KPRG and Associates, Inc.

TRANSMITTAL LETTER

April 3, 2007

Ms. Marilyn Fleming
P.O. Box 546
Brookfield, WI 53008

VIA FEDERAL EXPRESS

KPRG Proposal No. 18806.1

Re: Transmittal of Proposal for DERF Site Investigation
Natural Cleaners - Bayside, WI

Dear Ms. Fleming:

KPRG and Associates, Inc. (KPRG) is please to provide a sealed copy of our proposal for a Dry Cleaner Environmental Response Fund (DERF) program site investigation for the Natural Cleaners facility in Bayside, Wisconsin. One sealed bid has also been sent to the WDNR Project Manager.

As part of our proposal preparation process we reviewed the technical information provided as part of the Request for Proposal (RFP), performed a site inspection and obtained preliminary quotes from some commodity services contractors. Our proposal also addresses a preliminary screening of potential vapor intrusion issues associated with soils beneath the foundation slab. We believe that we have developed a technically sound and streamlined approach to the site investigation.

KPRG appreciates the opportunity for providing this proposal and we look forward to the potential for working with Natural Cleaners on this project. If there are any questions, please contact me at 262-781-0475.

Sincerely,
KPRG and Associates, Inc.

Richard R. Gnat

Richard R. Gnat, P.G.
Principal

CC: Mr. Binyoti Amungwafor, WDNR (1 sealed copy)

PROPOSAL FOR DERF REMEDIAL ACTION
REDI-QUIK CLEANERS
9508 W. GREENFIELD AVE.
WEST ALLIS, WISCONSIN

PREPARED FOR:

Dorothy G. Inc.
C/O Axley Brynelson, LLP
2 East Mifflin Street, Suite 200
Madison, WI 53703

PREPARED BY:

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Brookfield, Wisconsin 53005

March 7, 2007

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1.0 INTRODUCTION

KPRG and Associates, Inc. (KPRG) and Orin Remediation Technologies (Orin; specialty injection contractor) is please to provide Axley Brynelson, LLP (ABL) and Dorothy G, Inc. (Client) with this proposal for the development and implementation of an appropriate remedial action for the Redi-Quik dry cleaning facility located at 9508 West Greenfield Avenue in West Allis, Wisconsin. To assist in the development of this proposal, the materials provided in the Request for Proposal (RFP) issued on February 16, 2007. In addition, KPRG performed a Freedom of Information Act (FOIA) review of the Wisconsin Department of Natural Resources (WDNR) Environmental Restoration Program (ERP) files for the site in an effort to obtain additional information not provided in the RFP. A site visit was also performed to evaluate existing site physical conditions. Based on this research effort and information obtained, in conjunction with KPRG's 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 proposed scope of work is comprehensive and addresses the site issues from finalizing the proposed remedial action plan through case closure and well abandonment. It is noted that the proposed scope of the remedial action at this time is based on the data provided in the RFP and obtained through the WDNR file review.

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 Redi-Quik dry cleaning facility is located on the northwest corner of Greenfield Avenue and 95th Street in West Allis, Wisconsin. The building is a single story structure with a slab on grade foundation. The entire property is covered with concrete, asphalt or building structure with the exception of a small grassy area on the east side of the building and a narrow strip of land along the north property line. The facility has been in operation as a dry cleaner since the late 1950s or early 1960s. The SI report states that the dry cleaning solvent tetrachloroethene (a.k.a., perchloroethene [PCE]) was historically stored within a 1,000 gallon underground storage tank (UST) located beneath the building floor, centrally along the north wall of the facility (see Figure 1). Discussions with Mr. Gruichich, however, suggest that in fact this tank was not used for the storage of solvent but rather as a potential overflow or spill collection system. The tank was partially decommissioned approximately 5 to 6 years ago. Based on a visual inspection performed by KPRG, the tank was decommissioned by cutting/removing the overlying concrete floor, removing any liquids, cutting an access hole in the top of the tank, cleaning the interior and then cutting a hole in the bottom of the tank. The tank, however, was not backfilled with any clean, inert materials. A sheet of plywood was placed over the access hole in the concrete floor and this condition is currently still present. The inspection

performed by KPRG of the partially decommissioned tank did not indicate any solvent odors emanating from the hole and there was no indication of residual sludges. The soil beneath the tank was clearly apparent where the bottom was cut during decommissioning activities. No substantial staining was noted.

Prior site use was as a gasoline station. Four USTs were formerly used for petroleum product storage including one 1,000-gallon fuel oil tank, one 260-gallon waste oil tank and two 4,000-gallon gasoline tanks. The tanks were located in two exterior areas on the south side of the building as shown on Figure 1. The tanks were removed in December, 1989 and two recovery sumps (RS-W and RS-E) were constructed, one within the backfill of each tank cavity excavation. The recovery sumps were installed to address impacted groundwater associated with the petroleum USTs. The WDNR file review performed by KPRG indicates that the sumps extend to a depth of approximately 9 to 10 feet below ground surface (bgs). The west sump is constructed of 6-inch inner diameter PVC and the east sump is constructed of 8-inch inner diameter PVC. In 1990, Miller Engineers performed a focused site investigation to determine the extent of petroleum hydrocarbon impacts associated with the former tanks. Based on the results of this focused investigation, additional petroleum hydrocarbon impacted soil was remediated by direct excavation around each of the two former tank cavities and landfilling of the materials. A total of 32 soil verification samples were collected as part of the excavation activities, 16 from the west excavation and 16 from the east excavation to document completion of removal activities. The WDNR approved completion of remedial action activities for the petroleum impacts in October, 1995. It was noted by the WDNR, however, that during the petroleum UST remedial activities, chlorinated solvent impacts were also documented and that additional environmental activities would be required to address this new issue.

Shaw Environmental & Infrastructure, Inc, (f.k.a., Envirogen, Inc.) was subsequently contracted to perform a site investigation (SI) associated with the release of the dry cleaning solvent PCE. On September 17, 2004, the WDNR conditionally approved the site investigation, however, it was noted that some additional sampling may be necessary due to potentially increasing trends of chlorinated solvent concentrations in groundwater. Additional site investigation work was performed by Shaw and summarized in Supplemental Subsurface Site Investigation Report dated August 28, 2006. The supplemental investigation concluded that the primary residual soil impacts are located beneath the Dauer driveway (neighbor to the north of the facility). The upper 5 feet of soil beneath the driveway is apparently unimpacted. Soils from 5 to 21 feet bgs are impacted with PCE at concentrations that would require the handling and disposal of the materials as hazardous waste. The area of impact is estimated to be 60 feet long and 10 feet wide. The total volume of impacted soil is estimated at 355 cubic yards (or 533 tons assuming a 1.5 ton per cubic yard conversion factor which is conservatively high). The supplemental report also provided additional groundwater monitoring data and defined the PCE impacted plume area.

It is noted that Shaw also performed some additional soil vapor intrusion studies and remediation associated with the Dauer residence. It is KPRG's understanding that any potential remaining spoil vapor issues are not part of this requested scope of services.

1.2 Project Objectives

The objectives of this project are to develop an appropriate Remedial Action Plan (RAP) and implement the RAP to obtain closure for the site. 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. Additional funding is also being obtained from the WDNR "Ready for Reuse" program and that all work must also be performed in compliance with Sections 292.72 and 292.75 of Wisconsin Statutes and Chapters NR 700-728 of the WAC.

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. Section 3.0 outlines a proposed project schedule to implement the remedial action. Section 4.0 provides KPRG's business proposal which details assumptions and the anticipated project cost. Section 5.0 provides the qualifications and experience of KPRG.

2.0 TECHNICAL SCOPE OF WORK

This section details the KPRG's proposed technical approach. The approach includes the use of non-commodity specialty services provided by Orin relative to chemical oxidation injection expertise. The approach is broken down into the following tasks:

- Task 1 – Design Data Generation
- Task 2 – RAOR/RAP Finalization
- Task 3 – Commodity Services Bidding
- Task 4 – Remedial Construction/Injections
- Task 5 – Construction Documentation/As-Built Report
- Task 6 – Operation, Maintenance, Monitoring and Reporting
- Task 7 – Case Closeout Report and Well Abandonment

Each task is detailed further below in this section.

2.1 Task 1 – Design Data Generation

As discussed below in Task 2, in-situ chemical oxidation is a remedial option which may be the most favorable solution for this site. There are a variety of different oxidation agents which can be used depending on the nature of a specific site. For dry cleaning (PCE) sites, catalyzed sodium persulfate or sodium permanganate are most often the chemical oxidants used for in-situ treatment. The KPRG/Orin team will perform a treatability study to determine the most applicable chemistries and dosages for the site. This information will be input into completing Task 2 activities. The scope of this task will include:

- Collect a composite sample from three geoprobe locations from within the highest area of impacts.
- Provide the sample to specialty contractor Orin Remediation Technologies to perform a bench scale treatability study testing of both persulfate and sodium permanganate at different dosages.
- Up to two rounds of testing per chemical. Untreated and treated samples will be analyzed for VOCs.

It is also noted that the source of the initial release was the former UST used for PCE storage. As discussed above, this tank, although cleaned and rendered

unusable, has not been closed properly and soils beneath this tank are still accessible. There have been no samples collected from the soils beneath the tank. It is highly probably that these soils are still residually impacted with PCE as they are immediately below the former source of the release. KPRG will collect a soil sample from beneath the former UST for analysis of VOCs.

Once the treatability study is completed, a pilot scale test will be performed in the field to assist in determining appropriate injection point spacings. The pilot test will include:

- Install one to two temporary observation well points within the driveway the day before initiating the pilot test. The well points will be installed using a geoprobe and constructed of 0.75 inch PVC with 10 foot of screen. The bottom of the well will be set at 20 feet bgs. Construction will be in general accordance of NR 141.
- Mobilize field personnel, chemicals and equipment to the site.
- Treatment will occur in-situ using direct push technology. Due to the scale of the pilot study, drilled points is too expensive to implement.
- Implementation in the field will take approximately 1 day depending on site and matrix conditions.
- Approximately four injection locations will be used for treatment in the targeted plume area located within Dauer's driveway. The wells will be spaced around the temporary observation wells.
- An initial 4 -foot radius of influence is assumed. With 33% overlap to ensure complete coverage, each of the injection locations will be spaced approximately 7 feet apart.
- Treatment will start at approximately 21 ft. bgs with repetitive lifts of the Geoprobe® rods throughout the vertical extent of the plume to approximately 5 ft. bgs.
- Inject approximately 200 gallons of 30% catalyzed sodium persulfate solution into each of the direct push locations.
- Number of locations, concentration and volume may vary depending on unforeseen site conditions and contaminant load.
- Obtain field parameter readings from samples collected from the temporary well point(s) immediately prior to (baseline) and on a regular basis throughout the pilot injection to evaluate detection of the injected chemical to assist in evaluating radius of influence.
- ORIN will maintain field notes on the location of the injection points, amount of chemical injected, and any other injection related field observations.

- Cleanup the site, pull the temporary well point(s) and properly abandon the hole. Demobilize field personnel and equipment from the site.
- A brief letter report describing the pilot scale remediation, chemical amount used, other field information and observations regarding the injection will be incorporated into the full scale remedial action plan.

2.2 Task 2 – RAOR/RAP Finalization

The new DERF bidding requirements for remedial actions at dry cleaner facilities require documentation of a remedial alternatives evaluation along with a description of the proposed remedial alternative. Based on the available data, KPRG has initiated an evaluation of remedial alternatives for soil and groundwater. Descriptions of the alternatives considered along with preliminary technical and economic evaluations are summarized on Tables 2-1 and 2-2 provided at the end of this section. These constitute the initial basis of the Remedial Action Options Report (RAOR). Upon receipt of treatability study and pilot test data from Task 1 activities, these evaluations will be completed and formalized into a RAOR and RAP in accordance with guidelines established in NR 722.07 through NR 722.13 and NR 724. The submittal will include, but not be limited to, the following:

- Transmittal Letter
- Executive Summary
- Background Information (includes a regulatory status and a summary of the nature and extent of impacts)
- Remedial Action Options
  - Description of each remedial option considered (up to 5 options)
  - Degree of compliance of each option to environmental laws and standards under NR 722.09(2)/establishment of site specific cleanup objectives (this has not been done as part of the SI)
  - Compliance point(s)
  - Required licenses, permits and approvals
  - Performance comparisons (technical and economic)
  - Basis for rejecting potential options
- Selected Remedial Action
  - Rationale for choosing the preferred remedial action
  - Estimated implementation cost
  - Anticipated timeframe for completion/compliance

- Performance monitoring requirements

- Remedial Action Plan
  - Introduction
  - Detailed remediation task description
  - Implementation schedule
  - Monitoring
  - Submittals

A draft of the report will be provided to ABL and the Client for review. A final report will be issued incorporating review comments, as appropriate, for submittal to the WDNR.

2.3 Task 3 - Commodity Services Bidding

To maximize eligible reimbursable costs under DERF, all commodity services required for the implementation of the remedial action will need to be bid out in accordance with NR 169.21. KPRG 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 geoprobe drilling, remedial construction contractor(s) and laboratory analysis. Each set of bids will be compared and evaluated. The most cost effective bidder for each service will be identified and contracting recommendations will be provided to the Client along with comparison summary tables and copies of each bid. *Orin is a highly specialized injection contractor and, therefore, not considered a commodity service and has been included as part of the base team for this proposal.*

2.4 Task 4 – Remedial Construction/Injections

Task 1 and 2 activities defined above will finalize the scope of the remedial action along with WDNR approval of the RAP. However, for cost estimating purposes of this proposal, the following strategy and scope of remediation activities is provided based on KPRG's experience at remediating other similar sites.

It is anticipated that the overall remediation strategy will consist of source control/removal on the Redi-Quik property, remediation of residually impacted soils beneath the Dauer driveway through in-situ chemical oxidation injection using sodium persulfate, on-site residually impacted soil management through engineered barriers and institutional controls and monitored natural attenuation of groundwater impacts. Site closure will include listing the Redi-Quik and all other affected properties on the WDNR GIS Registry (groundwater and/or soil). Each component of the remedial strategy is discussed separately below.

