnel (which may be charged on a per diem basis) when away from their office on business directly or indirectly connected with the Project; identifiablecommunication, shipping, printing, andreproduction costs; subcontractors; identifiable drafting and stenographic supplies; computer time and software; and expendable materials and supplies purchased specifically for the Project. At least a ten percent ( $10 \%$ ) handling and administrative charge will be added to those foregoing items which are purchased from outside sources. When KPR, subsequent to initiation of services, finds that specialized equipment is needed to perform the services, it will notify CLIENT of such requirement and purchase the equipment for CLIENT as a reimbursable expense.
(c) Extra or additional work invoices will be submitted on standard invoice format which typically shows labor hours worked and total expenses, but not actual documentation (e.g. time sheets and expense receipts). If additional detail or actual invoice documentation is requested by CLIENT, the labor and expenses associated with gathering, sorting, highlighting, mailing and copying supporting documentation will be billed to CLIENT on subsequent invoice(s). Where the method of contract payment is based on a fixed price/lump sum basis, then invoices will be submitted based on the billing schedule as proposed by KPR as mutually agreed by the parties.
7. (A) Termination For Default. Either Party (Terminating Party) may terminate this Agreement, in writing, if the other party (Breaching Party) fails to fulfill its obligations under the Agreement (breaches) through no fault of the Terminating Party. In such event the Terminating Party may, after giving the Breaching Party an opportunity to cure in accordance with provisions of this Article, declare the Breaching Party in default by issuing a Declaration of Default and terminate the Agreement for cause. Prior to such Declaration of Default, the Terminating Party shall advise the Breaching Party that a Declaration of Default is imminent by sending a written notice (Notice of Imminent Default) including a description of the conditions constituting breach of the Agreement and providing the Breaching Party a period of time of not less than five (5) days and not more than twenty (20) days within which to correct such conditions. For purposes of this Article "days" means business days. In the event that the Breaching Party does not correct such conditions contained in the Notice of Imminent Default within the designated period of time, the Terminating Party may issue a Declaration of Default and terminate the Agreement. Disputes arising under this Article, including final payment to KPR if unresolved, shall be resolved in accordance with Article 18 hereof.
(B) Termination/Suspension for Convenience of CLIENT. The performance of Work under this Agreement may be terminated or suspended by CLIENT in accordance with this Article 7(B) when CLIENT determines that such termination or suspension is in CLIENT's best interests. Any such termination or suspension shall be instituted by delivery to KPR of a written Notice of Termination or Suspension for Convenience specifying that the Agreement is being terminated or suspended for the convenience of CLIENT and directing KPR to cease the performance of services under the Agreement upon the date of KPR's receipt of such notification (the "Effective Date"). After receipt of the Notice of Termination or Suspension for the Convenience of CLIENT or Termination for Default, KPR shall upon the Effective Date cease performing services under the Agreement and as soon as practicable thereafter, KPR shall:
(1) Terminate or suspend all orders and subcontracts to the extent that they relate to the performance of Work terminated or suspended by the Notice of Termination or Suspension for Convenience.
(2) Assign to CLIENT all of KPR's right, title and interest under the orders and subcontracts so terminated or suspended.
(3) Transfer to CLIENT (and CLIENT will acceptresponsibility for) disposition of all outstanding liabilities and all unresolved claims arising out of termination or suspension of orders and subcontracts incident to such termination or suspension and CLIENT will release, indemnify, hold harmless and defend KPR from all such liabilities and claims including attorneys' fees.
(4) Transfer the responsibility for site management from KPR to CLIENT in accordance with Article 7(C) hereof.
(5) Submit to CLIENT and CLIENT shall pay KPR's termination or suspension invoice including, with respect to Work performed prior to the Effective Date of the Notice of Termination or Suspension for Convenience, the total of:
(a) The cost and fees associated with such Work;
(b) The cost of settling and paying claims arising out of the termination or suspension of Work under subcontracts or purchase orders;
(c) Reasonable demobilization costs;
(d) A reasonable allowance for profit with respect to paragraph 7(B) above; and
(e) All costs incurred under Article 7(C) below.
(C) Orderly Transfer of Responsibility. To the extent the Work involves KPR directed activity on site and the Work is terminated or suspended, whether for Convenience of CLIENT or for Default, the Parties hereto understand and agree that certain steps (hereinafter referred to as "orderly transfer") must be taken to address the impact of the termination or suspension. CLIENT agrees that all costs of such orderly transfer will be borne by CLIENT.