2.4.1 Soil - Source Removal/Treatment

Based on the data and information currently available, there are two primary sources of impacts. The first is the former UST located beneath the building floor, centrally along the north wall of the facility (see Figure 1). The second is associated with the residually impacted soils beneath the driveway on the adjoining residential property to the north of the facility. They are addressed separately below since one is proposed as an interior excavation and the other is an in-situ soil treatment.

Interior Redi-Quik Excavation

Relative to the former UST located beneath the building floor, as discussed in Section 1.1, this tank has been cleaned and cut open on the top and bottom. Therefore, the primary suspect source of impacts has been removed, however as noted above, there has been no soil sampling performed from beneath this tank. In addition, since the tank was not filled with an inert material such as sand, gravel or concrete, proper closure of the tank has not been completed. For costing purposes, this proposal assumes that up to 4 feet of soil from beneath the tank will be removed via excavation (this may be shallower if groundwater is encountered). This will require the use of a mini-excavator that can fit through the 4-foot wide doorway in front of the tank on the south side of the building. Based on measurements obtained during a site visit performed during the preparation of this proposal, the existing tank cavity is approximately 4 feet wide, 10 feet long and 3.5 feet deep. Therefore, if soils are excavated to an additional 4 foot depth (total depth of the hole would be 7.5 feet), an estimated mass of soil to be removed is approximately 8 tons. This would be the limit of the depth of excavation that could be achieved with the mini-excavator that would be required to use to fit through the existing doorway. For the purposes of this proposal, it is assumed that this soil will need to be transported for off-site disposal as hazardous waste to the EQ facility in Michigan. Verification soil samples will be collected from the base and four sidewalls and analyzed for VOCs to document remaining conditions. The tank cavity will then be backfilled with pea gravel and a concrete floor patch will be placed. Any residual impacts remaining in the soil beneath the facility will be addressed via engineered barriers (i.e., existing building) and institutional controls (deed restriction).

Exterior (Dauer) Driveway In-Situ Chemical Oxidation

Based on the KPRG/Orin project team experience, a 30% sodium persulfate solution will be used (this will be finalized based on treatability study data from Task 1). The cleanup goal for the chlorinated hydrocarbons will be the U.S. EPA Preliminary

Remediation Goals (PRGs) listed in Table 2 of the Shaw supplemental report referenced above. For the purposes of cost estimating this proposal, the following scope of injection work is defined:

- Mobilize field personnel, chemicals and equipment (trailer with all mixing tanks and injection hoses/pumps.
- Treatment/injection will be performed using direct push (geoprobe) technology.
- Approximately 10 injection locations will be used for treatment in the targeted plume area located within the Dauer driveway (60 feet long and 10 feet wide based on Shaw report).
- A 4-foot radius of influence is assumed. With 33% overlap to ensure complete coverage, each of the injection locations will be spaced 7 feet apart.
- Treatment will start at approximately 21 feet bgs with respective lifts of the geoprobe rods throughout the vertical extent of the plume to approximately 5 feet bgs.
- Inject approximately 200 gallons of 30% catalyzed sodium persulfate solution into each direct push location.
- The number of locations, solution concentration and volume may vary depending on unforeseen site conditions and contaminant load.
- Clean equipment and site. Demobilize.
- Approximately 14 days after the injection, perform verification soil sampling using the geoprobe method. A total of 6 sample locations (10' x 20' grid on center) with two soil samples collected per location. This will yield a total of 12 verification samples. The samples will be analyzed for VOCs.
- For conservative costing purposes, a second round of chemical injection is assumed over 75% of the area is assumed to be necessary for the purposes of this proposal based on the verification sampling. The same procedures will be used as noted above with the injection areas focused based on the verification sampling results.

- Approximately 14 days after the second injection, a second round of verification samples. The same procedures will be used as noted above. A total of 8 additional verification samples (4 locations with 2 samples per location) will be collected and analyzed for VOCs.

Additional focused injection work may be needed based on the results of the second round of verification sampling, however, this is not contemplated in this proposal.

2.4.2 Residually Impacted Soil Management

The existing SI data and information indicates that there are some shallow residual PCE soil impacts in the vicinity of PZ-10 immediately east for the building. The area has a number of utilities entering the building at this point. Due to the commercial use of this property, the relatively low detected concentration of PCE (3.09 mg/kg) and the fact that closure for the Redi-Quik property is anticipated to include WDNR GIS Registry listing for residually impacted soils that will remain beneath the building, this proposal assumes extending an engineered barrier over the soils on the east side of the building. The noted shallow soil impacts east of the Redi-Quik facility are within a small grassy area which is surrounded by concrete pavement or building structure in all directions. KPRG proposes to extend concrete pavement over this area as an engineered barrier.

The overall area of the additional engineered barrier is approximately 200 square feet. The barrier construction will require removing approximately 1 foot of soil from over this area (estimated at 10 tons) to facilitate proper base preparation. This soil will need to be staged, profiled, and sent for proper off-site disposal. Based on the available information, this soil should qualify for disposal as special non-hazardous waste under the contained out policy. Barrier construction will consist of placing clean stone backfill followed by 4 inches of poured concrete with fiber (4,000 pound per square inch strength).

Once the engineered barrier is in place, long term management of the residual impacts will be addressed through site closure via GIS registry and barrier maintenance.

2.4.3 Groundwater Monitored Natural Attenuation

Groundwater data generated to date suggests that the natural attenuation process of reductive dechlorination is occurring within the impacted plume area. The proposed source removal/control activities should reduce the source term feeding the groundwater plume thereby

further reducing noted groundwater impacts. Therefore, the only additional groundwater remediation work being proposed is monitoring to verify that the plume is stable and/or decreasing in size. The proposed groundwater monitoring program is detailed under Task 6 below.

2.5 Task 5 – Construction Documentation/As-Built Report

Upon successful completion of the source control activities and expansion of the existing engineered barrier KPRG will provide a Construction Documentation/As-Built Report which will document the activities and note any field changes or modifications to the design. An Operation, Maintenance and Monitoring Plan (O&M Plan) will also be included in this submittal. The As-Built Report will be provided within 30-days of completion of the injection and construction activities.

2.6 Task 6 – Operation, Maintenance, Monitoring and Reporting

An O&M Plan will be developed and submitted to the WDNR (see Task 5). The proposed remediation will have very low maintenance.

A groundwater sampling program will be implemented to monitor water quality conditions and enhanced natural attenuation over time. This proposal assumes one year of quarterly monitoring followed by one additional year of semi-annual monitoring. Wells to be included in the monitoring program are MW-8, MW-10, MW-11, MW-12, MW-13, MW-21, PZ-10 and PZ-20. All samples will be analyzed for VOCs, DO and ORP. In addition, the first and third quarter samples collected during the first year of monitoring and one of the subsequent semi-annual monitoring events will be analyzed for natural attenuation parameters of total organic carbon (TOC), sulfate, sulfide, nitrate, ferrous iron and dissolved gasses of ethene, ethane and methane. In addition, one duplicate sample will be analyzed for VOCs per sampling event for quality assurance/quality control purposes.

All monitoring data will be reported to the WDNR on an annual basis on a completed WDNR form 4400-194. All supporting figures and documentation will be included in the report.

2.7 Task 7 – Case Closeout Report and Well Abandonment

Each round of groundwater monitoring data will be evaluated to track the progress of the remediation program. Once it is determined and sufficiently documented that groundwater quality is stable or improving, a Case Closeout Report will be prepared and submitted to the WDNR for review/approval. At this time it is anticipated that the closure will include placement of the Redi-Quik and other affected properties on the WDNR soil registry and placement

of the Redi-Quik and other affected properties on the WDNR groundwater registry. The exact nature of the closure package will depend on the results of the remediation program at that time.

Upon WDNR approval of the closure package all monitoring wells and the two existing recovery sumps will be properly abandoned.

Table 2-1. Preliminary Evaluation of Soil Remedy Options. Redi-Quik Dry Cleaners West Allis, WI

Soil Remedy Options	Technology Description	Technical Feasibility	Economic Feasibility
No Action	This option basically is a no action alternative for the soils relying strictly on natural biodegradation and volatilization processes to reduce contaminant mass over time.	There is documentation of soil impacts above soil screening levels for PCE. This alternative would only be feasible in conjunction with engineered barriers and/or institutional controls. Engineered barriers for the property to the north would provide poor short and long term risk management due to its residential use. A WDNR GIS Soil Registry listing for the Redi-Quik property may be part of the overall risk management strategy assuming commercial land use is maintained. See discussion below.	No substantive additional cost.
Soil Excavation and Off-Site Treatment/Disposal	This option includes the excavation of impacted soils and transport of the soils for proper off-site treatment/disposal. The area would then be backfilled with clean fill and repaved. Based on the nature of the contaminants and the concentrations detected on site, a portion of the excavated soils may have to be handled and disposed as a hazardous waste, however, soils below 33 mg/kg PCE would be able to be handled and disposed as non-hazardous waste under the "contained-out" rule. Initial estimate of hazardous waste soil is on the order of 533 tons. The upper 5 feet of unimpacted soil would need to be stripped off and stockpiled for later replacement.	The limited space within the driveway that would need to be excavated and the depth of the required excavation (up to 21 feet) make this standard excavation option not technically feasible. The excavation would require shoring of both the Redi-Quik building and the residence. The limited space will not allow for access of standard construction equipment for the installation of sheet piling for shorng purposes. The soil removal can be accomplished with a large diameter (4 ft.) bucket auger rig but this will still require underpinning of the residence for safty purposes. - Excavations inside the facility in the vicinity of the former tank may be feasible since there is a wide access door and room for a mini-excavator. Depth of the interior excavation will be limited by the machinery that can access the interior. Access from the north side would require partial wall removal the cost of which will not justify the added potential contaminant mass removal. Excavation of source material provides good short and long term effectiveness.	- Relative to the exterior excavation, the economic feasibility of this option is driven by the need for removing the soil through the use of large diameter bucket augers as opposed to standard excavation equipment, the need for structural underpinning and the volume of soil that would need to be transported and disposed of as hazardous waste. Assuming use of a large diameter bucket auger for soil removal, structural underpinning and doisposal of 533 tons of soil as hazardous waste at the EQ facility in Wayne, Michigan is estimated to range from $415,000 to $475,000. - Relative to interior excavation work, the economics are driven by the need for specialized excavation equipment and the cost of soil dispsoal as hazardous waste. Assuming that approximately 8 tons of soil will be removed from the interior, the estimated cost for interior soil removal work is between $11,000 and $16,000.
In-Situ Soil Vapor Extraction	In-situ soil vapor extraction (SVE) is a commonly applied remediation technology for addressing VOC impacts in unsaturated zone soils. SVE involves the removal of VOCs from unsaturated soils by mechanically drawing or venting air through the soil matrix. A standard SVE system consists of a series of air injection points surrounded by a series of air extraction points on which a vacuum is applied. The movement of air through the subsurface soils volatilizes the contaminants which are extracted via the air/vapor stream. The extracted air/vapor is then either vented directly to the atmosphere or passed through granular activated carbon (GAC) to filter the organics prior to discharging to the atmosphere.	Although SVE is an effective and proven technology, it has limitations that preclude it from use at all sites with VOC impacted soils. This technology generally provides poor results for sites with clay and silty clay soils such as those found beneath this site. With these soil conditions, there is substantial loss in the efficiency of SVE systems in removing VOCs. To improve efficiency for SVE systems in clayey soils, a horizontal extraction well system would probably need to be considered. This would require excavating large portions of the site for system construction and installation. The excavated soils would need to be properly disposed off site and handled as discussed in the soil removal options evaluated above. Operational timeframes for SVE systems, under ideal conditions, are usually on the order of 2 to 3 years. However, due to the clayey soils at this site the operational timeframe would be expected to be substantially extended. Permitting requirements would potentially include an air discharge permit.	A general estimated cost per unit of treated material ranges from $30 to $80 per ton of impacted soil. Operation/maintenance costs can range from $5,000 to $30,000 per year depending on the size of the system and nature of the design. Additional costs would be incurred for engineering, excavated soil management/disposal and GAC disposal.
In-Situ Treatment w/ Chemical Oxidation	This option generally involves the introduction of a chemical oxidizing agent, such a potassium permanganate or catalyzed sodium persulfate, into the subsurface soil via pressure injection points. The oxidizing agent would react chemically with the organics within the soil (including the contaminants) resulting in non-hazardous by-products such as chlorine, carbon dioxide and manganese oxide in the case of potassium permanganate treatment. Since no soils would be excavated with this option, soil handling/disposal issues would be minimized or eliminated.	Chemical oxidation injection technology has evolved substantially over the last several years. Injection into lower permeability soils is not optimal, however, there has been proven success at sites with clayey tills such as at this facility. Injection can be performmed trough temporary geoprobes or via constructed injection points. Oxidant selection is also important. This option generally requires a treatability study to determine the best chemical oxidant and dosage for a specific site and a pilot test is needed to determine appropriate injection point spacings. Since the oxidant chemically reacts with the contaminant to physically breakdown the chemical to non-hazardous by-products and the reaction occurs quickly, this treatment option is effective on both the short and long term basis relative to meeting cleanup objectives and risk reduction. It is noted that in general, cleanup objectives may not be met with only one injection and that based on verification sampling, a "polishing" injection over a portion of the treatment area may be needed to meet final goals.	The economic feasibility of this option is driven by the mass of contaminant that needs to be treated, the natural oxidant demand of the soil, the size of the treatment area, the permeability of the soils and the levels of treatment that need to be achieved. Based on the data available, the estimated costs include $9,000 to $12,000 for treatabaility study, $8,000 to $15,000 for pilot testing and $30,000 to $70,000 per round of injection depending on the nature of chemical oxidant required.
Ex-Situ Treatment w/ Chemical Oxidation	This option includes the excavation of soils with contaminant concentrations above the "contained-out" threshold and treating these soils on-site to achieve contaminant levels sufficiently low to qualify for off-site disposal as non-hazardous waste which is substantially cheaper relative to transport and disposal costs. Treatment of the soils would occur in approved containers (e.g., lined roll-off boxes) and consist of mechanically mixing in an oxidizing agent such a potassium permanganate or catalyzed sodium persulfate. The oxidizing agent would react chemically with the organics within the soil (including the contaminants) resulting in non-hazardous by-products such as chlorine, carbon dioxide and manganese oxide in the case of potassium permanganate treatment. The treated soils would then be disposed as non-hazardous waste under the contained-out rule. Soils with contaminant concentrations determined to be below the contained-out threshold would be directly excavated and transported for off-site disposal as non-hazardous waste as with the remedial option discussed above.	This option may be technically feasible if performed under the "in-container" treatment exemption. The primary objective of this option would be to decrease the PCE concentration within excavated soils to below 33 mg/kg to facilitate disposal under the "contained out" policy. All technical issues relative to excavation noted in the second option above would apply to this option. Therefore, the soils would have to be removed with large diameter augers, structural underpinning of the residence, etc. The only difference would be treatment of the materials on site with subsequent transport and disposal as a non-hazardous waste at a local landfill.	The economic feasibility of this option depends on the volume of soil that may need to go off-site for disposal as a listed hazardous waste, assuming that soil excavation will be performed as part of remedy. The estimate provided in the supplemental site investigation work is 533 tons of hazardous waste soil. The cost savibngs from the off-site disposal as hazardous waste optio would be off-set by the on-site treatment costs. The additional disturbance of the neighbors and the permitting that would be required by the state would not justify this approach since the cost savings would not materialize in this case.
Engineered Barriers and Institutional Controls	This remedial alternative uses engineered barriers and/or institutional controls to manage the risks associated with the site. These can be implemented either individually or in tandem depending on the specific site conditions and exposure issues. Examples of engineered barriers are asphalt paving, clay caps, soil covers, etc. to eliminate direct contact hazards and minimize potential leaching associated with the infiltration of precipitation. Examples of institutional controls are the WDNR Geographic Information System (GIS) soil and groundwater registries. These items are often used at a site where meeting numerical cleanup standards for all impacted soils or groundwater may not be feasible or practical.	The currently known lateral distribution of impacted soils on the subject property lends itself well to this option. All currently defined impacts are below existing building foundations, concrete or asphalt with the exception of one approximate 200 square foot area on the east side of the facility. Paving this area with concrete is easily achievable. Institutional controls such as a deed restriction is technically feasible for the soils beneath the Redi-Quik facility. Closure with WDNR GIS registry is common and accepted especially if in conjunction with some source removal and engineered barriers. This option, however, is not believed to be appropriate for the risk management of impacted soils on the property to the north due to its residential land use.	Most of the site is already under an engineered barrier consisting of either building structure, concrete or asphalt. A concrete or asphalt barrier would need to be extended over only a small portion of the site to have all impacted areas under a barrier. This option is relatively inexpensive. Costs for this work are provided in the base proposal submittal. Institutional controls/placement on the WDNR Registry of sites with residually impacted soils and groundwater are generally inexpensive and economically feasible. An engineered barrier strategy without some form of source soil treatment or removal is not believed to be appropriate for the property to the north due to its residential land use.

Table 2-2. Preliminary Evaluation of Groundwater Remedy Options. Redi-Quik Dry Cleaners West Allis, WI

Groundwater Remedy Options	Technology Description	Technical Feasibility	Economic Feasibility
Natural Attenuation	Natural attenuation of groundwater is generally the no action alternative, relying on the natural biodegradation of the dissolved phase contaminants within the groundwater and the mechanical mechanisms of advection and dispersion to control/limit the extent of the impacted ground water plume. This is generally coupled with a groundwater monitoring component to verify that the subsurface conditions are favorable for the natural biodegradation of the contaminant and that the plume is stable and/or decreasing.	Since there are documented groundwater impacts above Enforcement Standards (ESs), this option would include no further action relying on natural biodegradation of impacts along with mechanical mechanisms of advection and dispersion. This would be coupled with groundwater monitoring to verify that the plume is stable or decreasing. The most recent groundwater data from 2006 suggests that the natural biodegradation process of reductive dechlorination is occurring beneath the site. Under such conditions, monitored natural attenuation alone may be technically feasible particularly if the overall site remediation strategy will include source zone soil treatment or removal.	This alternative is economically feasible. The costs would be limited to routine groundwater monitoring to document that the groundwater plume is stable or decreasing in size and magnitude.
Enhanced Biodegradation	This alternative is basically a modification of natural attenuation by adding an amendment solution into groundwater to stimulate the natural biodegradation process of reductive dechlorination. This is usually achieved by introducing the amendment solution into groundwater via an infiltration gallery or injection points. There are a variety of amendments that can be used such as Hydrogen Release Compound (HRC®) which is a proprietary, environmentally safe polyacetate ester specifically formulated for the slow release of lactic acid upon hydration. Microbes in groundwater then metabolize the lactic acid and produce hydrogen that can be used by reductive dehalogenators which are capable of dechlorinating chlorinated aliphatic hydrocarbons such as PCE. Other amendments include organic substrates such as molasses. There are advantages and disadvantages to each of these types of amendments and the final selection should be based on site specific conditions.	This alternative is technically feasible and has proven success at similar sites across the country.This alternative is generally not effective over the long-term unless the source of the groundwater impacts has been properly addressed (i.e., the source and any associated impacted soils within the unsaturated zone have been remediated or properly addressed). This alternative, however, coupled with source removal and unsaturated zone soil remediation should provide for desirable short and long term reductions in contaminated groundwater concentrations.	Enhanced biodegradation is generally an economically feasible option. The costs for this remedial option will vary depending on the amendment used and the efficiency of the injections. A single injection at this site is estimated to cost between $15,000 and $20,000. However, since current site data indicates that redeuctive dechlorination is actively occurring beneath the site, incurring the additional expense of the injection may not be necessary. This should be re-evaluated after the first two to three rounds of standard natural attenuation monitoring.
Air Sparging	This remedial action option for groundwater basically consists of the injection of air from an oil-less compressor through a series of injection points screened below the water table. This results in a stripping effect for the dissolved phase VOCs in groundwater by transferring the contaminant into the vapor phase. The VOC rich vapors then rise through the water column into the overlying vadose zone (unsaturated zone) soils and eventually to the ground surface. The vapors within the vadose zone soils are usually captured using a soil vapor extraction system (see Table 2-1) so as to preclude the direct discharge of the vapors to the atmosphere.	Although air sparging is an effective and proven technology, it has limitations that preclude it from use at all sites with VOC impacted groundwater. This technology generally provides poor results for sites with clay and silty clay soils such as those found beneath the site to a depth of 45 feet. With these soil conditions, there would be a substantial loss in the efficiency of an air sparging system particularly with the development of preferential migration pathways in discontinuous sandy stringers within the overall silty clay matrix. In addition, as noted above, an extensive soil vapor extraction system would need to be installed to collect and treat the accumulated vapors from within the vadose zone. This would require extensive soil excavation and/or the installation of air sparging and soil vapor extraction points on a very tight grid (very small spacing). Another technical consideration for this site is that air sparging adds oxygen to the ground water system which would counteract any natural reductive dechlorination of the PCE.	A typical design and installation cost for an air sparging system is in the order of $60,000 to more than $100,000 depending on the required sparge point spacing and depth. Operation and maintenance costs generally range from $10,000 to $20,000 per year. These costs do not include the additional costs for the design and installation of a soil vapor extraction system for the collection and treatment of the VOC vapors accumulated within the vadose zone. Additional costs would also be encountered for the excavation and disposal of any soils that would need to be removed as part of the installation of both the air sparging and soil vapor extraction systems.
Active Groundwater Recovery and Treatment	Active groundwater recovery and treatment basically consists of the installation of a groundwater recovery well or wells to hydraulically capture the impacted groundwater plume through active pumping. The collected water would then require treatment via an air stripper or granular activated carbon (GAC) prior to discharge or reinjection into the ground water system. To be effective, a groundwater recovery system should be designed in a manner that will establish a capture zone that will recover the primary mass of dissolved phase contaminants and provide hydraulic control of further downgradient migration of the impacted groundwater plume.	Although technically feasible, active groundwater pump and treat systems have been found to be most effective in situations where extremely high groundwater impacts are documented along with an expanding groundwater plume and/or to address the removal of free product. These types of remediation systems have been found to be highly inefficient and ineffective for sites with low level dissolved phase impacts due to low mass removal rates. The short-term effectiveness of this option for the subject site would be minimal and long-term effectiveness would be questionable at best. Discharge of treated groundwater into the local sanitary sewer would need to be negotiated with the City of West Allis or another disposal option would need to be considered.	Based on the subsurface geological conditions at this site, an active groundwater recovery system would consist of two to three six-inch diameter pumping wells. The water would be treated via an air stripping column prior to discharge. The design, installation and start-up costs for a system of this size typically range from $75,000 to $150,000 with annual operation and maintenance costs ranging from $25,000 to $50,000 assuming discharge of the treated water to the municipal sewer system with nominal discharge fees. These costs do not include potential disposal costs for impacted soils that may be generated as part of system installation.

3.0 SCHEDULE

A detailed project schedule will be provided upon successful award of the project which will facilitate a firm start date. A general project schedule is provided below.

TASK	SCHEDULE
1) Design Data Generation	Within 45 days of authorization.
2) RAOR and RAP Finalization	Within 30 days of task 1 data receipt.
3) Commodity Services Bidding	2 to 3 weeks.
4) Remedial Construction	90 days.
5) Construction Doc./As-Built Rpt.	4 weeks after Task 4 completion.
6) Operation, Maintenance, Monitoring	2 years with annual reports.
7) Case Closeout Report	Within 30-days of determination that site is ready for closure.

It is noted that the start date for construction will be somewhat weather dependant. In addition, the timeframe for monitoring may be shorter or longer depending on the analytical results. This proposal assumes a full 2 years of monitoring as defined in Section 2.6.

4.0 BUSINESS PROPOSAL

This section provides KPRG's business proposal. Since the exact scope of remediation activities can not be determined until the completion of Tasks 1 and 2, this cost is being provided as a good faith estimate. Specialty, non-commodity service contractor (Orin) cost estimate is provided in Appendix A as backup to the KPRG cost estimate. Commodity contractor costs provided in this proposal are based on individual bids from qualified firms to assist in providing a realistic cost estimate. These bids are provided in Appendix B as backup documentation to this bid. These services will be competitively bid as part of Task 3 activities when the scope of the remediation work is finalized.

The total contract base 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 KPRG cost estimate is based on the following assumptions:

- Orin is a specialty services contractor that is integral to the proposed work and therefore incorporated as part of the bidding proposal team and not subject to commodity services bidding process.

- The Client will contract and be billed directly by all specialty and commodity services contractors. If KPRG 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.

- All available data and field measurements have been fully disclosed by the previous consultant.

- Soil vapor intrusion issues have been addressed to the WDNR's satisfaction and no additional work (investigative or remedial) needs to be performed relative to this exposure pathway.

- Unrestricted access to the neighboring property will be provided.

- Soil cleanup goals identified as USEPA PRGs in Table 2 of Shaw supplemental SI report.

- Task 1 – Treatability Study: 1 day of field sampling activities. Bench scale treatability study for three chemicals (sodium persulfate and sodium permanganate).

- Task 1 – Pilot Test: 1 day of field pilot test field activities.

- Task 2 – One round of report revisions.

- Task 3 – Three bids will be obtained for each commodity service.

- Task 4 – Source Control/Removal: One interior excavation area. The assumed size of the excavation and waste volumes are defined in Section 2.4. Transportation and disposal costs fluctuate with market conditions and the price of fuel. This proposal assumes $1,400 per load transport and $290/ton disposal for soils that may need to be disposed as hazardous waste at the EQ facility and $60/ton for loading, transport and disposal to a local landfill under the contained out policy. Five soil samples will be collected from the interior excavation as part of documentation sampling. The samples will be analyzed for VOCs with standard turn around.

- Task 4 – Exterior Driveway In-Situ Chemical Oxidation: 30% catalyzed sodium persulfate will be used as the oxidation chemical. The number of injection points specified in Section 2.4. Verification sampling as specified in Section 2.4 and a second round of injection and sampling as specified in Section 2.4. **If the treatability study determines that sodium permanganate is the preferred injection chemical as opposed to sodium persulfate, an additional $13,278, $33,158 and $19,147 will be incurred for the pilot test, 1st round injection and 2nd round injection, respectively (total additional $65,583).**

- Task 4 – Residually Impacted Soil Management: The Redi-Quik building will remain in place and a concrete engineered barrier will be extended over a 200 square foot area immediately east of the building. No utilities are within 1 foot of the surface and will, therefore, not need to be moved or replaced.

- Task 4 – Groundwater Monitored Natural Attenuation: No additional groundwater remediation will be required by the WDNR.

- Task 5 – No revisions to the submittal will be required.

- Task 6 – Two years of operation, maintenance and monitoring. Groundwater samples will be collected on a quarterly basis for the first year and semi-annually the second year. Eight wells will be in the monitoring program. All samples will be analyzed for VOCs. Three of the sampling events will include natural degradation parameters as specified in Section 2.6. One duplicate sample will also be collected per sampling event. Three drums of purge water that will qualify for disposal under the contained out policy.

- Task 6 – Two annual reports will need to be submitted.

- Task 7 – Site closure strategy includes listing the Redi-Quik and affected properties on the WDNR GIS Registry for both residually impacted soil and groundwater sites. Soil vapor intrusion issues have been addressed to WDNR's satisfaction.

- Task 7 – One round of submittal revisions.

Any 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 to submittals beyond those covered in the assumptions above.

Time required for the development and submittal of reimbursement packages is not refundable under the DERF program. This time is not included in the base cost estimate and will be billed separately on a time and materials basis in accordance with the rates provided on our costing sheets.

KPRG will take reasonable precautions to avoid damaging buried structures and utilities. KPRG will order a utility clearance locate through Digger's Hotline for all proposed drilling/excavation areas. In addition, KPRG will request the property owner's approval of all sites relative to potential private subsurface utilities/structures not cleared as part of the standard public utility clearance. As such, the property owner assumes liability for claims arising out of damage to buried utilities or subsurface structures that were not called to KPRG's attention or not properly located on plans furnished to KPRG.

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

- KPRG certifies that the contracts services will comply with all applicable requirements under state statutes 292.65 and WAC chapters NR 700 through 728.

- KPRG will make available to the WDNR upon request, for inspection and copying, all of our documents and records related to this project.