Upon notification of termination or suspension, KPR will prepare a memorandum of orderly transfer, which will advise CLIENT of the steps necessary to shut down the job site and the anticipated date of transfer of
responsibility of CLIENT.
Upon completion of these steps, KPR will provide notification to CLIENT of the effective date of transfer, and by so doing, will effectively transfer responsibility for the Work and Site to CLIENT. CLIENT agrees to accept all responsibility for the Work and Site, including but not limited to continued maintenance and protection of the Work and Site in accordance with all federal, state, and local laws and regulations.

In the event of CLIENT's termination or suspension of Work under this Agreement, whether for the Convenience of CLIENT or for Default, CLIENT accepts responsibility for continuing operations on the Site and to the fullest extent permitted by law, CLIENT shall indemnify, hold harmless and defend KPR and its agents and employees from and against any and all claims, damages and expenses, including but not limited to attorneys' fees, arising out of or resulting from Site maintenance, protection and operation following the transfer of responsibility in accordance with this Article.
8. Standard of Care. When KPR serves as the professional representative of CLIENT or provides any professional service to CLIENT under any Agreement, KPR will provide professional advice, consultation and services to CLIENT in accordance with general accepted professional standards as applied to similar projects performed under similar conditions prevailing in the community at the time such advice, consultation and/or services are rendered.
9. No Warranty/Guarantee. Estimates of cost, approvals, recommendations, opinions and decisions by KPR are made on the basis of KPR's experience, qualifications and professional judgement and are not to be construed as warranties or guarantees. KPR MAKES NO WARRANTY OR GUARANTEE, EXPRESSED OR IMPLIED, EXCEPT AS SET FORTH IN ARTICLE 8 ABOVE, REGARDING THE WORK TO BE PROVIDED UNDER THIS AGREEMENT.
10. Hazardous Materials. CLIENT recognizes that when it is known, assumed or suspected that hazardous materials exist on or beneath the surface of the site of the Project or within any structure thereon, certain sampling materials or residues, such as drill cuttings and drilling fluids or asbestos removed for sampling, should be handled as if hazardous or contaminated. Accordingly when sampling is included in the scope of services and when determined by KPR in its sole and exclusive judgement to be necessary based on KPR's assessment of the degree of contamination, hazard and risk, KPR will promptly inform CLIENT that containerization and labeling of wastes or residues will be performed. KPR will appropriately contain and label such materials and will leave the containers on site for proper and lawful removal, transport and disposal by CLIENT. CLIENT waives any claim against and agrees to indemnify, defend and hold KPR harmless from any claim or liability for injury or loss which may arise as a result of the drill cuttings, drilling fluids or other assumed hazardous materials being left on the site of the Project after containerization by KPR. It is KPR's established policy not to accept title to hazardous materials and to neither store such materials nor contract to store such materials.
11. Indemnity. KPR shall use its best professional judgement, however, it is understood and agreed that, in seeking the professional services of KPR under this Agreement, CLIENT may be requesting KPR to undertake uninsurable obligations for CLIENT's benefit involving the presence or potential presence of hazardous substances. Therefore, KPR's indemnification of CLIENT shall not include loss or damage arising out of or relating to hazardous waste handling, transportation, treatment, storage, disposal, or cleanup or other Environmental Liability ${ }^{1}$. Subject to the foregoing and the limitation of liability contained in Article 12 hereof, KPR shall indemnify CLIENT for loss or damage caused by the sole professional negligence, errors or omissions of KPR in the performance of the Work under this Agreement.