- KPRG is fully informed about the project's scope and requirements, and has the expertise and ability to analyze alternatives and design the most suitable response action consistent with technical and economic feasibility, environmental statutes and rules, restoration timeframes and latest technical services.

- KPRG will provide the necessary staff and facilities for all phases of planning, investigation, design, construction and operation.

- As needed, KPRG will confer with specialists on unusual matters; provide qualified technical reviewers, who will keep the owner/operator advised on technical and regulatory matters and work toward the planned remediation goal.

- KPRG will perform all services in an ethical, professional and timely manner.

Table 4-1. Estimated Project Cost Summary - Base Bid - Redi-Quik Dry Cleaners West Allis, WI

				Commodity Contractors							
Task	Professional Labor	Expenses	Orin Specialty Contractor - Injection	Construction Contractor	Geoprobe Contractor	Haz. Waste Transport	Haz. Waste Disposal	Non-Haz. Waste Load/Transport/Disp	Purge Water (IDW) Disposal	Analytical	Totals
1) Design Data Generation (Treat. Study and Pilot Test)	$3,010.00	$770.00	$24,782.00	$0.00	$900.00	$0.00	$0.00	$0.00	$0.00	$405.00	$29,867.00
2) RAOR/RAP Finalization	$6,640.00	$100.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$6,740.00
3) Commidity Services Bids	$2,330.00	$30.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$2,360.00
4) Remedial Construction	$12,880.00	$1,560.00	$41,038.00	$9,170.00	$3,200.00	$2,400.00	$2,320.00	$480.00	$0.00	$1,375.00	$74,423.00
5) Construction Documentation/As Built Report	$3,475.00	$200.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$3,675.00
6a) Operation, Maintenance and Monitoring	$9,030.00	$3,070.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$375.00	$6,075.00	$18,550.00
6b) Annual Reporting (2 years)	$2,660.00	$60.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$2,720.00
7a) Case Closeout Report	$4,900.00	$1,275.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$6,175.00
7b) Well Abandonment	$730.00	$65.00	$0.00	$0.00	$1,000.00	$0.00	$0.00	$0.00	$0.00	$0.00	$1,795.00
Totals	$45,655.00	$7,130.00	$65,820.00	$9,170.00	$5,100.00	$2,400.00	$2,320.00	$480.00	$375.00	$7,855.00	$146,305.00

KPRG TASK COSTING SHEET

Project: Redi-Quik - West Allis, WI

Task: 1 - Design Data Generation

Professional Labor	Rate ($/Hr.)		Units	Total
Principal/Proj. Mgr.	$130		4	$520
Sr. Project Engineer	$90		0	$0
Project Geologist	$75		32	$2,400
CADD	$65		0	$0
Admin. Asst/ Word Proc.	$45		2	$90
			Total Labor	$3,010

External Expenses	Rate	Type	Units	Total
Photoionization Detector	$75	Daily	3	$225
Field Vehicle	$65	Daily	3	$195
Water Quality Meter	$175	Daily	2	$350
			Total Exp.	$770

Non-Commodity Specialty Contractor	Rate	Type	Units	Total
Orin - Treatability Study		See Appendix A		$9,000
Orin - Pilot Test		See Appendix A		$15,782
			Total Orin	$24,782

Commodity Contractors	Rate	Type	Units	Total
Geoprobe	$900	Est	1	$900
Analytical	$55	VOC - Soil	1	$55
	$350	Profiling - Soil	1	$350
			Subtotal Contractors	$1,305

TASK TOTAL:	$29,867

KPRG TASK COSTING SHEET

Project: Redi-Quik - West Allis, WI

Task: 2 - RAOR/RAP Finalization

Professional Labor	Rate ($/Hr.)	Units	Total
Principal/Proj. Mgr.	$130	32	$4,160
Sr. Eng./Sci.	$90	16	$1,440
Project Eng./Sci.	$75	8	$600
CADD	$65	4	$260
Admin. Asst/ Word Proc.	$45	4	$180
		Total Labor	$6,640

External Expenses	Rate	Type	Units	Total
Reproduction	$100	Est	1	$100
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.	$100

Contractors	Rate	Type	Units	Total
				$0
				$0
				$0
				$0
			Subtotal Contractors	$0

TASK TOTAL:	$6,740

KPRG TASK COSTING SHEET

Project: Redi-Quik - West Allis, WI

Task: 3 - Commodity Services Bidding

Professional Labor	Rate ($/Hr.)	Units	Total
Principal/Proj. Mgr.	$130	8	$1,040
Sr. Eng./Sci.	$90	0	$0
Project Eng/Sci	$75	16	$1,200
CADD	$65	0	$0
Admin. Asst/ Word Proc.	$45	2	$90
		Total Labor	$2,330

External Expenses	Rate	Type	Units	Total
Reproduction	$30	Est	1	$30
Field Vehicle	$65	Daily	0	$0
Field Supplies	$20	Daily	0	$0
Drums	$55	Each	0	$0
			Total Exp.	$30

Contractors	Rate	Type	Units	Total
				$0
			Subtotal Contractors	$0

TASK TOTAL:	$2,360

KPRG TASK COSTING SHEET

Project: Redi-Quik - West Allis, WI

Task: 4 - Remedial Construction

Professional Labor	Rate ($/Hr.)		Units	Total
Principal/Proj. Mgr.	$130		40	$5,200
Project Design Engineer	$90		0	$0
Oversight Engineer/Geol	$75		100	$7,500
CADD	$65		0	$0
Admin. Asst/ Word Proc.	$45		4	$180
			Total Labor	$12,880

External Expenses	Rate	Type	Units	Total
Photoionization Detector	$75	Daily	10	$750
Field Vehicle	$65	Daily	10	$650
Sampling Supplies	$20	Daily	3	$60
Water Fees (tap hydrant)	$100	Est	1	$100
			Total Exp.	$1,560

Non-Commodity Specialty Contractor	Rate	Type	Units	Total
Orin (1st Round Injection Persulfate)		See Appendix A		$24,075
Orin (2nd Round Injection Persulfate)		See Appendix A		$16,963
				$41,038

Contractors	Rate	Type	Units	Total
Geoprobe Verification Sampling	$1,600	Daily	2	$3,200
Analytical (Verification Sampling)	$55	VOC Soil	20	$1,100
Interior Excavation/Staging/Backfilling	$6,050	Est.	1	$6,050
Interior Exc. Load/Trans. (haz)	$2,400	per load	1	$2,400
Interior Exc. Disp. (haz)	$290	per ton	8	$2,320
Concrete Barrier Const. Labor/Equip.	$940	Est.	1	$940
Base Gravel	$18	per ton del.	10	$180
Concrete for Placement	$10	s.f.	200	$2,000
Barrier Scraped Soil Tran/Disp	$60	ton	8	$480
Analytical (Interior Exc Standard)	$55	VOC Soil	5	$275
			Subtotal Contractors	$18,945

TASK TOTAL:	$74,423

KPRG TASK COSTING SHEET

Project: Redi-Quik - West Allis, WI

Task: 5 - Construction Documentation/As-Built Report

Professional Labor	Rate ($/Hr.)	Units	Total
Principal/Proj. Mgr.	$130	10	$1,300
Project Design Engineer	$90	0	$0
Oversight Engineer	$75	24	$1,800
CADD	$65	3	$195
Admin. Asst/ Word Proc.	$45	4	$180
		Total Labor	$3,475

External Expenses	Rate	Type	Units	Total
Reproduction	$200	Est	1	$200
Field Vehicle	$65	Daily	0	$0
Sampling Supplies	$20	Daily	0	$0
			Total Exp.	$200

Contractors	Rate	Type	Units	Total
				$0
				$0
				$0
				$0
			Subtotal Contractors	$0

TASK TOTAL:	$3,675

KPRG TASK COSTING SHEET

Project: Redi-Quik - West Allis, WI

Task: 6a) - Operation, Maintenance and Monitoring (Quarterly First Year, Semi-Annual Second Year)

Professional Labor	Rate ($/Hr.)	Units	Total
Principal/Proj. Mgr.	$130	12	$1,560
Sr. Eng./Sci.	$90	0	$0
Project Eng./Sci.	$75	96	$7,200
CADD	$65	0	$0
Admin. Asst/ Word Proc.	$45	6	$270
		Total Labor	$9,030

External Expenses	Rate	Type	Units	Total
Photoionization Detector	$75	Daily	0	$0
Field Vehicle	$65	Daily	16	$1,040
Disposable Bailers	$15	Ea.	48	$720
Drums	$55	Each	2	$110
Water Quality Meter (W/DO/ORP)	$175	Daily	6	$1,050
Water Level	$25	Daily	6	$150
			Total Exp.	$3,070

Contractors	Rate	Type	Units	Total
Analytical - Water	$55	VOC	54	$2,970
	$115	Nat. Att. Para.	27	$3,105
Purge water (IDW) Disposal	$125	per drum	3	$375
			Subtotal Contractors	$6,450

SIX EVENT TASK TOTAL:	$18,550

KPRG TASK COSTING SHEET

Project: Redi-Quik - West Allis, WI

Task: 6b) - Annual Reporting

Professional Labor	Rate ($/Hr.)	Units	Total
Principal/Proj. Mgr.	$130	4	$520
Sr. Eng./Sci.	$90	0	$0
Project Eng./Sci.	$75	8	$600
CADD	$60	2	$120
Admin. Asst/ Word Proc.	$45	2	$90
		Total Labor	$1,330

External Expenses	Rate	Type	Units	Total
Photoionization Detector	$75	Daily	0	$0
Field Vehicle	$65	Daily	0	$0
Sampling Supplies	$20	Daily	0	$0
Reproduction	$30	Est	1	$30
PPE - Modified Level D	$15	Daily	0	$0
PPE - Level C	$35	Daily	0	$0
			Total Exp.	$30

Contractors	Rate	Type	Units	Total
			Subtotal Contractors	$0

ANNUAL TASK TOTAL:	$1,360
2 YEARS:	$2,720

KPRG TASK COSTING SHEET

Project: Redi-Quik - West Allis, WI

Task: 7a) - Case Closeout Report

Professional Labor	Rate ($/Hr.)	Units	Total
Principal/Proj. Mgr.	$130	16	$2,080
Sr. Eng./Sci.	$90	0	$0
Project Eng./Sci.	$75	32	$2,400
CADD	$60	4	$240
Admin. Asst/ Word Proc.	$45	4	$180
		Total Labor	$4,900

External Expenses	Rate	Type	Units	Total
Reproduction	$75	Est	1	$75
WDNR Review Fee	$750	LS	1	$750
WDNR GW Registry Fee	$250	LS	1	$250
WDNR Soil Registry Fee	$200	LS	1	$200
PPE - Level C	$35	Daily	0	$0
			Total Exp.	$1,275

Contractors	Rate	Type	Units	Total
				$0
			Subtotal Contractors	$0

TASK TOTAL:	$6,175

KPRG TASK COSTING SHEET

Project: Redi-Quik - West Allis, WI

Task: 7b) - Well Abandonment

Professional Labor	Rate ($/Hr.)	Units	Total
Principal/Proj. Mgr.	$130	1	$130
Sr. Eng./Sci.	$85	0	$0
Field Oversight	$75	8	$600
CADD	$60	0	$0
Admin. Asst/ Word Proc.	$45	0	$0
		Total Labor	$730

External Expenses	Rate	Type	Units	Total
Photoionization Detector	$75	Daily	0	$0
Field Vehicle	$65	Daily	1	$65
Sampling Supplies	$20	Daily	0	$0
PPE - Modified Level D	$15	Daily	0	$0
PPE - Level C	$35	Daily	0	$0
			Total Exp.	$65

Contractors	Rate	Type	Units	Total
Driller/Abandonment	$100	per well est	10	$1,000
				$0
			Subtotal Contractors	$1,000

TASK TOTAL:	$1,795

5.0 QUALIFICATIONS AND EXPERIENCE

5.1 Company Overview

KPRG and Associates, Inc. is a multi-disciplinary firm providing high quality environmental consulting and remediation services to a wide variety of clients. KPRG 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.

KPRG was founded in 1993 by three highly experienced individuals from the steel manufacturing and environmental remediation industries. In 2002, Richard Gnat, P.G. joined the firm as a Principal with over 20 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 KPRG to develop a reputation for innovation and excellence that has resulted in practical and cost-effective solutions to complex environmental problems.

KPRG 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, automotive, etc.), 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: *To provide our clients with high quality technical services to eliminate, minimize and/or manage their short and long term environmental liabilities.*

5.2 Project Team

Richard R. Gnat, P.G. - Richard will be the assigned project manager. He is a Principal in the Brookfield, Wisconsin office. He has over 23 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 projects completed were the in-situ treatment of approximately 11,000 cubic yards of metals and volatile organic solvent (PCE/TCE) 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 United States, 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 located in Milwaukee. Actively involved in the National Brownfield Association, was part of a Wisconsin Department of Natural Resources (WDNR) rule making committee associated with the development of brownfield grant eligibility requirements and scoring guidelines for evaluating grant submittals. Currently part of the consultant advisory committee to the WDNR relative to NR 700 issues.

Thomas J. Rysiewicz, P.E. – Thomas will provide the engineering QA/QC for this project. He is a corporate founder and a Wisconsin registered Professional Engineer. He has over thirty (30) 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.

Patrick Allenstein – Patrick will assist the project manager as the field engineer/scientist. He has over eight (8) years of environmental consulting experience in all facets of the field. Patrick routinely performs site investigation and remediation projects for private sector clients that participate within state environmental programs. He has recently completed the oversight of a dry cleaner remediation in Thiensville, Wisconsin which included Hydrogen Release Compound (HRC) injections into the ground water to promote natural biodegradation of PCE.

5.3 Relevant Project Descriptions

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

Existing Dry Cleaner Remediation – Thiensville, Wisconsin

Facility Description: The subject facility is located in Thiensville, Wisconsin. A site investigation determined the nature and extent of PCE impacts in groundwater and soils beneath the site. The approved remedial action included the temporary removal of the dry cleaning equipment, cutting of the concrete floor to access the underlying source zone soils, excavation of the soils for off-site disposal, the construction of an infiltration gallery to inject biostimulants to enhance natural reductive dechlorination in groundwater, the installation of an overlying soil vapor extraction system and the replacement of the concrete floor and dry cleaning equipment.

Project Activities: KPRG was contracted to design and implement the approved remedial action. The initial concept design for the approved action needed to be modified based on the engineering properties of the soils. A vertical infiltration gallery was subsequently included in the design. KPRG then obtained competitive contractor bids for the construction of the remedial system. KPRG provided engineering oversight of all construction activities. All excavated source zone soils were transported and disposed off-site as non-hazardous special waste under the "contained out" policy. The overall remedial construction took approximately 30 days to complete. Subsequent injection of HRC to stimulate natural reductive dechlorination of PCE in groundwater has successfully shown decreases on PCE concentrations of one order of magnitude as far a 100 feet downgradient of the injection zone within three months of initial injection. The project is currently being reviewed for closure.

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 negotiated and completed which identified the soils to be excavated and disposed of as a delisted, non-hazardous waste and the ground water to be addressed through natural attenuation.

Project Activities: KPRG 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 project negotiated with the WDNR where the soil was delisted and disposed of as a non-hazardous waste providing for substantial cost savings over disposal as a hazardous waste. Impacted ground water remediation was addressed through monitored natural attenuation. Site closure was received in 2003.

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: KPRG was contracted to complete a Phase II site characterization of the property and develop/implement the remedial action plan. The site characterization included both soil and groundwater. An initial phase of site investigation identified soil and groundwater impacts with various volatile organics including aromatics and chlorinated solvents. Metals were shown not to be an issue at this site. KPRG 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 60K 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. This facility stores, packages and manages the majority of the dry cleaning fluids used within the Midwest. In addition, historical operations have managed and included on-site treatment of steel mill wastes, liquors and heavy end petroleum by-products.

Project Activities: KPRG was 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, Metropolitan Water Reclamation District of Greater Chicago (WRDGC), 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, KPRG 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.

KPRG subsequently completed an evaluation of remedial alternatives followed by detailed remedial design. The interim actions completed to date include a free product PCE DNAPL removal system, and entrained PCE DNAPL removal system and a treatability study and pilot test for chemical oxidation injection using sodium permanganate. The detailed injection system design has been approved by IEPA and full scale injection is scheduled for the spring of 2007.

5.4 References

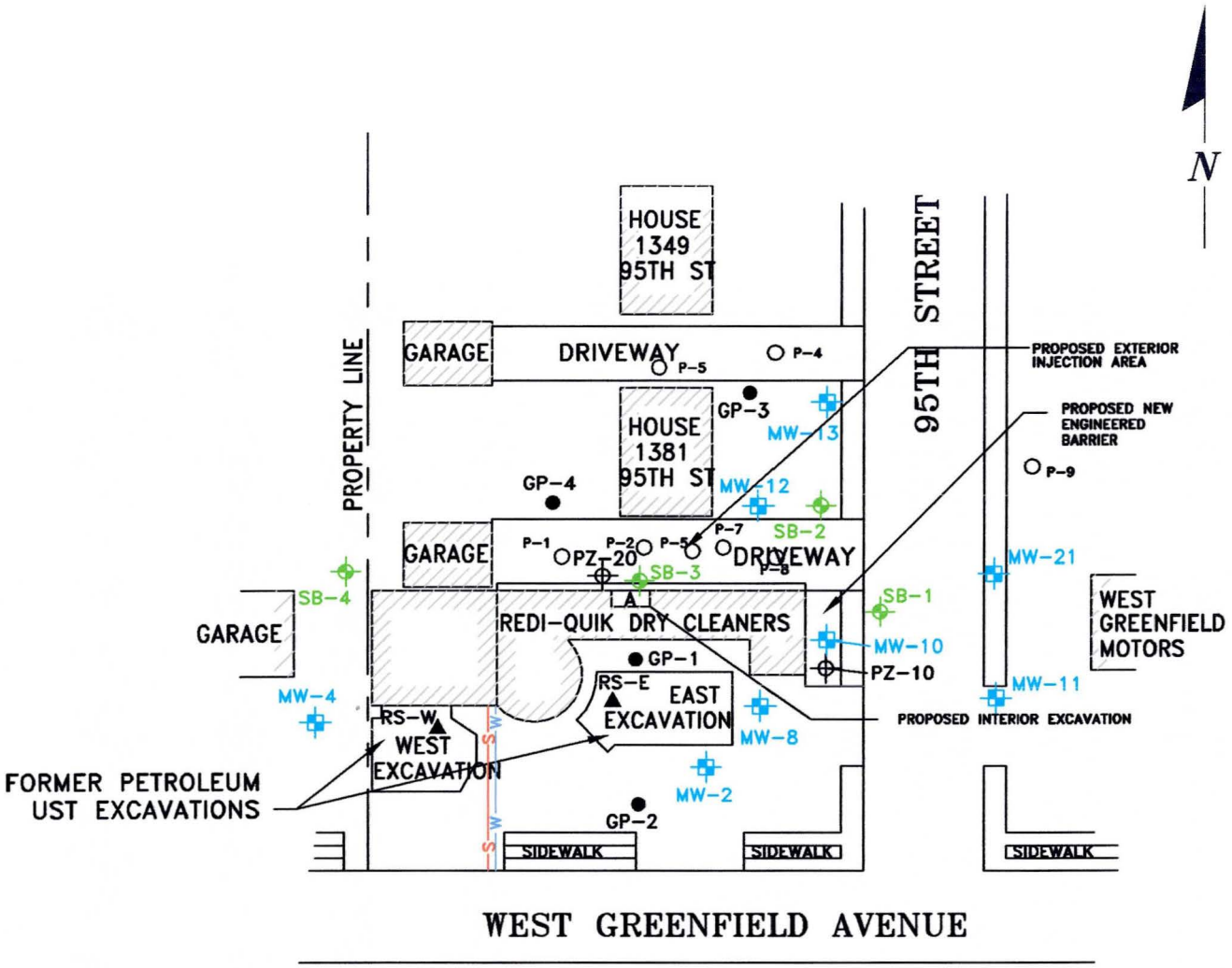
As requested in the RFP, the following client references are provided:

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

3) One Hour Martinizing of Butler, Inc.
   108 E. Friestadt Road
   Thiensville, WI
   414-254-9709
   Contact: Thomas Grimm

FIGURE



LEGEND

- A — 1,000 GALLON DRY CLEANER SOLVENT UST (NO LONGER IN USE)
- MONITORING WELL
- ● SITE INVESTIGATION GEOPROBE BORING
- TEST BORING, DRILLED 5/10/99 BY JJS & ASSOCIATES
- ▲ RECOVERY SUMP
- PIEZOMETER
- ○ SUPPLEMENTAL SI BORING – SHAW 8/06
- —W— WATER LINE
- —S— SEWER LINE

0 50
APPROXIMATE SCALE

ENVIRONMENTAL CONSULTATION & REMEDIATION

K P R G

KPRG and Associates, Inc.

14665 West Lisbon Road, Suite 2B Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

PROPOSED EXCAVATION, INJECTION AND ENGINEERED BARRIER LOCATIONS

REDI-QUICK DRY CLEANERS SITE
WEST ALLIS, WISCONSIN

Scale: 1"=50'	Date: mARCH 5, 2007
KPRG Proposal No. 12007	FIGURE 1

APPENDIX A
Orin Quote (Non-Commodity Specialty Contractor)

ORIN

Remediation Technologies

PROJECT PRICE BREAKDOWN

KPRG and Associates, Inc.
Richard Gnat
14665 West Lisbon Rd. Ste. 2B
Brookfield, WI 53005

Project: Redi-Quick Dry Clear
Prepared by: KEB
Date: 2/26/2007

Treatability Study Pricing

Lump Sum (includes labor and analytical)	$9,000

persulfate Pricing

Pilot Test

Project Design	$2,600
Onsite Injection Program	
Labor	$1,700
Equipment and subcontractors	$4,900
Chemical	$3,662
Per diem and mobilization and demobilization	$2,020
Documentation	$900
Estimated Price for persulfate	**$15,782**

Stanby Time Rate is $3500 per day

Basis of Price

Days on site	1 days
Area to be treated	200 sq. feet
Volume to be treated	3,200 cubic feet
Number of injection points	4 points
Concentration of reagents	
Sodium Persulfate	30%
Sodium Persulfate	0%
Gallons of chemical per injection point	200 gallons

ORIN

Remediation Technologies

PROJECT PRICE BREAKDOWN

KPRG and Associates, Inc.
Richard Gnat
14665 West Lisbon Rd. Ste. 2B
Brookfield, WI 53005

Project: Redi-Quick Dry Cleaners
Prepared by: KEB
Date: 2/26/2007

Treatability Study Pricing

Lump Sum (includes labor and analytical)	$9,000

persulfate Pricing

Full-Scale

Project Design	$2,600
Onsite Injection Program	
Labor	$1,700
Equipment and subcontractors	$6,550
Chemical	$9,155
Per diem and mobilization and demobilization	$3,170
Documentation	$900
Estimated Price for persulfate	**$24,075**

Stanby Time Rate is $3500 per day

Basis of Price

Days on site	1	days
Area to be treated	600	sq. feet
Volume to be treated	9,600	cubic feet
Number of injection points	10	points
Concentration of reagents		
Sodium Persulfate	30%	
Sodium Persulfate	0%	
Gallons of chemical per injection point	200	gallons

ORIN Remediation Technologies

February 27, 2007

Rich Gnat
KPRG and Associates, Inc.
14665 West Lisbon Rd., Ste. 2B
Brookfield, WI 53005

Subject: Proposal for In-Situ Remediation at the Redi-Quick Dry Cleaners Site in West Allis, Wisconsin 53214.

Dear Rich:

ORIN Remediation Technologies, LLC. (ORIN) is pleased to submit this proposal for in-situ remediation at the Redi-Quick Dry Cleaners Site located at 9508 West Greenfield Ave. in West Allis, Wisconsin (site). This proposal is based upon the latest information provided by KPRG and Associates, Inc. (KPRG).

The developed remedial strategy by ORIN consists of a grid injection into the Dauer driveway. Select soil samples collected from the Dauer residence exceed the 40 CFR 261.42 Table 1 value for Tetrachloroethene (PCE). The proposed driveway injection zone, as dictated by KPRG, is approximately 60 feet in length by 10 feet in width and contains approximately 10 proposed direct push injection locations or 8 temporary drilled points. The vertical treatment zone for the driveway grid injection extends from approximately 5 feet below ground surface (ft. bgs) to approximately 21 ft. bgs.

The lithology within the vertical treatment zone is a brown silty clay unit, ranging from ground surface to approximately 20 to 25 ft. bgs. This silty clay layer is underlain by gray sandy clay. Groundwater at the site appears to flow east-northeast. Regional flow direction is to the north towards the Menomonee River.

Groundwater primary contaminants of concern with maximum concentrations are (MW-10): (1) PCE at 17,000 micrograms per liter (ug/L); (2) Trichloroethene (TCE) at 330 ug/L; (3) Cis-1,2-Dichoroethene (DCE) at 49 ug/L; and (4) Vinyl Chloride (VC) at 0.64 ug/L. KPRG's overall site goal is to effectively remediate groundwater to below Wisconsin NR 140.10 Table 1 PAL and ES standards for aforementioned contaminants.

Soil primary contaminants of concern, within the driveway injection zone, with maximum concentrations are: (1) PCE at 1,900 milligrams per liter (mg/L); and (2) Trichloroethene (TCE) at 620 ug/L. There are petroleum hydrocarbons and chlorinated daughter products present in the soils within the targeted remedial zone; however, the levels are below USEPA Soil Screening Criteria and USEPA PRG's Table 1. KPRG's overall site goal is to effectively remediate the aforementioned chlorinated contaminants to below USEPA Soil Screening criteria and USEPA PRG's Table 1.

The limited amount of groundwater data currently available within the targeted treatment zone dictates that some assumptions be made. Implementation designs may change along with the corresponding cost as more information becomes available. The following scope of services describes two options ORIN feel are best for the site based on the current information received from KPRG.

ORIN is recommending two remedial approaches. The first approach would be the injection of catalyzed sodium persulfate, sodium permanganate or EOS® into the targeted remedial plume through temporary injection wells installed prior to ORIN mobilization.

The second approach would be to remediate the targeted remedial plume via direct push technology. This approach encompasses the injection of catalyzed sodium persulfate, sodium permanganate or EOS® into the targeted remedial plume through Geoprobe injection points.

Due to the range in price associated with the different chemistries and the amount of petroleum hydrocarbons present, ORIN recommends that a bench scale treatability study as well as a pilot scale test be conducted. ORIN recommends that the initial bench scale treatability study be performed using soil sampled from the most contaminated zone to determine the most cost effective treatment chemistry and dosage rate in reducing the concentration of contaminants, thereby demonstrating effective chemical loading and if a polish application may be needed. Treated and untreated samples will be analyzed for VOCs. Treatability testing will be conducted at ORIN's laboratory in conjunction with a local commercial laboratory. Cost provided other than treatability study is for budgetary purposes only.

After the treatability study, ORIN will provide recommendations for the chemistry that is the most suitable for the site and provide a firm cost for conducting the pilot scale test. The pilot study will ensure that the full-scale field application is

effective in its design and to modify parameters as needed. The pilot study will be conducted within and adjacent to the most contaminated zone, thereby demonstrating effective chemical loading and if polish applications may be needed.

After the pilot study, ORIN will provide recommendations for the remedial design that is the most suitable for the site and provide a firm cost for conducting the full-scale field application.

Sodium persulfate is a non-selective scavenger of organic compounds. Due to the amount of petroleum hydrocarbons present, the amount of persulfate needed to overcome these conditions is unknown. Sodium permanganate is more expensive but will mainly target chlorinated compounds. Potassium permanganate is less expensive than sodium permanganate; however, under field conditions you cannot achieve a greater concentration than 2-3% by solution, which is not enough to remediate the soil. In addition, potassium permanganate is a solid and may clog the screen of the temporary injection wells, if that option is exercised. The EOS® process promotes an inexpensive in-situ anaerobic biodegradation of chlorinated solvents. However, EOS® is only effective under saturated conditions and is not effective at biodegradation of petroleum constituents.