When and to the extent KPR arranges on behalf of the CLIENT for the handling, transportation, treatment, storage or disposal of hazardous substances or wastes, CLIENT shall release, indemnify, hold harmless and
defend KPR from any and all claims, demands, judgements or other liability associated with such activity except if transported solely by KPR. Any manifests or forms in connection with such activity shall be executed by or in the name of CLIENT. The parties do not intend KPR to be a generator or transporter of such hazardous substances in the performance of the Work hereunder.

CLIENT hereby indemnifies and holds harmless (including reasonable attorneys' fees) KPR and any employee or agent against all liability to third parties (other than liability solely the fault of KPR) arising from or in connection with the violation of any third party's trade secrets, proprietary information, trademark, copyright, or patent rights in connection with the performance of the Work hereunder. CLIENT's obligation to indemnify KPR or any employee or agent thereof will survive the expiration or termination of this Agreement by either party for any reason. KPR shall promptly notify CLIENT of any third party claim known to KPR and CLIENT may, at its option, conduct the defense of any such third party action and KPR shall cooperate with such defense.
12. Limitation of Liability. Notwithstanding any other provision of these General Terms and Conditions, and unless a higher limit of liability is expressly provided elsewhere in this Agreement in a provision making specific reference to this Article 12, KPR's total liability to CLIENT for any loss or damages from claims arising out of or in connection with this Agreement from any cause including KPR's strict liability, breach of contract or professional negligence, errors and omissions shall not exceed the lesser of the total contract value of the Agreement or the limits of KPR's liability insurance in effect at the time such claims are made. CLIENT hereby releases KPR from any liability exceeding such amount. In no event shall either Party be liable to the other for special, indirect, incidental or consequential damages whether or not such damages were foreseeable at the time of the commencement of the Work.
13. KPR Employees. CLIENT shall not offer to employ or actually employ any KPR employee assigned to the Work during the term of this Agreement or for a period of six (6) months after completion of this Agreement. CLIENT agrees that KPR may utilize employees of any of KPR's subsidiary companies and affiliates in the performance of this Agreement.
14. Confidentiality. KPR shall maintain as confidential and not disclose to others without CLIENT's prior written consent, any information or documents obtained from CLIENT expressly designated by the CLIENT in writing to be "CONFIDENTIAL". KPR retains all contract files for three (3) years following completion of Services (See Article 16 below). The provisions of this paragraph shall not apply to information in whatever form which (a) is published or comes into the public domain, (b) is already known to or by the receiving Party, (c) is furnished by or obtained from a third party who is under no obligation to keep the information confidential, or (d) is required to be disclosed by law on order or pursuant to a subpoena of a court, administrative agency or other authority with the proper jurisdiction.

Notwithstanding anything to the contrary set forth herein, it is understood by CLIENT that KPR is or may be subject to certain legal and ethical considerations and obligations depending upon the nature and scope of services rendered hereunder which may require KPR to disclose facts observed by KPR to third parties. In such event, KPR shall advise CLIENT, but shall, subject to any legal or professional obligation as determined by KPR's management or counsel to immediately disclose such facts, refrain from making any such disclosure until KPR and CLIENT have conferred with respect to such facts. If, for any reason the Parties are unable to confer or if KPR believes on the advice of counsel that it must disclose such facts, KPR shall notify CLIENT of its intention to disclose such information prior to actual disclosure to third parties. Any such disclosure shall not be deemed a violation of this Agreement and CLIENT agrees that KPR shall be and is hereby released from any liability, claim or cause of action whatsoever with respect to such disclosure.