Approach

Option One

ORIN proposes to utilize a series of Geoprobe® injections to effectively disperse the treatment chemistry into the subsurface. Direct push technology involves driving the Geoprobe® rods, with an expendable tip, to depth. Once at the desired depth, the rods will be lifted to ensure the tip has exuded the rod. Treatment chemical will then be injected through the rods until the desired amount has been issued at that depth. From that point on the rods will be lifted at various intervals, injecting the desired amount of chemical at each depth. The rate and total volume of treatment chemistry injected into the formation will be monitored to ensure an even distribution of treatment chemistry throughout the entire length of the targeted vertical contamination zone. Proposed treatment chemistries include catalyzed sodium persulfate, sodium permanganate or EOS®.

Option Two

ORIN proposes to utilize a series of 1" Sch. 40 PVC drilled temporary injection locations to effectively disperse the treatment chemistry into the subsurface. Two or three screens nested per injection location shall be installed at varying depths within the targeted vertical treatment zone. Each of the eight locations installed by hollow stem auger (HSA) shall have two to three injectors screened at different depth intervals.

Proposed Chemistries Explanation

Sodium Persulfate

Sodium Persulfate is a stable, highly soluble, crystalline material, which upon activation generates the sulfate radical, a very strong oxidant, capable of oxidizing a broad range of recalcitrant compounds. Laboratory studies in water have shown favorable destruction of Tetrachloroethene, Trichloroethene, and cis/trans- 1,2-Dichloroethene using catalyzed persulfate.

The formation of the sulfate radical is critical for the destruction of volatile organic compounds. A few ways to activate persulfate to the sulfate radical is by heat, addition of alkaline (NaOH), peroxide or by a catalyst such as ferrous iron (Fe^{+2}).

$$S_2O_8^{-2} + Fe^{+2} \rightarrow SO_4^{-\bullet} + Fe^{+3} + SO_4^{-2} \qquad E^o \cong 2.6v$$

$$S_2O_8^{-2} + NaOH \rightarrow HSO_4^- + SO_4^{-2} + \tfrac{1}{2}O_2 + Na$$

The sulfate radical is a strong oxidizing agent capable of destroying many recalcitrant compounds. For example, the breakdown of common organic solvents in the presence of catalyzed persulfate is as follows:

PCE

$$2Na_2S_2O_8 + 4H_2O + C_2Cl_4 \rightarrow 4NaHSO_4 + 4HCl + 2CO_2$$

TCE

$$3Na_2S_2O_8 + 4H_2O + C_2HCl_3 \rightarrow 6NaHSO_4 + 3HCl + 2CO_2$$

DCE

$$4Na_2S_2O_8 + 4H_2O + C_2H_2Cl_2 \rightarrow 8NaHSO_4 + 2HCl + 2CO_2$$

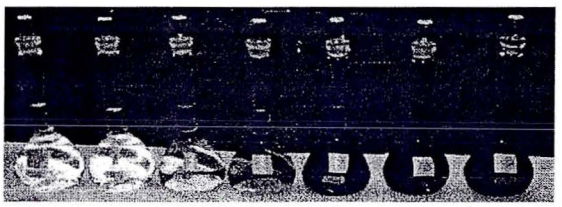
VC

$$5Na_2S_2O_8 + 4H_2O + C_2H_3Cl \rightarrow 10NaHSO_4 + HCl + 2CO_2$$

At some sites, sufficient iron will exist in the soils thus eliminating the need for the iron catalyst. The byproduct of persulfate reaction with target species is sodium monosulfate that subsequently breaks down into sulfate ions. The USEPA has listed a secondary drinking water standard for sulfates with an SMCL of 250 mg/L, a result of the fact that sulfates may impart a salty taste to drinking water.

Sodium Permanganate

Potassium ($KMnO_4$) and sodium permanganate ($NaMnO_4$) are a strong oxidizing agents that were originally discovered in the 17th and 18th century, respectfully. As oxidizing agents they have the ability to add oxygen, remove hydrogen or remove electrons from an element or compound. The molecular weight of permanganate is 103 g/mol. Permanganate is recognized by its characteristic purple to pink color when made into a solution.



Sodium permanganate has been successful in the reduction of chlorinated solvents in a wide array of field implementations. A benefit of a permanganate remediation approach is the complete oxidation of the contaminant without the formation of intermediate compounds commonly found with biodegradation. For example, the breakdown of common organic solvents with sodium (NaMnO4) permanganate is as follows:

PCE

$$4NaMnO_4 + 3C_2Cl_4 + 4H_2O \rightarrow 6CO_2 + 4MnO_2 + 4Na^+ + 12Cl^- + 8H^+$$

TCE

$$2NaMnO_4 + C_2HCl_3 \rightarrow 2MnO_2 + 2Na^+ + 3Cl^- + H^+$$

DCE

$$8NaMnO_4 + 3C_2H_2Cl_2 \rightarrow 6CO_2 + 8MnO_2 + 8Na^+ + 6Cl^- + 2OH^- + 2H_2O$$

VC

$$10NaMnO_4 + 3C_2H_3Cl \rightarrow 6CO_2 + 10MnO_2 + 10Na^+ + 3Cl^- + 7OH^- + H_2O$$

Sodium permanganate is an inorganic oxidant that performs chemically the same way as potassium permanganate, only in a more concentrated form. The significant advantage to sodium permanganate is its high solubility in water, allowing it to be a more convenient and concentrated form of permanganate when used for organic oxidation of contaminants.

EOS®

The EOS® process provides an innovative, low-cost approach for distributing and immobilizing biodegradable organic substrates in contaminated aquifers to promote in-situ anaerobic biodegradation of chlorinated solvents. EOS® consists of food-grade soybean oil, surfactants, macro and micronutrients, and vitamins to form a stable micro-emulsion with small, uniformly sized droplets. Once injected, the oil droplets stick to the sediment surfaces providing a residual oil phase. The EOS® then serves as a carbon source for cell growth and an electron donor for energy generation, supporting long-term anaerobic biodegradation of the target contaminants.

This approach provides good contact between the slowly biodegradable organic substrate (oil) and the contaminants and substantially reduces initial capital and long-term operation and maintenance costs. For example, common organic solvents utilizing EOS® is completely reduced to ethene according to the following equations:

PCE

$$C_2Cl_4 + 4H_2 \rightarrow C_2H_4 + 4H^+ + 4Cl^-$$

TCE

$$C_2HCl_3 + 3H_2 \rightarrow C_2H_4 + 3H^+ + 3Cl^-$$

DCE

$$C_2H_2Cl_2 + 2H_2 \rightarrow C_2H_4 + 2H^+ + 2Cl^-$$

VC

$$C_2H_3Cl + H_2 \rightarrow C_2H_4 + H^+ + Cl^-$$

The following scope of services is based on information to date:

Bench Scale Treatability Study

- KPRG will provide a sample for treatability testing from an area with the highest contaminant level.
- Samples will be collected in a manner to minimize volatilization. ORIN recommends that the sample be collected in a non-preserved, wide mouth glass amber container (one liter) with no headspace or in a macro core from the zone of contamination. Samples shall be shipped under proper chain of custody protocol in a cooler chilled with blue ice.
- Catalyzed sodium persulfate (iron, alkaline and peroxide) and sodium permanganate will be analyzed at different dosages as possible treatment chemistries.
- Analytical testing will be performed on a standard 3-4 week turn around.
- ORIN will conduct up to two rounds of testing per treatment chemical.
- Untreated and treated samples will be analyzed for VOCs. ORIN will provide a treatability study report with recommendations and firm costs to perform on-site treatment.

Chemical Remediation Implementation

Pilot Scale

- Mobilize field personnel, chemicals and equipment to the site.
- Treatment will occur in-situ using direct push technology. Due to the scale of the pilot study, drilled points is too expensive to implement.
- Implementation in the field will take approximately 1 day depending on site and matrix conditions.
- Approximately four injection locations will be used for treatment in the targeted plume area located within Dauer's driveway.
- A 4 -foot radius of influence is assumed. With 33% overlap to ensure complete coverage, each of the injection locations will be spaced approximately 7 feet apart.

- Treatment will start at approximately 21 ft. bgs with repetitive lifts of the Geoprobe® rods throughout the vertical extent of the plume to approximately 5 ft. bgs.
- Inject approximately 200 gallons of 30% catalyzed sodium persulfate solution.
- Number of locations, concentration and volume may vary depending on unforeseen site conditions and contaminant load.
- Obtain field measurements from one to two temporary well points to evaluate radius of influence.
- ORIN will maintain field notes on the location of the injection points, amount of chemical injected, and any other injection related field observations.
- Decon, cleanup the site and demobilize field personnel and equipment from the site.
- A brief letter report describing the pilot scale remediation, chemical amount used, other field information and observations regarding the injection will be submitted to KPRG after all field work is completed. Upon request, ORIN will provide KPRG with recommendations and cost for full-scale application.

Full Scale

Option One

- Mobilize field personnel, chemicals and equipment to the site.
- Treatment will occur in-situ using direct push technology.
- Implementation in the field will take approximately 1 to 2 days depending on site and matrix conditions.
- Approximately ten injection locations will be used for treatment in the targeted plume area located within Dauer's driveway.
- A 4 -foot radius of influence is assumed. With 33% overlap to ensure complete coverage, each of the injection locations will be spaced approximately 7 feet apart.

- Treatment will start at approximately 21 ft. bgs with repetitive lifts of the Geoprobe® rods throughout the vertical extent of the plume to approximately 5 ft. bgs.
- Inject approximately 200 gallons of 30% catalyzed sodium persulfate solution.
- Number of locations, concentration and volume may vary depending on unforeseen site conditions and contaminant load.
- ORIN will maintain field notes on the location of the injection points, amount of chemical injected, and any other injection related field observations.
- Decon, cleanup the site and demobilize field personnel and equipment from the site.
- A brief letter report describing the remediation, chemical amount used, other field information and observations regarding the injection will be submitted to KPRG after all field work is completed.

Option 2

- Treatment will occur in-situ using previously installed temporary drilled points.
- Implementation in the field will take approximately 1 day depending on site and matrix conditions.
- Approximately 8 temporary injection locations will be used for treatment in the saturated targeted plume area.
- Each of the temporary injection points shall be constructed with three (or two) 1" sch. 40 PVC pipes screened from 5 to 8 ft. bgs, 11 to 14 ft. bgs and 17 to 21 ft. bgs (or any combination) with flush mounts.
- An average of 5 feet radius of influence is expected. With 33% overlap to ensure complete coverage, each temporary injection location should be approximately 8 feet apart.
- Inject approximately 85 gallons of 30% catalyzed sodium persulfate solution into each of the 24 (8 locations with 3 injectors nested within each location) temporary injectors.

- Concentration and volume per point may vary depending on contaminant load and unforeseen site conditions.
- ORIN will maintain field notes on the location of the injection points, amount of chemical injected, and any other injection related field observations.
- Decon, cleanup the site and demobilize field personnel and equipment from the site.
- A brief letter report describing the remediation, chemical amount used, other field information and observations regarding the injection will be submitted to KPRG after all field work is completed.

Assumptions:

- Information supplied to ORIN from KPRG is accurate and representative regarding the site contaminants and concentrations, area and volume of materials to treat, and the geology of the site.
- Multiple injections may be needed to achieve cleanup goals.
- Treatment chemical, injection equipment and injection personnel are included in the estimated cost.
- ORIN is responsible for chemical administration.
- KPRG is responsible for any concrete coring and any disposal or repair of asphalt and or concrete necessary to complete in-situ remediation.
- KPRG will be responsible for supplying water in a quality and quantity needed for the duration of the project.
- KPRG is responsible for acquiring all proper permits no later than the beginning of the scheduled remediation start date.
- KPRG is responsible for marking all utility lines in or near the area of concern. ORIN will be responsible for maintaining appropriate clearance from marked utilities. KPRG shall be liable for any damages resulting from disruption or destruction of marked utilities.
- The site is accessible to ORIN and any subcontractor and equipment necessary to conduct the remediation.

ORIN Remediation Technologies

Price Estimate

Bench Scale Treatability Study	**$9,000**

For Budgetary Purposes Only (obtain firm cost after bench scale study)

Chemical Remediation Implementation

Pilot Scale (direct push only)

Catalyzed Sodium Persulfate	**$15,782**
Sodium Permanganate	**$29,060**

Full Scale (obtain firm cost after pilot study)

Option One (direct push)

Catalyzed Sodium Persulfate	**$24,075**
Sodium Permanganate	**$57,260**

Option Two (drilled temporary points)

Catalyzed Sodium Persulfate	**$35,675**
Sodium Permanganate	**$68,860**

Second Injection (assuming 50% reduction, direct push only)
(Price may vary pending results of verification samples)

Catalyzed Sodium Persulfate	**$16,963**
Sodium Permanganate	**$36,110**

Price valid for 120 days from date on this proposal
HSA install assume temporary injection well installation: (three 1 inch PVC sch 40 screened at different intervals at each location)

ORIN Remediation Technologies, LLC.
4908 Meinders Rd., McFarland, WI 53558 Phone: 608-838-6699 Fax: 608-838-6695

ORIN Remediation Technologies

Health and Safety

To ORIN, health and safety is not just a priority, we make it a value. By being proactive instead of reactive, ORIN has learned to identify and listen to health and safety triggers, such as fatigue, emotion and rushing. ORIN reports near misses and lessons learned to help facilitate open discussions with clients and vendors alike about health and safety on our projects.

ORIN subscribes to Occupational Safety and Health Administration (OSHA)- and United States Environmental Protection Agency (USEPA)-mandated Health and Safety standards. Because of the wide range of potential exposures for our employees, ORIN must make conservative judgments as to potential health risks. The services outlined in this proposal are offered on the basis of providing Level D health and safety protection (Tyvek®, safety shoes, hard hats, and eye protection only). If additional protection is required for ORIN employees to perform these services, then ORIN will advise KPRG of the needed protection and any associated increase in compensation before proceeding with the work.

We look forward to working with you on this project. If you have additional questions or comments, please feel free to contact me at the office (608) 838-6699 x305.

Sincerely,

ORIN Remediation Technologies, LLC.

Keith Becker
Project Manager

APPENDIX B
Other Preliminary Contractor Estimates

Mr. Rich Gnat
KPRG & Associates, Inc.
14665 West Lisbon Road
Suite 2B
Brookfield, Wisconsin 53005

RE: Inside Excavation – 9508 W. Greenfield Ave., West Allis

Mr. Gnat:

This proposal presents the scope and cost of excavating contaminated soil inside the dry cleaning store located at 9508 W. Greenfield Ave. in West Allis and is an addendum to the original proposal dated 04/27/05 for exterior work.

SCOPE OF WORK

- Provide equipment necessary to excavate and stockpile contaminated soil inside to a depth of 6 to 7 feet below concrete floor surface.
- Set up visquene curtains on either side of work area to contain dust.
- Sawcut concrete surface as needed.
- Cut and remove bottom section of steel tank. Sides and ends of tank to remain in place to maintain sidewall support of surrounding soil.
- Excavate contaminated soil and load into hazardous waste roll-off container spotted on site.
- Backfill excavation with pea gravel.
- Restore surface with 4 inches of concrete.

Additional Costs for Exterior East Wall Excavation

- Break, remove and dispose of 200 s.f. of concrete surface.
- Excavate and load approximately 10 tons of contaminated soil.
- Transport and dispose of contaminated soil at Waste Management's Orchard Ridge RDF.
- Backfill excavation with self-compacting pea gravel and/or crushed gravel with bucket compaction.
- Replace concrete surface with 4 inches of concrete.

ESTIMATED PROJECT COST

North Shore proposes to conduct the scope of work defined herein, for an estimated cost of:

ITEM	UNITS	UNIT COST	TOTAL COST
Mobilization/Demob	1	$1,000/ea	$1,200.00
Sawcut concrete	32 l.f.	LS	$ 450.00
Technician	est. 8 hrs.	$70/hr	$ 560.00
Mini-excavator w/operator	est. 8 hrs.	$ 125/hr	$1,000.00
Power buggie w/operator	est. 8 hrs.	$ 110/hr	$ 880.00
Skid loader w/operator	est. 8 hrs.	$ 110/hr	$ 880.00
Pea gravel, delivered	est. 10 tons	$18.00/ton	$ 180.00
Concrete replacement	est. 50 sq. ft.	$18.00/sq.ft.	$ 900.00
Cont. soil transportation	1 load	$2,400/load	$2,400.00
Cont. soil disposal	est. ~~6~~ 8 tons	$290.00/ton	~~$2,100.00~~ $2320
Exterior:			
~~Remove & dispose of concrete~~	200 s.f.	$1.45/s.f.	~~$ 290.00~~ Not Applic.
Mini-excavator w/operator	est. 4 hrs.	$150.00/hr	$ 600.00 — 1940
Dump truck	est. 4 hrs.	$ 85.00/hr	$ 340.00
Non-haz cont. soil disposal	est. ~~10~~ 8 tons	$60.00/ton	$ ~~600.00~~ 480
Gravel	est. 10 tons	$18.00/ton	$ 180.00
Concrete replacement	200 s.f.	$10.00/s.f.	$2,000.00
TOTAL ESTIMATED COST			$14,560.00

14770

North Shore appreciates the opportunity to submit this proposal and looks forward to working with you.

Sincerely,

North Shore Environmental Construction, Inc.

Charles G. Scheffer
Vice President of Operations

APPENDIX C
Certificate of Insurance and Contract

ACORD CERTIFICATE OF LIABILITY INSURANCE

CSR RH
KRIKA-1

DATE (MM/DD/YYYY)
03/05/07

PRODUCER

T.M. Edwards & Assoc., Inc.
648 Joliet St. P.O. Box 146
Dyer IN 46311
Phone: 219-865-2221 Fax:219-865-1245

THIS CERTIFICATE IS ISSUED AS 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.

INSURED

KPRG and Associates, Inc.
414 Plaza Drive Suite 106
Westmont IL 60559

INSURERS AFFORDING COVERAGE	NAIC #
INSURER A: Zurich U.S. Insurance	
INSURER B: Hudson Specialty Insurance Co	
INSURER C:	
INSURER D:	
INSURER E:	

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
B		GENERAL LIABILITY				EACH OCCURRENCE	$ 1,000,000
		X COMMERCIAL GENERAL LIABILITY	R/O FEC6104272	11/09/06	11/09/07	DAMAGE TO RENTED PREMISES (Ea occurence)	$ 50,000
		CLAIMS MADE X OCCUR				MED EXP (Any one person)	$ 5,000
						PERSONAL & ADV INJURY	$ 1,000,000
		X E&O-Pollution	R/O FEC6104272	11/09/06	11/09/07	GENERAL AGGREGATE	$ 2,000,000
		GEN'L AGGREGATE LIMIT APPLIES PER:				PRODUCTS - COMP/OP AGG	$ 2,000,000
		POLICY PRO-JECT LOC					
		AUTOMOBILE LIABILITY				COMBINED SINGLE LIMIT (Ea accident)	$
		ANY AUTO					
		ALL OWNED AUTOS				BODILY INJURY (Per person)	$
		SCHEDULED AUTOS					
		HIRED AUTOS				BODILY INJURY (Per accident)	$
		NON-OWNED AUTOS					
						PROPERTY DAMAGE (Per accident)	$
		GARAGE LIABILITY				AUTO ONLY - EA ACCIDENT	$
		ANY AUTO				OTHER THAN AUTO ONLY: EA ACC	$
						AGG	$
A		EXCESS/UMBRELLA LIABILITY				EACH OCCURRENCE	$ 5,000,000
		X OCCUR CLAIMS MADE	PAS41648453	02/15/07	02/15/08	AGGREGATE	$
							$
		DEDUCTIBLE					$
		X RETENTION $ 0					$
		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY				WC STATU-TORY LIMITS OTH-ER	
		ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?				E.L. EACH ACCIDENT	$
		If yes, describe under SPECIAL PROVISIONS below				E.L. DISEASE - EA EMPLOYEE	$
						E.L. DISEASE - POLICY LIMIT	$
		OTHER					

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

CERTIFICATE HOLDER

SAMPLE

SAMPLE CERT

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 10 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT [redacted] SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

ACORD CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 09/12/2006

PRODUCER (708)597-2800 FAX (708)597-2945
thornton powell
5550 West 147th St.
Oak Forest, IL 60452

THIS CERTIFICATE IS ISSUED AS 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.

INSURED KPRC & Associates Inc
414 Plaza Dr, Suite 106
Westmont, IL 60559

INSURERS AFFORDING COVERAGE	NAIC #
INSURER A: Owners Insurance Co.	
INSURER B:	
INSURER C:	
INSURER D:	
INSURER E:	

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
		GENERAL LIABILITY				EACH OCCURRENCE	$
		☐ COMMERCIAL GENERAL LIABILITY				DAMAGE TO RENTED PREMISES (Ea occurrence)	$
		☐ CLAIMS MADE ☐ OCCUR				MED EXP (Any one person)	$
						PERSONAL & ADV INJURY	$
		GEN'L AGGREGATE LIMIT APPLIES PER:				GENERAL AGGREGATE	$
		☐ POLICY ☐ PROJECT ☐ LOC				PRODUCTS - COMP/OP AGG	$
A		AUTOMOBILE LIABILITY	44531056-00	06/24/2006	06/24/2007	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
		X ANY AUTO				BODILY INJURY (Per person)	$
		ALL OWNED AUTOS				BODILY INJURY (Per accident)	$
		SCHEDULED AUTOS				PROPERTY DAMAGE (Per accident)	$
		HIRED AUTOS					
		NON-OWNED AUTOS					
		GARAGE LIABILITY				AUTO ONLY - EA ACCIDENT	$
		☐ ANY AUTO				OTHER THAN AUTO ONLY: EA ACC	$
						AGG	$
		EXCESS/UMBRELLA LIABILITY				EACH OCCURRENCE	$
		☐ OCCUR ☐ CLAIMS MADE				AGGREGATE	$
							$
		☐ DEDUCTIBLE					$
		☐ RETENTION $					$
A		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	07238381-ILLINOIS	05/01/2006	05/01/2007	☐ WC STATU-TORY LIMITS ☐ OTH-ER	
		ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?	07239199-WISCONSIN	06/11/2006	06/11/2007	E.L. EACH ACCIDENT	$ 1,000,000
		If yes, describe under SPECIAL PROVISIONS below:				E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
						E.L. DISEASE - POLICY LIMIT	$ 1,000,000
		OTHER					

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

CERTIFICATE HOLDER

For Record Purposes Only

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 10 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE
John Thornton

IMPORTANT

If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

DISCLAIMER

The Certificate of Insurance on the reverse side of this form does not constitute a contract between the issuing insurer(s), authorized representative or producer, and the certificate holder, nor does it affirmatively or negatively amend, extend or alter the coverage afforded by the policies listed thereon.

KPRG AND ASSOCIATES, INC.

414 Plaza Drive, Suite 106
Westmont, Illinois 60559

14665 West Lisbon Road, Suite 2B
Brookfield, Wisconsin 53005

ENVIRONMENTAL SERVICE CONTRACT

THIS ENVIRONMENTAL SERVICE CONTRACT (Contract) is made into, as of this ___ day of _____, 2005, by and between KPRG and Associates, Inc. (KPRG) and (Client).

WHEREAS, Client wishes KPRG to perform environmental services for it;

WHEREAS, KPRG is willing to perform the environmental services for the Client;

(hereinafter referred to collectively as the "Contract Services" or the "Environmental Services").

NOW, THEREFORE, in consideration of the foregoing, and the undertakings and agreements hereinafter provided, and other good and valuable consideration, the receipt and sufficiency of which is hereby expressly acknowledged, the parties agree as follows:

ARTICLE 1: DEFINITIONS

1.1 The terms "Contract Services" and the "Environmental Services" shall have the meaning set forth in the preamble to this contract.

1.2 The term "Material" as used herein refers to any liquid, gas, solid or semisolid or fibrous material whether or not it is a waste. The term includes all breakdown, dilution, stabilization and treatment products and by-products associated with the Material.

1.3 The term "Site" as used herein refers to the real estate or property described on Exhibit B.

1.4 The term "Work" shall have the meaning set forth in Section 2.1 hereof.

ARTICLE 2: STATEMENT OF SERVICES

2.1 KPRG agrees to perform the work described in the request for proposal, the scope letter, or KPRG's proposal attached to this Contract as Exhibit A (the "Work").

ARTICLE 3: SCOPE OF WORK

3.1 The work performed by KPRG shall be subject to the terms and conditions of this Contract, and this Contract shall be controlling unless the request for proposal, scope letter or KPRG proposal attached as Exhibit A specifically provides contrary terms and conditions. Both parties must approve and sign any amendment to the Work described on Exhibit A and any such amendment will not be effective until approval and signature by both parties.

ARTICLE 4: TERM OF CONTRACT

4.1 This Contract shall become effective as of the date of execution by both parties and shall continue thereafter until terminated as hereinafter provided or until the Work is completed.

ARTICLE 5: TERMINATION

5.1 If either party defaults in any material way in performing any of the terms or provisions of this Contract, or breaches in any material way any warranty hereunder, the party not in default shall have the right to terminate this Contract upon ten (10) days written notice.

5.2 Either party may terminate this Contract if it is determined to be invalid, illegal or unenforceable in any material respect; or (a) if the other party (i) has been adjudicated as bankrupt, (ii) has filed a voluntary petition in bankruptcy, or (iii) has made an assignment for the benefit of creditors, or (b) if a receiver has been appointed for such party. Termination shall be by notice from the terminating party to the other party, specifying the reason thereof and the effective date thereof which shall be not less than ten (10) days after the date of the notice.

5.3 Unless specified otherwise, termination or expiration shall operate to discharge all executory obligations of either party on and after the effective date of termination or expiration, but any right of a party, based on performance occurring prior to the effective date of termination or expiration, or breach of this Contract occurring prior to the effective date of termination or expiration shall survive the termination or expiration of this Contract.

5.4 In the event of termination of the Contract by either party, KPRG shall take reasonable measures to prevent undue contamination or deterioration of the Site due to activities by KPRG which are only partially completed before withdrawing from the site, including but not limited to covering of exposed Materials.

5.5 In the event of termination of this Contract by Client, Client shall pay KPRG (a) all reasonable costs incurred by KPRG in connection with the termination of this Contract, the cessation of its Work at the Site and the action taken under Section 5.4 hereof (including without limitation removal of equipment, removal of temporary structures, payment of sub-contractors and other similar items) and, (b) the reasonable value of work which KPRG has completed through the date of termination, including the reimbursement to KPRG of all amounts for which it has made irrevocable commitments (regardless of whether such amounts have been expended at the time of termination) and (c) a reasonable overhead and profit percentage (not less than 25%) for KPRG, its employees, agents and subcontractors for work done prior to termination.

5.6 If at any time during the performance of the Work, KPRG reasonably believes the safety of its employees, agents or subcontractors is in jeopardy, KPRG reserves the right to suspend immediately its performance of the Work until such condition is remediated in a manner acceptable to KPRG. If such condition cannot be remedied to the satisfaction of KPRG, KPRG has the right to terminate this Contract immediately upon written notification.

ARTICLE 6: COMPENSATION

6.1 The request for proposal, scope letter, or KPRG's proposal attached as Exhibit A, or a separate cost schedule attached as part of Exhibit A, sets forth the cost for completing the Work, together with a breakdown of costs and the assumptions underlying the costs, where appropriate and necessary. The cost set forth on Exhibit A is the fixed price (the "Fixed Price") for performance of the Work by KPRG; provided however, that if, at any time during the course of completing the Work, KPRG encounters conditions which differ materially from those on which the Fixed Price was based, KPRG reserves the right to inform the Client of these changed conditions and of the impact these conditions have on the Fixed Price. If Client is unwilling to pay the additional costs set forth above, KPRG may terminate this Contract and Client shall pay KPRG the amounts payable under Section 5.5 hereof in the event of termination of this Contract by Client.

6.2 KPRG will invoice Client monthly for the

proportional amount of Work completed under the Contract to the date of invoice, with a final invoice to be presented on the date of completion of the Work. Client will pay KPRG within fifteen (15) days from the date of invoice. Invoices not paid in full within fifteen (15) days of the date of invoice will be subject to interest on the unpaid balance (including prior interest charges) at the rate of 1½% per month.