CLIENT agrees that KPR may use and publish CLIENT's name and
a general description of KPR's services with respect to the Work in describing KPR's experience and qualifications to other clients and potential clients.

KPR's technical and pricing information contained in the Proposal or Agreement is confidential proprietary information constituting a trade secret and is not to be disclosed or otherwise made available to third parties without the prior written consent of KPR.
15. Use of Documents. All documents, including drawings and specifications, prepared or furnished by KPR (including KPR's independent proféssional associates, consultants and subcontractors) pursuant to this Agreement are instruments of service regarding the Work. CLIENT maymake and retain copies for information and reference in connection with the Work; however, such documents are not intended or represented to be suitable for other than the use specified in the Contract Documents. Such documents are not for reuse by CLIENT or others on extensions of the Work or on any other work or for any other purpose. Any reuse of such documents without prior written verification or adaptation by KPR for the specific purpose intended will be at CLIENT's sole risk and without liability or legal exposure to KPR, or to KPR's independent professional associates, consultants or subcontractors and CLIENT shall indemnify and hold harmless KPR and KPR's independent professional associates, consultants and subcontractors from any and all costs, expenses, fees, losses, claims, demands, liabilities, suits, actions and damages whatsoever arising out of or resulting from such reuse. Any verification or adaptation agreed to by KPR will entitle KPR to compensation at rates to be agreed upon by CLIENT and KPR at that time.
16. Records Retention. KPR retains project records including reports and correspondence developed during performance of the Agreement for a period of three (3) years after project completion. Such records may be maintained on electronic media, as KPR may decide. In the event CLIENT desires such records to be maintained for an additional period of time, upon CLIENT's written advice to KPR, such records shall either (a) be delivered to CLIENT or (b) be retained by KPR for additional period(s) of time for the storage fee applicable under KPR's current commercial rates.
17. Services. It is understood and agreed that the services or Work performed under the Agreement are not subject to any provision of any Uniform Commercial Code.
18. Mediation/Arbitration. All disputes between the Parties arising out of this Agreement shall be resolved by submission to Mediation and Arbitration as described below;
(A) Mediation The parties shall attempt in good faith to mediate such dispute and use their best efforts to reach agreement on the matters in dispute. After a written demand for non-binding mediation, which shall specify in detail the facts of the dispute, and within ten (10) business days from the date of delivery of the demand, the matter shall be submitted to Mediation in accordance with the American Arbitration Association Construction Industry Mediation Rules. The Mediator shall hear the matter and provide an informal opinion and advice, none of which shall be binding upon the parties, but is expected by the parties to help resolve the dispute. Said informal opinion and advice shall be submitted to the parties within twenty (20) business days following written demand for Mediation. The Mediator's fee shall be shared equally by the parties. If the dispute has not been resolved, the matter shall then be submitted to Arbitration in accordance with Article 18(B) below.
(B) Arbitration All claims, counterclaims, disputes and other matters in dispute between the parties hereto arising out of or relating to this agreement or breach thereof not otherwise resolved in accordance with Article 18(A) hereof shall be decided by Arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association then obtaining, subject to the limitations and restrictions stated in Article $18(B)(1)$ and Article $18(B)(2)$ below. This agreement to so
arbitrate and any other agreement or consent to arbitrate will be specifically enforceable under the prevailing arbitration law of any court having jurisdiction.
(1) Notice of demand for Arbitration must be filed in writing with the other parties to this Agreement and with the American Arbitration Association. The demand must be made within a reasonable time after the claim, dispute or other matter in question has arisen. In no event may the demand for Arbitration be made after the time when institution of legal or equitable proceedings based on such claim, dispute or other matter in question would be barred by the applicable statute of limitations.
(2) All demands for Arbitration and all answering statements thereto which include any monetary claim must contain a statement that the total sum or value in controversy as alleged by the party making such demand or answering statement.
(3) No Arbitration arising out of or relating to this Agreement may include, by consolidation, joined or in any other manner, any person or entity who is not a Party to this Agreement.
(4) By written consent signed by all the parties to this Agreement and containing a specific reference hereto, the limitations and restrictions contained in Article 18(B)(2) and Article 18(B)(3) may be waived in whole or in part as to any claim, counterclaim, dispute or other matter specifically described in such consent. No consent to arbitration of a specifically described claim, counterclaim, dispute or other matter in question will constitute consent to arbitrate any other claim, counterclaim, dispute or other matter in question which is not specifically described in such consent or in which the sum or value in controversy exceeds $\$ 50,000$ (exclusive of interest and costs) or includes any party not specifically described herein.
(5) The award rendered by the arbitrators will be final, not subject to appeal, and judgement may be entered upon it in any courthaving jurisdiction thereof.
19. No Third Party Beneficiary. KPR's services are performed for the sole and exclusive benefit of CLIENT. This Agreement does not create any right or benefit in anyone other than CLIENT and KPR.
20. Sales and Use Tax. CLIENT and KPR believe that KPR's professional services provided to CLIENT under Agreement are not subject to sales and use tax. Pending a final ruling by appropriate tax authorities with respect to the imposition of a State Sales and Use Tax applicable to KPR's professional services, CLIENT acknowledges that the obligation to pay the sales and use tax, if ruled applicable to KPR's services, is CLIENT's obligation as purchaser. CLIENT agrees to pay such sales and use tax and hereby releases, indemnifies and holds KPR harmless from any and all claims related to sales and use tax as it applies to KPR's professional services provided under this Agreement.
21. Severability/Savings. The provisions of this Agreement shall be deemed severable and the invalidity or unenforceability of any of the provisions hereof shall not affect the validity and enforceability of the other provisions hereof. If any provision of this Agreement is unenforceable, for any reason whatsoever, such provision shall be appropriately limited and given effect to the extent that it may be enforceable.
22. Assignment. Neither Party shall assign, subcontract or otherwise transfer this Agreement or any rights or obligations hereunder to a subsidiary, successor, affiliate or any third party, except as expressly provided herein, without the prior written consent of the other party. Nothing hereunder shall prevent KPR from employing such professional associates and consultants as KPR deems appropriate to assist KPR in performance of services hereunder.
23. Litigation Services. Regarding litigation in which CLIENT is named as a party litigant, or if not named as a party, litigation in which CLIENT has an interest, CLIENT may seek the services of KPR in providing testimony as a consultant or as an expert or fact witness regarding its services in the matter to which its services relate. The fee or billing rate for such services will be established at the time such services are requested.
24. Governing Law. The interpretation and enforcement of this Agreement is to be governed by and construed in accordance with the law of the State of Indiana.
25. Entire Agreement. This Agreement represents the entire and integrated Agreement between the Parties and supersedes all other prior negotiations, representations or agreements, either written or oral.

Any terms and conditions set forth in CLIENT's purchase order, requisition, or other notice of authorization to proceed are inapplicable to the Work, except when specifically provided for in full on the face of such purchase order, requisition, or notice or authorization and specifically accepted in writing by KPR, KPR's acknowledgment of receipt of any purchase order, requisition, notice or authorization or KPR's performance of Work subsequent to receipt thereof does not constitute acceptance of any terms or conditions other than those set forth herein.

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[^0]:    1. Environmental Liability includes, but is not limited to specification of a product, material or process containing hazardous substances; failure to detect the existence or proportion of hazardous substances in a product, material or process; the abatement, replacement or removal of a product, material or process containing hazardous substances and also includes activities resulting in the actual, alleged or threatened discharge, dispersal, release or escape of pollutants ("pollutants" means any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals, nuclear material waste and waste materials to be recycled, reconditioned or reclaimed) and also any material that is toxic, carcinogenic, mutagenic, biologically infectious, explosive, flammable or characterized as hazardous under applicable federal, state or local law.