6.3 Client agrees to pay all sales, use, or other taxes, including any hazardous or special waste fees or taxes, imposed upon the Environmental Services rendered by KPRG. To the extent known by it, KPRG has included the amount of such taxes and fees in the Fixed Price.

ARTICLE 7: DAMAGES

7.1 The parties agree that KPRG shall not be liable to Client for any damages in the nature of indirect, consequential, punitive or other similar damages of any kind, including business interruption, goodwill or other economic or commercial loss relating to services rendered or for any kind or nature whatsoever arising from any actions taken or omitted to be taken by it in connection with this Contract. The maximum amount for which KPRG shall be liable to Client for damages under any circumstances shall be the amount paid KPRG under this Contract.

ARTICLE 8: PERMIT ASSISTANCE AND COMPLIANCE WITH LAWS

8.1 Client recognizes that the Work may involve the performance by KPRG of Environmental Services requiring it, in many instances, to obtain governmental permits, licenses and other similar documents. Although KPRG is responsible for obtaining such governmental permits, licenses and other similar documents, Client agrees to provide all reasonable and timely assistance to KPRG in obtaining applicable governmental permits, licenses and other similar documents required for the performance of the Work by KPRG and KPRG's obligations hereunder are specifically conditioned upon its being able to obtain the issuance of all permits, licenses or other similar documents required to enable KPRG to perform the Work.

8.2 KPRG shall use reasonable efforts to comply with, and shall use reasonable efforts to secure compliance by its agents, employees, representatives, or subcontractors with federal, state, county and municipal laws and regulations of which it is aware in connection with the Work. KPRG will indemnify and hold Client harmless for any penalties or clean-up costs solely for KPRG's gross negligence or willful misconduct, which constitutes a direct violation of any applicable rule, regulation, statute or permit condition.

ARTICLE 9: SITE INFORMATION

9.1 KPRG may divulge information regarding the Site only to Client, its agent, employees or subcontractors, or to a governmental agency under a bona fide belief or upon advice of counsel that such reporting or disclosure is required by law.

9.2 To the extent that it is currently known, Client shall disclose to KPRG upon entering into this Contract all information regarding the source, composition, characteristics and handling precautions for the Materials at the Site. If requested by KPRG, Client shall also make its present employees available for interviews regarding the Site and shall disclose to KPRG the names of past employees, as well as all documentation including but not limited to files, maps and engineering drawings, relating to Materials which may have been stored, used or produced at the Site.

9.3 It shall be the duty of each party to notify the other party promptly of (a) any newly discovered or newly suspected hazardous Materials, (b) any increased concentrations of previously disclosed Materials where the increased concentration makes such Materials hazardous, or (c) any other hazards at the Site discovered during the course of performance of this Contract. Hazardous Materials shall include, but not be limited to, any substance which poses or may pose a present or potential hazard to human health or the environment, whether contained in a product, Material, by-product, waste or sample and whether it exists in a solid, liquid, semi-solid, fibrous, gaseous or other form.

ARTICLE 10: CONFIDENTIALITY

10.1 Except to the extent applicable laws or regulations may require otherwise, KPRG agrees to hold confidential any information which is made available to KPRG by Client, or which results from KPRG work under this Contract. KPRG further agrees not to disclose any information learned as part of the Work performed pursuant to this Contract to any person other than Client, except to the extent that such information can be shown to have been (i) previously known by party to which it was furnished, (ii) in the public domain though no fault of KPRG or such party, (iii) later lawfully acquired from other sources by the party to which it was furnished or (iv) required to be disclosed by KPRG pursuant to applicable laws or regulations.

10.2 Other than disclosing the existence of this Contract, KPRG shall not release, or cause or allow the release of information concerning this Contract, or the subject matter thereof, to the communications media, except as required by applicable laws or regulations, without, in each instance, securing the prior consent of the Client.

10.3 The foregoing obligations shall survive the termination or expiration of this Contract.

ARTICLE 11: INDEPENDENT CONTRACTOR

11.1 Each party is an independent contractor and shall perform this Contract as an independent contractor, and as such, shall have and maintain complete control over all its employees, agents and operations. Neither party nor anyone employed by it shall be, represent, act, purport to act or be deemed to be the agent, representative, employee or servant of the other party, and nothing herein shall be construed to establish any partnership, joint venture or principal/agent relationship between KPRG and Client.

ARTICLE 12: EXCUSE OF PERFORMANCE

12.1 KPRG shall not be liable for its failure to perform, or any delay in its performance of, the Work due to events, actions or contingencies beyond its reasonable control, including, but not limited to, strikes, riots, wars, fire, explosion, accident, flood, sabotage, labor disputes, delay in transportation or inability to obtain material or equipment, acts of nature, acts of government, including but not limited to compliance with or change in any applicable governmental laws, rules, regulations or order; action of regulatory agencies; court injunction or order, loss of permits or failure to obtain permits. In the event of any delay in performance due to any such circumstances, the time for performance will be extended by a period of time necessary to overcome the effect of such delay, and Client will not be entitled to refuse performance of this Contract or otherwise be relieved of any of its obligations under this contract.

ARTICLE 13: INDEMNIFICATION

13.1 KPRG shall indemnify, defend and hold harmless Client, its agents, employees, and subcontractors from and against any and all expenses, loss, damage, injury, liability and claims thereof for injury to or death of a person, including KPRG's employees, agents and

subcontractors, or loss or damage to property resulting directly from a grossly negligent or willful act, action, or omission for which KPRG is solely responsible in the performance of the Work. Notwithstanding anything to the contrary contained in this Contract, in no event shall KPRG, its directors, officers, employees, agents or subcontractors be liable for, (1) any claims arising out of or causes of action arising out of the ownership, transportation and/or disposal of any contaminated Materials, (2) any claims or cause of action arising out of any subsurface structure, whether owned by Client or a third party, the presence or location of which was not revealed to KPRG by Client in writing prior to the commencement of KPRG's performance, (3) any claims or cause of action arising under any governmental statutes or regulations which may have been violated at the site by KPRG's non-negligent performance of the Work.

13.2 Client shall indemnify and hold harmless KPRG, its directors, officers, employees, agents and subcontractors from and against all expenses, loss, damage, injury, liability and claims, direct and indirect (including but not limited to, fees and charges of attorneys and court and arbitration costs) except for those arising out of or resulting from any negligent or willful act, action or omission of KPRG described in Section 13.1 hereof, KPRG's intentional failure to observe contract provisions, to follow reasonable safety procedures, to inform Client fully regarding likely hazards, and to comply with government laws and regulations known to Client, and its officers, directors, employees, agents and subcontractors, in connection with any of the Work.

13.3 KPRG will contact the regional utility location network prior to excavating. Client agrees to forever release, hold harmless, defend and indemnify KPRG and its assignees against any and all claims, actions demands or losses arising out of or resulting from unknown, unmarked or inaccurately marked utilities or non-normal subsurface conditions at the Property. If relocating any utilities or obstructions is necessary or advisable to perform the work specified in this contract, the cost of doing so shall be Client's responsibility.

ARTICLE 14: SITE ACCESS AND CONTROL

14.1 Client grants to KPRG the right, exercisable during the term of this Contract until revoked in writing by Client, of entry to the Site by KPRG, its employees, agents and subcontractors, to perform the Work under this Contract. If Client does not own the Site, Client warrants and represents to KPRG that Client has the authority and permission of the owner and occupant of the Site to grant this right of entry to KPRG. If securing the Site or part of the Site from unauthorized entry is part of the Work to be rendered by KPRG under this Contract, Client shall promptly report any unauthorized entry to KPRG and to the appropriate authorities.

14.2 In order to perform the Work under this Contract, KPRG may be required to damage or alter the Site. KPRG will, to the extent reasonable, minimize damage to the Site in its performance of the Work. As applicable, Client understands and acknowledges that even after backfilling, settling may occur in and around the area where KPRG has performed excavation work and that the area may not be suitable for building purposes. Client realizes the importance of retaining a structural or architectural engineering firm to, among other matters, ensure the specified work conforms with Client's intended use of the Property.

14.3 Both parties agree that they will make an effort to notify each other in a timely manner, and if required by law to notify any appropriate federal, state and local government agency, of the existence of any known conditions at the Site which may present a potential danger to public health or safety of the environment.

ARTICLE 15: ENTIRE CONTRACT

15.1 This Contract represents the entire understanding and agreement between the parties hereto relating to the performance of the Work and supersedes any and all prior agreements, whether written or oral, that may exist between the parties regarding same. No terms, conditions, prior course of dealing, course of performance, usage of trade, understandings, purchase orders, or agreements purporting to modify, vary, supplement or explain any provision of this Contract shall be effective unless a written document embodying the same shall be signed by representatives of both parties authorized to amend this Contract. The terms and conditions contained herein take precedence over Client's additional or different terms and conditions that may be contained in Purchase Order, Work Order, Invoice, Gate Pass, Acknowledgment Form, Manifest or other document forwarded by Client to KPRG.

ARTICLE 16: SEVERABILITY

16.1 In the event any one or more of the provisions contained in this Contract shall, for any reason, be held to be invalid, illegal, or unenforceable in any respect, this entire Contract may be terminated by KPRG pursuant to the provisions of Article 5.

ARTICLE 17: WAIVERS

17.1 Any waiver by either party of any provision or condition of this Contract shall not be construed or deemed to be a waiver of any other provision or condition of this Contract, or a waiver of a subsequent breach of this same provision of condition, unless the party making the waiver shall so state in writing signed by the party to be found.

ARTICLE 18: STANDARD OF CARE

18.1 Client acknowledges that the rendering of the Environmental Services may require decisions which are based on professional judgments which are consistent with accepted standards in the industry. KPRG shall require its employees, agents and subcontractors to exercise sound engineering and professional judgment and shall utilize professionals which, in its judgment, possess the level of education, training and licensing appropriate to the Work to be rendered under this Contract.

18.2 KPRG shall take all necessary and reasonable measures to protect its employees against health or safety hazards or nuisances.

ARTICLE 19: SUBCONTRACTORS

19.1 KPRG may enter into any subcontract with any other party for providing any of the work or services covered by this Contract without the prior written approval of Client and shall use its best professional judgment in the selection of its subcontractors.

ARTICLE 20: BINDING NATURE; ASSIGNMENT OF CONTRACT

20.1 This contract is binding upon and shall inure to the benefit of KPRG and Client, and their respective successors and assigns; provided, however, that neither KPRG nor Client shall assign or take other similar action with respect to this Contract or any portion hereof, or of any right, title or interest herein, or be relieved of any obligation hereunder, without the prior written consent of the other party.

ARTICLE 21: SAMPLES & DOCUMENTATION

21.1 Client may request, in writing, that any soil, rock, material, water or other sample or work documentation be retained, and in such case KPRG will ship, at Client's expense, such samples or documents to the location designated by Client.

ARTICLE 22: UTILITIES

22.1 Client shall be responsible for disclosing, if requested by KPRG, the location of all known utility lines and subterranean structures, pipes and tanks on the site.

ARTICLE 23: ARBITRATION

23.1 All claims, disputes, and other matters in question that cannot otherwise be settled between the management of the parties to this Contract, arising out of, or relating to this Contract or the breach thereof, shall be promptly submitted to arbitration in Chicago, Illinois upon demand by either party to the dispute. If all amounts invoiced under this Contract have been timely paid, and KPRG agrees that its employees, agents and subcontractors are not in danger, KPRG shall not delay in performance because arbitration proceedings are pending unless KPRG has written permission from Client to do so, and such delay shall not extend beyond the time when the arbitrators shall have the opportunity to determine whether KPRG's performance shall continue or be suspended pending decision by the arbitrators of such a dispute.

23.2 Any demand for arbitration shall be in writing and shall be delivered to the other party either by personal delivery or by registered mail. The demand shall be made within a reasonable time (not to exceed 60 days) after the claim, dispute or other matter in question has arisen. In no event shall the demand for arbitration be made after the date 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.

23.3 No one shall be qualified to act as an arbitrator who has directly or indirectly, any financial interest in this Contract or who has, any business or family relationship with the parties. Each arbitrator selected shall be qualified by experience and knowledge of the work involved in the matter to be submitted to arbitration.

23.4 Arbitration shall be in accordance with the procedure and standards of the American Arbitration Association then existing, unless KPRG and the Client mutually agree otherwise.

23.5 The award rendered by the arbitrators shall be final, and judgement may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

ARTICLE 24: GENERAL PROVISIONS

24.1 This Contract shall be construed, enforced and governed, in all respects, in accordance with the laws, statutes, rules and regulations of the State of Illinois, without regard to its conflicts of law doctrine.

24.2 No amendments or alterations to or modification of the terms or the provisions of this Contract shall be effective unless such amendment, alteration or modification is contained in a written document properly executed by the parties hereto.

24.3 Any notice required by the terms of this Contract shall be given in writing and shall be deemed delivered on the day of actual delivery of the notice to the party thereunder entitled if delivery is made in person, or three days after the mailing of the notice in the United States mail, by registered or certified mail, return receipt requested, postage prepaid, to the address of the party entitled thereto. All notices, demands or other communications to the other party to Contract shall be addressed as follows:

KPRG AND ASSOCIATES, INC.

414 Plaza Drive, Suite 106
Westmont, Illinois 60559
(630) 325-1300

14665 West Lisbon Road, Suite 2B
Brookfield, Wisconsin 53005
(262) 781-0475

Client: _____

_____

_____

_____

Attention: _____

The address of any party hereto may be changed by notice to either party duly served in accordance with the provisions hereof.

24.4 Where applicable, before on-site work is begun at the Site, the parties shall provide each other with the names of contact persons who will be available on a 24-hour basis.

24.5 This Contract may be executed in any number of counterparts, each and all of which shall be deemed for all purposes to be one contract.

24.6 The subject headings contained in this Contract are included for the purpose of convenience only, and shall not affect the construction or interpretation of any of its provisions.

24.7 Time is of the essence of this Contract.

IN WITNESS WHEREOF, this Contract has been duly executed by the parties named below as of the day and year first above written.

KPRG AND ASSOCIATES, INC.

By: _____
Its: Principal

Client: _____

By: _____
Its:

EXHIBIT A

Work to be Performed for Client

EXHIBIT B

Site Location: