

September 25, 2008



Martino's Master Dry Cleaners
c/o Reinhart Boerner Van Deuren s.c.
P.O. Box 2265
N16 W23250 W. Stone Ridge Drive, Suite 1
Waukesha, Wisconsin 53188

Terracon Consultants, Inc.
9856 South 57th Street
Franklin, Wisconsin 53132
Phone 414.423.0255
Fax 414.423.0566

Attention: Ms. Michelle Williams
Phone: (262) 951-4500
Fax: (262) 951-4690

RE: DERF Proposal
BRRTS#: Not Available
FID#: Not Available
Martino's Master Dry Cleaners
7513 41st Avenue
Kenosha, Wisconsin
Terracon Proposal No. P58087039

Dear Ms. Williams:

At your request, Terracon Consultants, Inc. (Terracon) has prepared this proposal to provide environmental consulting services for the above-referenced site.

This proposal is written to comply with the Wisconsin Department of Natural Resources (WDNR) requirements for maintaining eligibility for reimbursement of costs covered under the Dry Cleaner Environmental Response Fund (DERF). Terracon is experienced at providing consulting services from initial assessment through remediation of impacted soil and groundwater, if necessary. We are also aware of the bid contract requirements of NR 169.13 and 169.23, Wisconsin Administrative Code (WAC). Terracon provides consulting services in compliance with the applicable requirements under NR 169 and 700 to 728. Terracon carries insurance coverage in compliance with NR 169.23(9)(b); our certificate of insurance is attached.

Terracon understands the scope of your project and the services that will be required. We have the experience and ability to analyze alternatives and design a feasible site investigation. All of Terracon's services are performed in an ethical, professional, and timely manner. We have attached selected project capsules describing related experience.

PROJECT INFORMATION

Three borings were advanced at the above-referenced site on January 8, 2008. Two borings (HP-2 and HP-3) were advanced on the interior of the building adjacent to the dry cleaning machine. One boring (GP-1) was advanced outside the rear (east) building entrance. A groundwater sample was collected from GP-1. The Preliminary Site Assessment Report dated February 20, 2008 summarizes the findings. Tetrachloroethene (a.k.a. perchloroethene or "perc" or PCE) was detected in the soil at each boring location. Trichloroethene, trans-1,2-dichloroethene, and cis-1,2-dichloroethene were also detected in the soil samples. Other volatile organic compounds were detected in the groundwater sample including vinyl chloride and toluene. Groundwater was encountered at a depth of 12 feet below ground surface (bgs).

The information available from the WDNR's geographic information system (GIS) for a closed leaking underground storage tank (LUST) project located at 4417 75th Street indicates that groundwater flow is to the south-southeast.

The PCE is the primary constituent of concern at this site. The maximum concentration of PCE detected at the site was in the soil sample collected from 2 to 4 feet bgs from soil boring HP-2 (170,000 micrograms per kilogram (ug/kg)). The concentration exceeds both the NR 720.19, WAC, Non-Industrial Direct Contact Site-Specific Residual Contaminant Level (SSRCL) of 1.23 milligrams per kilogram (mg/kg) and the NR 720.19, WAC, soil-to-groundwater SSRCL of 4.1 ug/kg. Concentrations of PCE detected at the site also exceed the NR 605, WAC, toxicity criteria after applying a correction factor of 20. Untreated soil above the toxicity criteria is considered hazardous. The breakdown products of PCE that were detected generally indicate an older release of PCE.

SCOPE OF SERVICES

Terracon has evaluated the assessment data and recommends the following scope of services. The scope of services is intended to assess the extent and magnitude of impacted soil and groundwater such that an NR 716 Site Investigation Report (SIR) can be prepared.

This proposal generally meets the requirements of the work plan that is required by the WDNR because of the detail we've included. If WDNR requires, Terracon will modify this proposal to provide additional details regarding the proposed site investigation.

The data indicates that the magnitude of the PCE decreases with depth beneath the building, but it is not certain whether a similar trend exists at boring GP-1. At each of the locations sampled, the soil impacts are present at the water table. The water table effectively delineates the extent of the soil at depth since it is not likely to be practical to excavate the relatively permeable, saturated

sand. The lateral extent of the impacts has not been delineated and needs to be determined. Additionally, since the concentration of PCE in the soil exceeds the soil-to-groundwater pathway SSRCL and groundwater samples indicated impacts are present, groundwater should be investigated to determine the extent and magnitude of the impacts above NR 140, WAC, ES.

Terracon proposes a two-Stage approach to the investigation to allow the second stage to benefit from the information gathered during the first stage. The two stages are:

- Stage 1 - Soil and groundwater assessment using push-probe techniques
- Stage 2 - Construction of groundwater monitoring wells to confirm flow direction and monitor groundwater contaminant concentrations

In Stage 1, we are proposing boring locations that do not appear to require obtaining access permission from adjacent property owners. The owner of the parcel occupied by Martino's, 7513 LLC, does not own the properties to the north or south. Additional access agreements may be necessary during Stage 2, depending upon the selected monitoring well locations.

Stage 1 – Push-Probe Assessment

Groundwater was encountered at the site at approximately 12 feet bgs. Therefore, based on the available data, Terracon proposes to advance exterior and interior push-probe borings to a maximum depth of approximately 16 feet bgs in an attempt to further define the horizontal and vertical extents of the PCE detected at the site. One of the exterior push-probe borings may be advanced to approximately 40 feet bgs at a presumed down-gradient location, based on the results of the initial borings, to assess the stratigraphy and the potential for migration of the plume to greater depths in the aquifer.

Terracon proposes to advance up to eight exterior push-probe borings using truck-mounted equipment and three interior push-probe borings using mobile equipment. The locations of the first seven proposed push-probe borings, including four exterior and three interior, are shown on Figure 2. The boring adjacent to former boring GP-1 will be advanced to approximately eight feet bgs, so we can screen the shallow soil using a photoionization detector (PID) and select a shallow soil sample from within the top four feet for laboratory analysis. If elevated PID readings (>10 ppmv) are observed in any of the four initial exterior borings, an additional boring(s) will be performed laterally outward from that boring(s) in an attempt to define the horizontal extent of the contamination. Costs for up to four of these additional contingency borings are included. If there are no elevated PID readings (>10 ppmv) in any of the proposed four initial exterior soil borings, then the four contingency soil borings will not be performed.

Probing equipment will be cleaned using a high-pressure washer prior to beginning the project and

before beginning each boring. Non-dedicated sampling equipment will be cleaned using an Alconox[®] detergent wash and potable water rinse prior to commencement of the project and between uses. Soil samples will be collected continuously using an acetate-lined macro core barrel sampler. The soil type and characteristics will be logged within each boring and discrete samples will be collected at 2-foot intervals from each boring.

Terracon may select up to three soil samples per boring from the initial seven borings for laboratory analysis of VOCs (EPA Method SW846-8260B), based on the PID field screening results. One analytic sample will be from the soil sample with the highest PID reading within the upper four feet of the soil column or at a depth of two feet bgs, if there are no elevated PID readings. The soil sample at depths greater than four feet bgs exhibiting the highest PID reading will be submitted for laboratory analysis in an attempt to determine the vertical extent of the impacted soil above the water table. If there are no elevated PID readings from samples in a boring deeper than four feet bgs or if the highest PID reading below four feet is not from the interval immediately above the water table, the sample from immediately above the apparent water table interface will be selected for analysis of VOCs.

Terracon may select up to two soil samples from each of the optional borings that are advanced, if any, for laboratory analysis of VOCs (EPA Method SW846-8260B). One analytic sample will be from the soil sample exhibiting the highest PID reading as well as a sample from a greater depth, if available, will be submitted for laboratory analysis in an attempt to determine the vertical extent of the impacted soil. If there are no elevated PID readings from samples in the boring, the sample from immediately above the apparent water table interface will be selected for analysis of VOCs.

Groundwater samples will be collected near the water table at each of the push-probe boring locations by converting the borings to temporary groundwater sampling points. The temporary groundwater sampling points will be constructed using a 5- or 10-foot section of 1-inch diameter polyvinyl chloride (PVC) well screen and riser pipe. If the groundwater levels in the temporary wells appear to stabilize relatively quickly, Terracon will survey the elevations of a minimum of three temporary wells, measure groundwater elevations, and develop a groundwater flow map in the field to aid in placing additional borings (if necessary) and future monitoring wells. Groundwater samples will be collected from the temporary groundwater sampling points using tubing inserted within the temporary wells and a peristaltic pump or disposable bailer and submitted to a Wisconsin-certified laboratory for analysis of VOCs by EPA Method SW846-8260B. Upon completion of sampling activities, the borings will be abandoned per NR 141, Wisconsin Administrative Code.

The interior borings will be advanced with a mobile push-probe rig to a depth of approximately 16 feet below the floor surface at the approximately locations shown in Figure 2. Upon completion of the soil sampling and if PID results exceed 10 ppmv, the boring with the highest PID result will be

completed as a sub-slab vapor sampling point set flush with the floor surface. Completion of the one interior boring as a sub-slab gas sampling point is proposed in anticipation of future vapor sampling that will likely be necessary if widespread impacts are identified. The port does not need to be abandoned since it is flush with the floor and seals with a threaded connection and o-ring.

The fixed sub-slab soil gas sampling point will be constructed from a 1-inch outer diameter cylindrical hollow steel sleeve approximately 4 inches in length with 1/8-inch diameter steel rod welded vertically on the exterior to prevent the insert from spinning loose after the installation process. The top of the sub-slab insert contains a threaded brass set-screw style cap and rubber O-ring that allows for a flush mounted installation and sealing of the insert. The sub-slab sampling insert will be thoroughly cleaned before installation to remove any residues and contaminants left over from the fabrication processes. Bentonite topped with silica sand will be used to backfill the hole and obtain the proper level for the insert to be flush mounted. A small piece of stainless steel wire and/or fiberglass mesh screen will be placed between the silica sand and insert to prevent silica sand from entering and additional silica sand will be placed in the annular space to stabilize the insert. The remaining annular space around the insert will be filled to the floor surface using Portland cement grout and finished as a flush-mounted unit.

At the conclusion of Stage 1, Terracon's goal is to have the majority, if not all, of the on-site impacted soil delineated to concentrations below the non-industrial direct-contact pathway PCE concentration of 1,230 ug/kg. However, the response of the PID is not reliable as a real time field instrument at low concentrations and may not identify the need to advance additional borings.

Terracon will provide a brief summary of the Stage 1 data including proposed locations for monitoring wells prior to implementing Stage 2 of the investigation.

Stage 2 – Groundwater Monitoring Well Network Installation

Based on the data collected from Stage 1, Terracon will have the information necessary to propose construction of monitoring wells. We propose to construct up to five monitoring wells at the site. Actual locations will be determined based on the results of the Stage 1 activities, but we anticipate that one monitoring well located within the plume. The monitoring wells will include one down gradient observation well/piezometer nest. The remaining proposed wells will be shallow observation wells.

The borings for the monitoring wells will be advanced using hollow-stem auger (HSA) drilling methods. Unless a push-probe soil boring was performed within 5 feet of the final monitoring well location, soil samples will be collected continuously and logged to the terminal depth of each boring using a standard 2-inch diameter split-spoon sampler. We anticipate the observation well borings being advanced to approximately 20 feet and the piezometer to 40 feet bgs. Terracon will

advance the borings for the observation wells to a depth to allow a 10-foot length of well screen to be submerged 6 to 8 feet below the apparent water table. Discrete samples will be collected at 2-foot intervals from each boring. Each discrete sample will be screened using a PID and equivalent headspace methodology. Terracon will containerize an aliquot of the sample which exhibits the highest PID reading, if identified above background levels, and submit the sample to a Wisconsin-certified laboratory for analysis of VOCs. Upon completion of each boring, monitoring wells will be constructed per NR 141, WAC. Based on the shallow soil stratigraphy, the observation wells will be constructed using PVC well materials, 0.01-inch slotted, 10-foot long screens, and fine sand filter pack. The piezometer will be constructed with a 5-foot long slotted PVC screen with appropriate slot-size and filter pack based on the soil stratigraphy and grain size observed adjacent to the screen.

Each monitoring well will be completed with a flush grade cover and locking well cap. The monitoring wells will be surveyed to the National Geodetic Vertical Datum. The monitoring wells will be developed per NR 141, WAC. Terracon will return to the site at least 24 hours after development to collect the first round of groundwater elevation data and groundwater samples from the monitoring wells.

Prior to purging the wells, water levels will be measured in each well during each event. The groundwater elevations will be measured to the nearest 0.01-foot using an electronic water level indicator. Groundwater samples will be collected using a disposable polyethylene bailer. Groundwater samples will be collected in laboratory supplied containers and transported under proper chain-of-custody procedures to a Wisconsin-certified laboratory for analysis of VOCs (EPA Method SW846-8260B) (four rounds) and natural attenuation parameters including methane, ethane, ethene; chloride; total organic carbon (TOC); nitrate/nitrite; sulfate; dissolved iron, dissolved manganese; dissolved oxygen (DO); oxidation-reduction potential (ORP); temperature; pH; and specific conductance (one round). One sample of each laboratory parameter per event will be submitted for laboratory analysis as a blind duplicate per NR 716.13 (11).

Even though we have included costs for four rounds of sampling, Terracon proposes to evaluate the data after two rounds to determine whether the groundwater plume is adequately delineated or additional site investigation is required.

If warranted, Terracon will collect a soil gas sample from the sub-slab soil gas sampling point installed during Stage 1 concurrent with one of the groundwater sampling events. A threaded adapter end will be connected to the polyethylene tubing and the threaded adapter will be connected to the sub-slab sample port. Prior to collecting the soil gas sample, approximately two volumes of the tubing air will be extracted using a graduated syringe. The polyethylene tubing will then be connected in-line with a paper filter/moisture trap and Summa Canister to collect a soil gas sample. Organic vapor concentrations using PID readings will be collected after the soil gas analytical sample has been

collected. The soil gas sample will be analyzed for VOCs using EPA Method TO-15. Note that our proposal assumes the full list of TO-15 analytes will be reported; a limited list of appropriate chlorinated solvents can be reported at a cost savings of \$80 per sample.

Investigation-derived wastes (IDW), soil cuttings and development water, will be containerized in labeled 55-gallon drums for temporary storage on site. Upon completion of the drilling activities, Terracon will arrange for disposal of the IDW generated during well construction. If needed, Terracon has included a cost for one TCLP VOC analyses to demonstrate the non-hazardous status of the IDW to a Subtitle D landfill. Terracon will prepare a waste profile for the soil and arrange for transportation to the landfill. We are assuming the IDW will not require disposal as hazardous waste. At this time, we anticipate the purge water generated during well development and sampling will be accepted for disposal via the municipal sewerage on-site drains. An application fee for disposal of the water is included.

Reporting

Following the completion of the fourth quarterly groundwater sampling round, Terracon will prepare an NR 716 Site Investigation Report (SIR) based upon the results of the assessment activities. An NR 716 SIR will only be appropriate if the assessment has provided data indicating that the extent of impacted soil and groundwater has been delineated to appropriate levels.

ANTICIPATED SCHEDULE

Terracon proposes to initiate these site investigation actions as soon as possible upon client and WDNR authorization. Specifically, the proposed schedule is as follows:

TASK	ANTICIPATED SCHEDULE	ANTICIPATED COMPLETION DATE*
Submittal of this Investigation Proposal/Work Plan		September 25, 2008
WDNR/Client Authorization	1 month from receipt	October 2008
Conduct Push-Probe Assessment and Vapor Point Installation	28 days from approval	November 2008
Proposed Monitoring Well Locations	5 days following receipt of analytic test results	December 2008
WDNR Approval of Well Locations	14 days from receipt of proposed locations	December 2008
Monitoring Well Construction/Development	28 days following WDNR approval of proposed locations	January 2009
First Groundwater Sampling Event/Sub-slab Soil Gas Sampling	7 days following well development	January 2009

TASK	ANTICIPATED SCHEDULE	ANTICIPATED COMPLETION DATE*
Second Groundwater Sampling Event	90 days following First event	April 2009
Evaluate Whether Additional Off-site Investigation is Necessary	14 days following receipt of analytic test results	May 2009
Third Groundwater Sampling Event	90 days following Second event	July 2009
Fourth Groundwater Sampling Event	90 days following Third event	October 2009
Submittal of Site Investigation Report/Disposal of IDW	60 days following final sampling event	December 2009**

*Anticipated completion dates are contingent upon WDNR and client review time and the schedules of Terracon, laboratory, and subcontractors.

**Completion of the Site Investigation Report is contingent upon the extent of contamination being defined with the scope of work described in this proposal. If additional investigation is necessary, the completion date of the Site Investigation Report will be adjusted accordingly.

HEALTH AND SAFETY

This work plan assumes that Level D safety precautions are adequate. A health and safety plan will be developed prior to mobilization based on these assumptions. The cost estimate will be increased accordingly should site conditions warrant Level D modified or more stringent health and safety procedures.

PROJECT TEAM AND QUALIFICATIONS

Mr. Blaine R. Schroyer will manage your project. Mr. Schroyer will serve as the NR 712, WAC, Registered Professional Engineer. Technical oversight will also be provided by Mr. Paul J. Wiese, P.G. and Mr. Scott A. Hodgson, P.G. Mr. Wiese helped develop the soil vapor sampling methods adopted by the State of Minnesota and works extensively with chlorinated solvent releases. Mr. Hodgson is a hydrogeologist according to NR 712, WAC. Field services may be performed by other Terracon personnel, if appropriate.

As required by NR 712, these staff will meet the appropriate professional requirements necessary for each phase of the project. Resumes are attached. We have also attached select project capsules and other information demonstrating our qualifications.

COMPENSATION

Consulting services are considered "contract services" by the DERF program. Prior to selecting a consultant, DERF requires you to review a minimum of three bids. The intent of this requirement is to allow you to compare experience, qualifications, costs, or other factors you consider important. The DERF program can reimburse for reasonable services provided by your consultant even when

they were not the lowest bidder, provided the costs are reviewed and approved in advance of the work. This provision allows you to select the best consultant based on all factors.

The cost estimate for the entire proposed scope of services in this proposal is shown on the DERF Site Investigation Bid Sheets attached at the end of this proposal. The intent of our proposal is to provide flexibility to the scope of services and to reduce potential delays in order to obtain approval for additional costs, if needed. As such, our proposal includes costs for up to eight exterior borings and three interior borings with associated analytic testing. We propose to do four initial exterior soil borings and expand laterally if necessary based on PID screening of soil samples. Costs include up to three soil samples and one groundwater sample for laboratory analysis from each of the initial seven borings and up to two soil samples and one groundwater sample from the optional borings, if necessary. If less than 11 borings are necessary, there may be a cost savings or these costs can be applied to other tasks. In addition, based on the available data for the site, the analytical costs for the TCLP VOC, soil gas sample, and additional soil samples from each boring may not be needed and therefore costs may be reduced accordingly. Please refer to the attached DERF Site Investigation Bid Sheets for a breakdown of the estimated costs for performing the above-described scope of services.

Terracon will obtain bids for push-probe and analytic laboratory services and select the lowest bidder, unless otherwise instructed. Terracon requests bids from qualified laboratories on an annual basis. Laboratory and push-probe services invoices will be sent to you for direct payment in order to avoid a markup assessed by Terracon. Markups are not reimbursable through DERF. At this time, Terracon is proposing to provide surveying services using our own equipment and personnel.

Costs for consulting are to be approved by WDNR and our client in order to be eligible for reimbursement. Terracon understands these requirements and does not perform work without your authorization. We will work closely with you on each cost estimate so that together we can present sufficient justification of the costs to WDNR and thereby, maximize your eligibility for reimbursement. The proposed scope of services and any other services requested by the client will be billed on a time and materials basis.

GENERAL COMMENTS

The analysis and opinions expressed in this proposal are based upon data obtained from the previous assessments and laboratory chemical analyses at the indicated locations or from other information discussed in this proposal. This proposal does not reflect variations in subsurface stratigraphy, hydrogeology, and contaminant distribution that may occur across the site. Actual subsurface conditions may vary and may not become evident without further assessment.

This proposal was prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted environmental engineering practices. No warranties, express or implied are intended or made. In the event any changes in the nature or location of suspected sources of contamination as outlined in this proposal are observed, the conclusions and recommendations contained in this proposal shall not be valid unless these changes are reviewed and the opinions of this proposal are modified or verified in writing by Terracon.

AUTHORIZATION TO PROCEED

We have attached an Agreement for Services that is incorporated into this proposal. This proposal is valid for 90 days from the date of this proposal. If this proposal meets with your approval, please sign the attached Agreement for Services and return it to our office via fax at (414) 423-0566 or mail to our Franklin, Wisconsin office.

Terracon appreciates the opportunity to submit this proposal and we look forward to working on this project with you. If you have questions or require additional information, please do not hesitate to contact our office.

Sincerely,



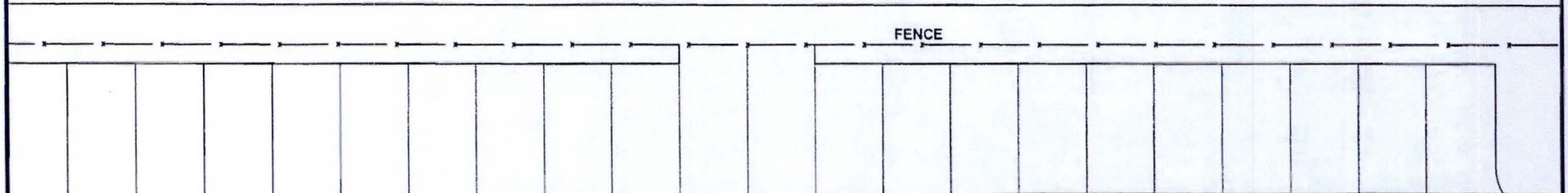
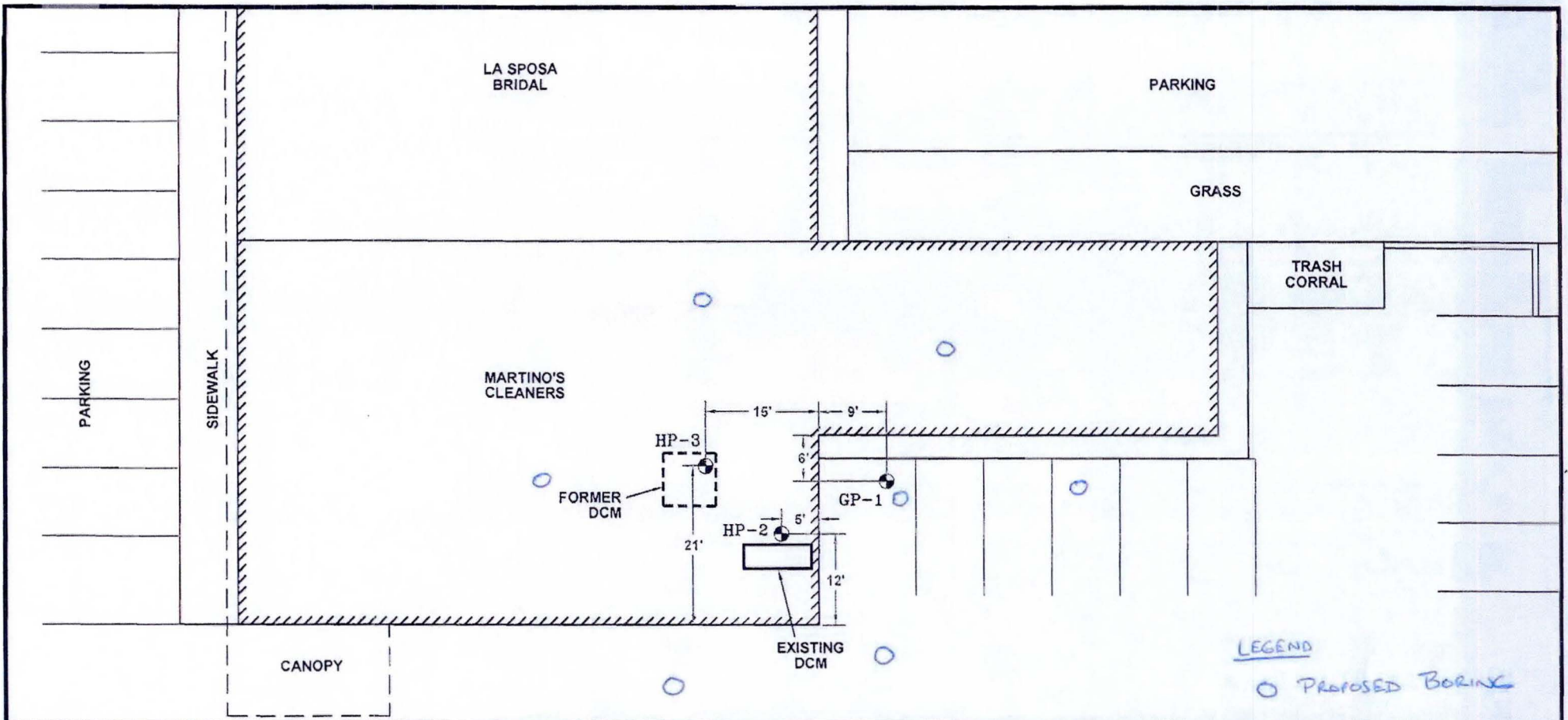
Blaine R. Schroyer, P.E.
Environmental Department Manager

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Attachments – Figure 2

- SOQ/Project Capsules
- Resumes
- Certificate of Insurance
- Agreement for Services
- Fee Schedule
- Consultant Bid Summary Sheets

Copy to: Ms. Michelle Williams, Reinhart Boerner (Second Sealed Copy)
Ms. Victoria Stovall, WDNR (Sealed Copy)
File



PARKING

CONFIDENTIAL
ATTORNEY-CLIENT PRIVILEGE
AND WORK PRODUCT PRIVILEGE
Reinhart Boerner Van Deuren s.c.

LEGEND:

- GP-1 GEOPROBE SOIL BORING
- HP-2 HAND PROBE
- DCM: DRY CLEANING MACHINE

NOTES:

1.) BASE MAP IS APPROXIMATE AND DEVELOPED FROM AERIAL PHOTOGRAPHY AND FROM FIELD OBSERVATIONS..

GILES ENGINEERING ASSOCIATES, INC.
N8 W22350 JOHNSON DRIVE, SUITE A1
WAUKESHA, WI 53186 (262)544-0118

FIGURE 2
BORING LOCATION PLAN
7513 41st AVENUE
KENOSHA, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB	JSZ	approx. 1"=20'	01-24-08	02-20-08
PROJECT NO.: 1E-0801001			CAD No. 1E0801001A	

Dry Cleaner Site Investigation

Green Bay, Wisconsin

Client:

Bay Towel, Inc./Reinhart
Boerner van Dueren, sc

Contact:

Mr. Don Gallo, Esq.

Project Manager:

Scott A. Hodgson, P.G.

Date:

2008-ongoing

Fee:

\$42,000

Highlights:

*Soil & Groundwater
Assessment*

Offsite Access Negotiations

Vapor Intrusion Assessment



Terracon was selected through a qualifications-based selection (QBS) process to provide environmental site investigation services at this active dry cleaner site at a strip mall. The chlorinated solvent tetrachloroethene (a.k.a. perchloroethene or PCE or “perc”) had been documented in soil and groundwater in two borings advanced at the site in 2007. As a result, the site entered the Dry Cleaner Environmental Response Program (DERP) and is eligible for reimbursement of costs for the site investigation and remediation activities.

Terracon proposed an initial investigation including a push-probe soil and groundwater assessment followed by construction and sampling of groundwater monitoring wells. The push-probe soil and groundwater assessment consisted of advancing eight exterior and one interior push-probe borings and installing temporary monitoring wells in the borings. Soil samples were obtained and screened for the presence of organic vapors using a photoionization detector (PID). The interior boring was completed as a sub-slab vapor monitoring point for future vapor sampling. Soil and groundwater samples were submitted for analysis of volatile organic compounds (VOC).

The results of the push-probe assessment indicated that PCE impacted soil and/or groundwater likely had migrated across the site boundaries to the north east, south, and southwest. Due to the proximity of impacted soil and groundwater to nearby structures, potential intrusion of contaminant vapors into the residence to the north and the adjacent strip mall basement also required assessment. Terracon proposed to construct an exterior soil vapor monitoring point adjacent to the foundation of the residence to the north to assess the potential for vapors entering the basement. To assess the potential of vapors entering the basement of the adjacent strip mall, Terracon proposed coring through the concrete basement floor and installing a sub-slab vapor monitoring port.

Terracon received approval from the Wisconsin Department of Natural Resources (WDNR) for the vapor intrusion assessment and additional offsite soil and groundwater investigation to define the extent of the contamination as required by NR 716, Wisconsin Administrative Code (WAC). This requires negotiating access to five offsite properties including private residences, local businesses, and national retail stores.

Once the extent and magnitude of the soil and groundwater impacts are determined, a site investigation report (SIR) is prepared. The SIR is subsequently used to determine appropriate remedial actions during a second QBS process, required under the DERP.

Dry Cleaner Environmental Response Program (DERP) Watertown, Wisconsin

Client:
Dykstra Properties, LLC
Waupun, Wisconsin

Contact:
Dan Dykstra

Project Manager:
Scott A. Hodgson, P.G.

Date:
2007-ongoing

Fee:
\$25,000

Highlights:
*Quick-Turn Soil &
Groundwater Assessment*



Terracon was retained on September 14, 2007 to perform a soil and groundwater site investigation at a former dry cleaner site operating as a laundromat. Trichloroethene (TCE) was detected in soil and groundwater samples collected from soil borings advanced at the site in June 2007. As a result, the site entered the Dry Cleaner Environmental Response Program (DERP). Due to a pending property transaction the client needed to have the extent of soil and groundwater contamination defined by October 12, 2007. Terracon proposed a two-stage investigation including a rapid soil and groundwater assessment followed by construction and sampling of groundwater monitoring wells.

Terracon mobilized to the site on September 27, 2007 to perform the push-probe soil and groundwater assessment, which consisted of advancing seven exterior push-probe borings and installing temporary monitoring wells in the borings. Soil samples were obtained and screened for the presence of organic vapors using a photoionization detector (PID). The initial three push-probe borings were advanced, temporary wells installed, and the elevation of the well casings surveyed. Water levels were collected from the temporary wells and analyzed in order to determine a groundwater flow direction to guide placement of the four subsequent push-probe borings. An additional hand-auger boring was also performed through the floor inside the building at the location of the former dry cleaning machine to collect soil samples and install a sub-slab vapor monitoring point for vapor sampling, if needed.

Soil and groundwater samples collected from the seven push-probe borings and interior hand auger boring were submitted for 24-hour quick-turn analysis of volatile organic compounds (VOC). The results indicated that the soil and groundwater plumes appeared to be defined. Terracon mobilized to the site again on October 4, 2007 to construct groundwater monitoring wells to verify the extent of the groundwater plume in accordance with NR 716, Wisconsin Administrative Code (WAC). Terracon sampled the wells on October 9, 2007 and submitted the samples for quick-turn analyses. The results verified that the groundwater plume above the NR140, WAC, Groundwater Quality Enforcement Standard (ES) was defined. Terracon successfully defined the soil and groundwater plume at the site to meet the client requirements. On behalf of the client, Terracon is currently pursuing closure of the site without restrictions.

Dry Cleaner Remediation

Neenah, Wisconsin

Client:
Gunderson Cleaners, Inc./
Reinhart Boerner van Dueren

Contact:
Mr. Don Gallo, Esq

Project Manager:
Scott A. Hodgson, P.G.

Date:
2007-ongoing

Fee:
\$118,000

Highlights:
*Hazardous Waste
Determination
Remedial Action Excavation
Enhanced Bioremediation
Groundwater Monitoring*



After participating in a qualifications-based selection (QBS) process, Terracon was retained to implement our innovative Remedial Action Plan (RAP) to remediate soil and groundwater impacted by dry cleaner solvents at this active dry cleaner site. The remedial action costs were eligible for reimbursement under the Dry Cleaner Environmental Response Program (DERP). The site investigation had documented chlorinated solvents such as tetrachloroethene (a.k.a. perchloroethene or PCE or “perc”) and trichloroethene (TCE), a PCE breakdown product, in soil and groundwater adjacent to and beneath the building. The groundwater plume with PCE concentrations above the NR 140, Wisconsin Administrative Code (WAC), Groundwater Quality Enforcement Standard (ES) extended horizontally offsite to the south and vertically into the underlying fractured dolomite bedrock.

Terracon’s plan included excavation of the chlorinated solvent-impacted soil in the source area and placement of horizontal piping at the base of the excavation for the injection of anaerobic bioremediation-enhancing Regenes hydrogen releasing compound (HRC[®]) to aid groundwater remediation. Because a small volume of characteristically-hazardous soil was identified during the investigation, the plan included on-site chemical oxidation to reduce the PCE concentrations and allow the soil to be disposed as non-hazardous waste. Approximately 245 cubic yards (yd³) or 426.25 tons of impacted soil was excavated and disposed at a licensed Subtitle D landfill. Additional groundwater monitoring wells were also constructed during the remediation activities to allow Terracon to monitor the effect of the remedial actions on groundwater quality immediately downgradient of the source area.

Post-excavation groundwater monitoring has documented decreasing concentrations of PCE. However, to help expedite natural attenuation of the groundwater impacts and offset remaining source area impacts that could not be excavated due to structural considerations, Terracon plans to use the piping system to implement the injection of HRC[®]. Once they review the report documenting the effectiveness of the remedial actions, the Wisconsin Department of Natural Resources (WDNR) is expected to close this case and document the remaining impacts on their geographic information system (GIS) registry of closed sites.

DERP Site Investigation Scoping/Closure

Mequon, Wisconsin

Client:
McKplaco, Inc./Reinhart
Boerner van Dueren, sc

Client Contact:
Mr. Don Gallo, Esq.

Project Manager:
Blaine R. Schroyer, P.E.

Date:
2006-2007

Fee:
\$10,400

Highlights:
DERF Eligibility Confirmed
Case Closure without Additional
Investigation



In order to ensure their wet dry cleaning operation was eligible for funding under Wisconsin's Dry Cleaner Environmental Response Fund (DERF), the client hired Terracon to investigate the most likely locations for releases of tetrachloroethene (a.k.a. perchloroethene or PCE or "perc"). Typical of most dry cleaners, the facility was rented space in a strip mall with one dry cleaning machine on a drip pan with a sealed floor. The location had been in operation for less than 10 years.

Terracon advanced four borings, three outside the building and one inside, adjacent to the dry cleaning machine. The interior boring was advanced by coring through the concrete floor and using a hand auger to obtain soil samples. The exterior borings were advanced using a drill rig. Soil samples were obtained and screened for the presence of organic vapors using a photoionization detector (PID). Two soil samples from each boring were selected for laboratory analysis of volatile organic compounds (VOC), including perc. The interior boring was fitted with a sub-slab vapor monitoring port to allow for future sampling of organic vapors beneath the floor slab. One of the exterior borings was completed as a monitoring well in accordance with NR 141, Wisconsin Administrative Code (WAC). The monitoring well allowed Terracon to obtain a groundwater sample weeks after installation despite the low permeability of the aquifer. In this case, relatively low concentrations of perc were detected in the two soil samples from the interior boring only.

As a result of the findings, the presence of perc in the soil was reported to the Wisconsin Department of Natural Resources (WDNR) as required by state statute. However, the WDNR reviewed the results and agreed that the case could be closed leaving the residual concentrations of perc in place provided the site was registered on the WDNR geographic information system (GIS) for soil impacts. As a result of the thorough initial investigation, the client was able to close their case without further investigation. Their DERF eligibility now provides insurance for future environmental expenses for this site, until the program sunset in 2032.

Chlorinated Solvent Assessment

Waupaca, WI

Client:
Confidential

Contact:
Confidential

Project Manager:
Blaine R. Schroyer, P.E.

Date:
2001-Ongoing

Fee:
\$155,000

Highlights:

Bedrock Well Installation

Sensitive Receptor Assessment

Push-Probe Soil Assessment

Bedrock Fracture Analysis

Calculation of Site-Specific Residual Cleanup Goals

Soil Excavation

Monitored Natural Attenuation

Background

Terracon was retained in April 2001 for environmental services associated with chlorinated solvent impacts at a small manufacturing facility. The facility had previously been used as an assembly plant for overhead garage door openers, for wallpaper manufacturing, and lumber milling. Previous assessments revealed that soil underneath and adjacent to the facility contained chlorinated solvents and diesel range organics (DRO). Groundwater assessments at the site had been generally unsuccessful due to the presence of fractured granite bedrock.

Services

In order to assess groundwater impacts at the site, the Wisconsin Department of Natural Resources (WDNR) required monitoring wells installed within the fractured granite.

Terracon installed monitoring wells in October 2001 and conducted a Sensitive Receptor Assessment. The monitoring wells yielded groundwater impacted with chlorinated solvents, which prompted the need for additional assessment. Excavation of soil impacted above direct-contact pathway cleanup goals was excavated and a bedrock depression where concentrations were focused was observed. Following soil removal, the site was subdivided to allow for sale of portions of the property. Terracon installed additional monitoring wells and has implemented ongoing groundwater monitoring to establish whether monitored natural attenuation of the remaining groundwater impacts is an acceptable final remedial alternative.



Soil Beneath Hospital Basement Floor Impacted by Chlorinated Solvents

Milwaukee, WI

Client:
Confidential

Contact:
Confidential

Project Manager:
Mylan A. Koski Jr.

Date:
2004-Ongoing

Fee:
\$24,000

Highlights:

Soil Impacted with Solvents

Assessment Beneath Existing Structures

Assessment Within Highly Sensitive Environment

Low-Clearance Portable Push-Probe Equipment

Soil Excavation

Background

Terracon was requested to assess chlorinated solvent-impacted soil during major renovation of a hospital. Construction workers observed the impacted soil during removal of a grease trap from the kitchen floor, located within the basement of the hospital. Installed flush with the basement floor, the grease trap extended into the subsurface approximately three to four feet. Due to the necessity of keeping the kitchen fully operational, construction of the kitchen was completed in phases. Considering all factors involved, extensive coordination between Terracon, hospital administrative staff and the general contractor was required to conduct the soil assessment.

Services

In order to assess the extent of chlorinated solvent-impacted soil, Wisconsin Department of Natural Resources (WDNR) required horizontal and vertical delineation of impacted soil within the basement of the hospital. Terracon and the contractor worked closely to expedite characterization, assessment, excavation and disposal of the impacted soil. Demanding construction schedules required that removal of soil impacts and assessment of remaining impacts be completed quickly. Terracon performed work on weekends in order to minimize disruptions to hospital staff and patients.

Concrete coring and soil probing locations were carefully chosen and completed by utilizing "low-clearance" push-probe soil probing equipment. Soil and groundwater samples were collected from the subsurface sufficient to delineate the horizontal and vertical extent of chlorinated solvent impact beneath the hospital. Future efforts may involve additional groundwater assessment and the use of deed instruments to close the site.



Chlorinated Solvent Assessment

Beaver Dam, WI

Client:
Confidential

Contact:
Confidential

Project Manager:
Blaine R. Schroyer, P.E.

Date:
2001-2002

Fee:
\$8,000

Highlights:

Chlorinated Solvents

*Push-Probe Soil
Assessment*

*09 Closure "No Action
Required"*

Terracon provided Due Diligence services to facilitate purchase of a portfolio of printing facilities. The Phase I Environmental Site Assessment (ESA) indicated that additional sampling was warranted to evaluate if solvents had been discharged to the on-site septic system.

The results of the limited site assessment indicated that low concentrations of chlorinated solvents were present. Terracon performed an assessment to further delineate the chlorinated solvents. Each of the samples collected did not contain the chlorinated solvents above the method detection limit.

In response, a report was prepared that requested the Wisconsin Department of Natural Resources (WDNR) consider reclassifying this site as an "09" site. Reclassification of the site meant that the WDNR concluded that the reported release of chlorinated solvent was insignificant and did not require assessment.

The site owner was able to obtain a General Liability Clarification letter from WDNR indicating the site status, which provided sufficient assurance to a buyer and allowed the sale of the site.



Groundwater Remediation

Long Prairie, MN

Client:

Minnesota Pollution
Control Agency
520 Lafayette Road N.
St. Paul, MN 55155

Contact:

Ms. Maureen Johnson
Project Leader
(651) 296-7353

Project Manager:

David Wolfgram, P.E.

Date:

2003-Present

Fee:

\$750,000

Highlights:

*Groundwater Monitoring
Well Installation*

*Maintenance of Carbon
Filtration Systems*

*Remedial Investigation
Feasibility Study*

Terracon provides environmental services to the Minnesota Pollution Control Agency (MPCA) on a large groundwater treatment site in Long Prairie, Minnesota. Terracon operates a remediation system that consists of nine recovery wells which pump water through two 14,500 pound carbon vessels. The treated water is discharged to the Long Prairie River under a NPDES permit.

The water table aquifer at the site is contaminated with TCE as a result of a former dry cleaning facility. The contaminant plume extends beneath a large portion of the City ranging two miles from the source area. Impacts were identified in two municipal wells, several residential wells and the Long Prairie River. Contaminant levels in the groundwater plume were as high as 150,000 mg/L.

The two municipal wells impacted by TCE were shut down and new wells installed. Nine recovery wells were installed to contain the plume and limit further migration to un-impacted municipal wells and the Long Prairie River. The recovery wells pump water at a combined rate of 250 gpm to a centrally located treatment system which consists of two carbon treatment vessels. Additional equipment includes a 10,000 gal clear well, a backwash pumping system, and a compressor system for carbon change out.

Terracon's professional staff conducts weekly operation and maintenance services. The O&M consists of monitoring and adjusting pumping rates from the recovery wells, tracking influent and effluent pressures on the carbon vessels, backwashing the lead carbon vessel bi-weekly, recovery line pigging, and conducting maintenance on various pumps and ancillary equipment. Semi-annual monitoring of 34 monitoring wells is also conducted to monitor the status of the groundwater plume and make adjustments to the recovery well pumping scheme. Water samples are collected monthly to monitor for breakthrough and carbon in the lead vessel is changed out when breakthrough occurs which is typically on a yearly basis.

Terracon is preparing a system effectiveness evaluation to determine the effectiveness of the current treatment system and the potential cost savings in additional remedial measures are implemented. In-situ treatment methods (chemical oxidation) are being evaluated to address the more contaminated zones and reduce the overall treatment time and cost. A pilot test is proposed to evaluate the effectiveness of injection techniques into the more contaminated areas of the plume.

Wisconsin Chromium

Kaukauna, WI

Client:

Wisconsin Department of
Natural Resources – NE Region
625 E. County Road Y
Suite 700
Oshkosh, WI 54901-9731

Contact:

Ms. Jennifer Borski
920-424-7887

Project Manager:

Blaine R. Schroyer, P.E.

Date:

2002 - 2004

Fee:

\$130,000

Highlights:

*Co-Mingled Plume of
Hexavalent Chromium and
Volatile Organic Compounds*

*pH Adjusted Ion Exchange
and Carbon Filtration
Groundwater Treatment System*

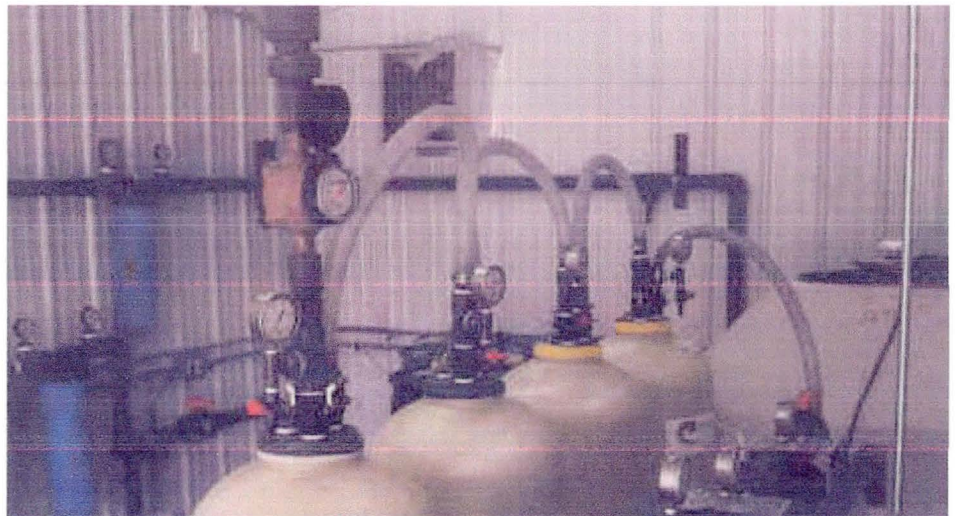
Quarterly Monitoring

Terracon was retained from April 2002 through December 2003 to provide environmental services associated with a groundwater treatment system at a site impacted primarily by hexavalent chromium and volatile organic compounds (VOCs). The former Wisconsin Chromium site was utilized as a chromium electroplating facility from 1976 to 1986. Hexavalent chromium exists in groundwater at several orders of magnitude above groundwater cleanup standards.

Groundwater is extracted from two trenches located downgradient of two distinct source areas. Groundwater is treated with a carbon filtration system to remove VOCs. After the water's pH is adjusted to 3 to 5, it is pumped through several ion exchange tanks, which remove both hexavalent and trivalent chromium. The pH is then raised to neutral before the water is discharged into the sanitary sewer system. Groundwater extraction also influences groundwater flow direction to minimize the amount of contaminated groundwater migrating from the site.

Terracon's responsibilities at the facility included system redesign and optimization, installation of monitoring wells, periodic monitoring of the groundwater, and operation and maintenance of the treatment system. Redesign and optimization involved evaluation of in-situ reductive chemical processes found to be ineffective and reengineering of the pumps and ion exchange resin capacity to allow for increased groundwater extraction volumes. Terracon's efforts have reduced estimated lifetime system costs and time to completion.

From April 2002 through December 2003, approximately 950,000 gallons of water were treated at the facility.





**Minnesota
Pollution
Control
Agency**

Majors &
Remediation
Program, Site
Remediation

Cleanup at Clark's Lane/Gilmore Avenue Ground Water Contamination Site in Winona

Geographic/Winona County/g-85-02/December 2002

This Minnesota Pollution Control Agency (MPCA) fact sheet describes the plan to address risks posed by soil contamination at the Winona Ground Water Contamination (Clark's Lane/Gilmore Avenue) site in Winona County, Minnesota. This fact sheet summarizes the history of the problem, results of soil investigations and response actions, and details of the cleanup action. The MPCA continues to address the ground water contamination problem associated with this site; however, this fact sheet deals specifically with the soil contamination problem. A solvent-type chemical used in the dry cleaning process, commonly referred to as perchloroethylene (PCE), is the principal contaminant that necessitates soil and ground water cleanup activities.

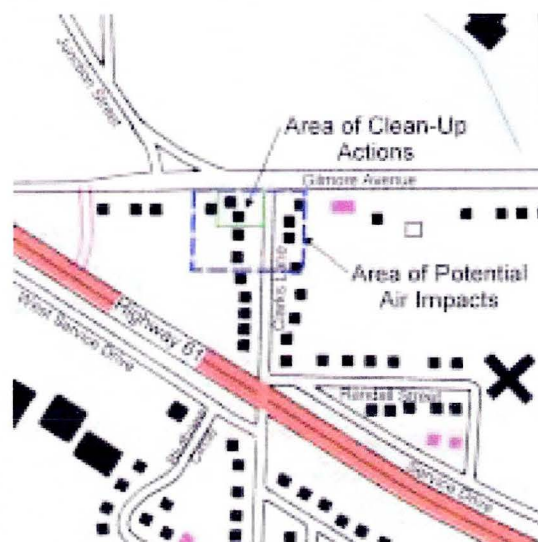
The ground water problem extends over an area of several city blocks. A remediation system continues to operate in order to address the ground water problem. During the forthcoming soil cleanup, an MPCA contractor will install deep temporary monitoring wells to evaluate the potential for deeper ground water contamination.

SITE LOCATION

For the purpose of this fact sheet, the "site" includes the source property, presently known as Leaf's Cleaners and Launderers at 1405 Gilmore Avenue, and two properties adjacent to Leaf's: 605 Clarks Lane and 1429 Gilmore Avenue (See Figure A).

The site consists of contaminated soil and a large groundwater plume containing dissolved PCE. The Leaf property consists of two buildings: a main building used for the dry cleaning business plus storage, and an unattached two-stall garage. The

property was once used as an auto service station.



(Figure A, Soil Remediation/Ground Water Contamination Site)

The Leaf property is bordered on the north by Gilmore Avenue, on the east by Clarks Lane, on the south by a garage and a single-family residence, and on the west by a motel. Past waste management practices at the site resulted in the release of PCE into the soil and ground water. Although the actual site consists of several square blocks due to the off-site migration of contaminated ground water, the current remedial action is addressing contaminated soils located on Leaf's property and adjacent property to the south.

HISTORY OF THE PROBLEM – A SUMMARY

In July of 1989, the MPCA discovered a release of PCE, which is a chemical commonly used in dry cleaning processes.

Contents:

Site Location, History...	1
Moving Ahead.....	2
Recommendations for Citizens.....	3



Approximately 25 area residences with impacted private drinking water wells were connected to City water as of November 1990, and the majority of the residents were awarded State compensation for water service replacement and for permanent sealing of their wells. In November 1990, Leaf's Services, Inc., under State order, was asked to respond to the contamination, and their response included the cleanup of two identified release areas. These two areas included an indoor drain and an outdoor "pit" that were both used for disposal of dry cleaning wastes.

Subsequently, and beginning in 1991, the MPCA retained consultants and other support remediation services to investigate the extent and magnitude of the contaminant plume and to evaluate and design a ground water remediation system. MPCA contractors completed the installation of a groundwater remediation system in 1992, and conducted a soil gas survey of the site in 1998. From the soil gas survey, it was concluded that a significant mass of contaminated soil remains underneath and within 25 feet of Leaf's building. Soil vapor concentrations of PCE and trichloroethylene (TCE, a typical breakdown product of PCE), were observed at significant levels. The survey report also recommended that additional soil sampling be completed in order to better define the source zone of contamination.

In 1999 the MPCA retained Terracon, Inc., a MPCA multi-site consultant/contractor with hydrogeologic and engineering expertise, to complete the groundwater contamination and source zone characterizations.

Additional soil, ground water, and indoor air samples were collected in and around the source property. PCE and other chlorinated solvents were detected in shallow soils (3 to 15 feet deep), with the majority of contamination occurring just above the water table at a depth of 8 feet. Indoor air at the three properties closest to Leaf's was monitored for chlorinated solvents and petroleum contaminants. To control chemical vapors that were detected in the nearest residence, the MPCA placed air purifiers in the home.

The MPCA and Terracon completed a Feasibility Study in 2000. The study provided potential demolition and excavation options at Leaf's and the residential property at 605 Clark's Lane.

The Minnesota Department of Health (MDH) staff has been engaged in the review of reports by Terracon, and has also provided technical review and comments for the

MPCA and Terracon project team. MDH staff also completed a 'Health Consultation', dated September 28, 2000 for this site. The MDH 'Health Consultation' fact sheet dated November 2000 summarizes the report and is available for general distribution and review.

MOVING AHEAD – EXCAVATING THE SOIL & REMEDIATING THE SITE

In order to remove impacted soil at the site, the Leaf's building and the private residence (605 Clarks Lane) will be demolished and the rubble will be hauled to a permitted landfill for proper disposal. The soil under the buildings will be removed and replaced with clean soil. Due to past and anticipated future costs of air quality monitoring in the home, the MPCA found that it was more cost-effective to purchase the property and demolish the house, and pay for the property owners' moving expenses. As part of the cleanup, the MPCA contractors will also install an exterior wall barrier and a soil vapor collection system at the El Rancho Motel (1429 Gilmore Avenue). Immediate funding for the cleanup actions is derived from the MPCA Superfund. This fund will be reimbursed with dollars from the Dry Cleaner Fund.

The MPCA contractors will work with the City of Winona and Winona County to deal with road closures and traffic issues during the various phases of this project. The daily schedule of cleanup work will follow typical/normal construction hours (7:00am to 5:00pm).

During the soil remediation process, the MPCA and its contractors will monitor the site's air, ground water, and soil with the assistance of an on-site mobile laboratory. The monitoring plan will require both continuous and periodic sampling of air quality during soil excavation activities. The soil and ground water in the excavation will be monitored periodically. Although PCE air concentrations down gradient from the site are expected to be well below MDH's health based criterion, a notification system to contact residents and other individuals in the area surrounding the site is part of the monitoring plan.

Project activities will not be significantly affected by cold weather. The cold weather, in fact, provides a better time of year for such remedial actions. Closing windows of buildings surrounding the area serves to decrease or eliminate any exposure that might arise as vapors escape during the site's excavation and remediation work.



As soil excavation proceeds, MPCA and Terracon staff will utilize various sampling techniques to identify the horizontal extent of PCE-contaminated soil. Additional temporary ground water monitoring wells (extending to a maximum depth of approximately 120 feet deep) will help to identify the vertical extent of PCE contamination. The additional step of collecting ground water samples at this depth will more fully assess the depth of the ground water contamination.

The MDH will provide technical guidance involving the air monitoring plan coordination efforts during the soil excavation.

Building demolition and soil excavation are anticipated to take only a few days; however, additional site activities such as disconnecting utilities and restoring the site could take two to three weeks. The extent of contamination, weather conditions and other factors will influence the amount of time required for cleanup.

Individuals with site excavation concerns may contact MPCA project leader, Dave Douglas.

RECOMMENDATIONS FOR CITIZENS NEAR SITE

Please keep all windows closed while site remediation occurs. Residents near the site (See Figure A, page 1) are encouraged to avoid outdoor activities during soil excavation. The air-monitoring plan provides for the use of color-coded signs to notify nearby residents about air quality in the vicinity of the excavation. Specifically, a blue sign indicates that no special alert is necessary. An orange sign indicates that residents are advised to stay indoors. A red sign indicates that residents are not to engage in any outdoor activities.

HOW DO I GET MORE INFORMATION?

The community is encouraged to call or e-mail the MPCA for additional information.

- Melanie Miland, MPCA Rochester Information Officer, (507) 285-7151 or toll-free at 1-800-657-3864; e-mail at melanie.miland@pca.state.mn.us

For site excavation concerns, contact:

- Dave Douglas, MPCA Majors and Remediation Program, (651) 296-7818 or toll-free at 1-800-657-3864; e-mail at david.douglas@pca.state.mn.us

Concerns regarding health issues or interest in obtaining the MDH 'Health Consultation' summary can be obtained by contacting Tannie Eshenaur, MDH at (651) 215-0916.

Visit the MPCA Web at <http://www.pca.state.mn.us> for additional information on remediation and site cleanup.

BLAINE R. SCHROYER, P.E.

OFFICE MANAGER

PROFESSIONAL EXPERIENCE

Mr. Schroyer is a project engineer with 15 years of environmental project experience. As office manager for Terracon's Appleton, Wisconsin office, his responsibilities include administering staff and projects covering the range of services Terracon offers. Mr. Schroyer provides client development, project management, project cost management, and report review services for his office. He also provides technical support and review for other projects and other Terracon offices.

Mr. Schroyer focuses on projects involving pesticides, herbicides, and other unique chemicals. He also has experience in all aspects of site assessments and remediation for petroleum releases. Mr. Schroyer manages several sites involving mixed contaminants. During the past several years, he has been called upon to coordinate and manage large-scale project efforts involving more than two dozen Terracon personnel and regions including North Dakota, Ohio and Texas.

Mr. Schroyer has designed and implemented research on the transport and fate of herbicides through the vadose zone. This work included the development of analytical methods using high performance liquid chromatography (HPLC) and ion chromatography (IC), and a comparative analysis of field and laboratory results.

PROJECT EXPERIENCE

- **Former Chrome Plating Facility – Kaukauna, Wisconsin**
Performed a treatment system evaluation for an existing carbon absorption/ion exchange groundwater treatment system designed to remove solvents and chromium. Proposed improvements enhanced system performance dramatically, decreasing the required life of the system. The system continues to operate and has removed approximately 400 pounds of chromium from the groundwater since 2001. The property is owned by Outagamie County and funded/managed by the Wisconsin Department of Natural Resources.
- **Former Landfill Assessment and Closure – Westport, Wisconsin**
Prepared an investigative work plan to determine whether or not a former demolition landfill which had accepted paint solvents and medical waste had impacted groundwater to the extent that could necessitate active remediation. Cost-saving methods employed reduced estimated costs from greater than \$100,000 to \$50,000. The site is being considered for redevelopment due to its proximity to the Bishop's Bay Country Club.
- **Pesticide Formulating Site – Albert Lea, Minnesota**
Performed assessment of soil and groundwater impacts, evaluation of risk-based cleanup goals and survey of remedial options. Project resulted in remediation of multiple classes of contaminants, including RCRA chemicals, using on-site thermal desorption technology, a first for chlorinated compounds in Minnesota, and microencapsulation.
- **Former Power Pole Treatment Site – Willmar, Minnesota**
Performed assessment of soil and groundwater impacts involving pentachlorophenol, diesel and dioxins/furans with evaluation of remedial options resulting in limited excavation followed by enhanced bioremediation and phytoremediation.

EDUCATION

Master of Science, Civil Engineering, 1999, University of Minnesota
Bachelor of Science, Civil and Environmental Engineering, 1991, University of Wisconsin

REGISTRATIONS

Professional Engineer: Wisconsin, Minnesota

AFFILIATIONS

American Society of Civil Engineers
Wisconsin Federation of Cooperatives

WORK HISTORY

Terracon, Project Engineer/Office Manager, 1997-present;
Environmental Engineer, 1994-1997; Environmental Engineer, 1992
USGS/University of Minnesota, Hydrologist/Research Assistant, 1992-1994
Bureau of Land Management, Land Surveyor, 1990-1991

PROJECT EXPERIENCE (continued)

- **Brownfield Redevelopment – Grand Chute, Wisconsin**

Coordinated Phase I and II environmental site assessments (ESA), asbestos demolition survey and wetland delineation and permitting and developed a remedial action plan which allowed two otherwise blighted and under-taxed properties to be developed into a large retail business. Contaminants included metals, petroleum and solid wastes.

- **Agricultural Facilities Acquisition – Multiple States**

Coordinated site visits of six site assessors for due diligence purposes. The team members visited 130 sites in seven states in a two-week period. The data was used to select sites for Phase II actions. Phase II efforts were then coordinated at seven of the sites, resulting in exclusion of environmental liabilities amounting to more than \$500,000. All efforts were completed within a five-week period.

- **Spill Prevention, Control and Countermeasures (SPCC) Plans – Large Portfolio**

Managed site visits, evaluation and preparation of SPCC plans for a local utility company for their substations, hydroelectric generation facilities, coal-fired plants, natural gas plants, diesel plants, nuclear plant, warehouses and operations facilities. The total number of facilities was nearly 200.

- **Petroleum Pipeline Spill**

Researched and developed a stream bed sediment sampling plan for a large petroleum spill. More than 500,000 gallons of unleaded gasoline containing nine percent methyl tert-butyl ether (MTBE) was released to an intermittent stream bed extending approximately 28 miles to a water supply reservoir. Assessment of the stream bed sediments for the entire 28 miles was complete within seven days of initiation. Sediment sampling was repeated on affected reaches two more times. A cross-sectional sampling plan was implemented, perennial pool sampling was conducted and monitoring wells were installed to assess the stream/groundwater interactions. The data was utilized to evaluate appropriate remedial actions for the stream bed sediments. As a result of the data obtained, active cleanup of the stream bed sediments was avoided.

PUBLICATIONS/PRESENTATIONS

Schroyer, Blaine R., *Remediation of Chlorinated Pesticides using Thermal Desorption* (Presentation), presented at the State Approaches to Agricultural Cleanups, Minnesota Department of Agriculture Conference in St. Paul, Minnesota, February 18-19, 2000.

Schroyer, Blaine R., G.N. Delin, M.K. Landon, K.J. Nelson, R.B. Wanty, R.W. Healy, H.W. Olsen, J.K. Bohlke and P.D. Capel, *Hydrogeologic and Water Quality Data Used to Evaluate the Effects of Focused Recharge on Groundwater Quality Near Princeton, Minnesota, 1991-1995*. U.S. Geological Survey, Open file report 97-21.

Schroyer, Blaine R. and Paul D. Capel, *A High-Performance Liquid Chromatography-Based Screening Method for the Analysis of Atrazine, Alachlor, and Ten of Their Transformation Products* (Proceedings of American Chemical Society, 1996), pp. 34-42.

Schroyer, Blaine R., Paul D. Capel, Lin Ma, Steven J. Larson and Therese A. Gilchrist, *Analysis and Detection of the New Corn Herbicide Acetochlor in River Water and Rain*. Environmental Science and Technology, Vol. 29, No. 6, 1995.

Engineers Remediate Land Polluted with Fertilizer, Pesticide – by Brett Hanson. Civil Engineering, Vol. 76, No. 3, March 2006. Article highlights an environmental project and innovative solution designed and permitted by Mr. Schroyer.

PAUL J. WIESE, CPG

PROJECT MANAGER/HYDROGEOLOGIST

PROFESSIONAL EXPERIENCE

Mr. Wiese supervises a project management group specializing in assessments and clean ups at industrial properties. Mr. Wiese's project responsibilities include the preparation of proposals, work plans, reports, and regulatory and client contacts. He is also responsible for the review of work prepared by other staff members. He provides hydrogeologic analysis, including the evaluation of subsurface conditions, aquifer characterizations, groundwater/surface water interaction, and modeling of drawdown, transport, capture zone, and natural attenuation. Other responsibilities include the design and implementation of a variety of different active and passive soil and groundwater remediation plans.

Mr. Wiese has supervised drilling crews during remedial assessments, remedial well installations, and Geoprobe assessments. He has conducted environmental field tasks, such as well development, groundwater sampling, vapor monitoring, groundwater and soil vapor extraction, and air sparging pilot testing, large scale soil excavation and treatment, remediation system monitoring, and documentation of subcontractor operations.

Prior to joining Terracon, Mr. Wiese was a geologist with another firm, where he performed environmental field tasks such as well stabilization, ground-water sampling, soil sampling, soil screening, observation of monitoring well construction, and documentation of subcontractor operations. He was also responsible for writing reports and proposals. He performed groundwater pumping tests, then reduced data to determine aquifer characteristics.

As a graduate student, Mr. Wiese performed research that utilized stable oxygen isotopes and X-ray fluorescence techniques to analyze metamorphic rocks from Labrador and Antarctica.

PROJECT EXPERIENCE

- **Phase I and II Environmental Site Assessments – Minnesota**
As the client contact, managed the completion of 70 Phase I Environmental Site Assessments for the telecommunications industry, 50 of which also included Phase II or Geotechnical assessments.
- **LUST Site Investigation – Glyndon, Minnesota**
As project manager, directed site assessment and remedial activities at a state funded cleanup of a impacted sole source aquifer which resulted in project closure. Assessment activities included the installation of more than 20 monitoring and test wells, completion of a feasibility study for evaluation of various remedial options, and pilot testing potentially effective options. Remedial actions included coordinating the on-site thermal treatment of more than 16,000 cubic yards of soil.

EDUCATION

*Graduate Studies, Geology, 1987,
Northern Illinois University*
*Bachelor of Science, Geology,
1985, Winona State University*

REGISTRATIONS

Certified Professional Geologist
Professional Geologist: Wisconsin

AFFILIATIONS

*American Institute of Professional
Geologists*
National Ground Water Association
*Minnesota Ground Water
Association*

WORK HISTORY

*Terracon, Project Manager/
Hydrogeologist, 1989-present*
*Twin City Testing Corporation,
Geologist, 1988-1989*
*Northern Illinois University,
Graduate Research Assistant,
1985-1987*

PROJECT EXPERIENCE (continued)**• Agricultural Chemical Distribution Facility – Lewiston, Minnesota**

As project manager, directed site assessment and remedial activities at a pesticide and fertilizer distribution facility which resulted in project closure. Site activities included the installation of more than 30 soil borings, excavation of more than 1,000 cubic yards of impacted soil, and coordination of land application of the impacted soil.

• LUST Site Investigation – New Richmond, Wisconsin

As project manager, completed site response, assessment and remedial activities at a petroleum release site which resulted in the recovery of more than 20,000 gallons free phase product during a three month period. Site response and assessment activities include coordinating the installation of an exhaust fan to reduce vapor levels in a storm sewer, maintaining product booms in a nearby wetland, oversight during the installation of more than 20 test pits, soil boring and monitoring, and designing and construction oversight of an interceptor trench.

• LUST Site Investigation – Hastings, Minnesota

As project manager, completed UST removal oversight, site assessment and remedial activities at a petroleum service station where free product was present on the water table in a bedrock aquifer. Assessment activities included the installation of eight borings and wells, completion of soil vapor and ground water extraction pilot testing; and design of a corrective action plan. Remedial actions included coordinating the installation of a vacuum enhanced ground water extraction system. Project closure was obtained after successfully negotiating less restrictive site clean up goals.

• Groundwater Resources - Land O'Lakes, Wisconsin

As project hydrogeologist, assisted in water supply and waste water treatment activities associated with a college prep school being constructed in a remote area of northeast Wisconsin. Activities associated with the water supply system included assisting with the design of the supply well and monitoring well network, evaluating the hydrogeologic setting based upon soil boring logs and fluid level data, and performing a groundwater pumping test and data analysis. Data collected during drilling and pilot testing activities were used to model the influence of the planned ground water pumping and waste water infiltration on the hydrogeologic setting. This information was used to locate the water supply and waste water treatment systems.

SCOTT A. HODGSON, P.G.

SENIOR PROJECT GEOLOGIST

PROFESSIONAL EXPERIENCE

Mr. Hodgson is a senior project geologist in Terracon's Appleton, Wisconsin office, with more than 15 years of experience in geologic interpretation, hydrogeology, and environmental cleanups. His responsibilities include management and technical oversight of environmental projects, and development of large-scale projects market. His experience includes project scope development, cost estimating, supervision and training of personnel, technical data analysis, technical report preparation and review, and client management.

Mr. Hodgson has performed site investigations within complex geologic regimes; performed groundwater pump & treat, soil vapor extraction, and air sparge pilot tests; designed groundwater and soil remediation systems including plan and specifications preparation; performed system construction oversight and QA/QC; and operated, monitored, and evaluated system operation. His experiences have included investigation and remediation of sites contaminated with metals, petroleum hydrocarbons, chlorinated solvents, and semi-volatile organic compounds.

PROJECT EXPERIENCE

- **Former Quicfrez Complex, Wisconsin Department of Natural Resources State Lead Site – Fond du Lac, Wisconsin**

Lead investigator and project manager for characterization and remediation of 4.5 acre high priority old industrial site with metals, semi-volatile, and chlorinated solvent contamination. Site investigation included sediment and surface water sampling, soil borings, and construction of multiple 3-well monitoring well nests. High concentrations of chlorinated solvent contamination were documented in soil and groundwater to depths of 45 feet adjacent to, and under a river. Innovative in-situ remediation of the chlorinated solvent contamination involved the second large-scale application of the Lasagna™ electro-osmosis/treatment wall technology in the US. Implementation of the technology required design and construction of a bulkhead into the river to allow treatment of contaminated soil beneath the river. Work included system construction oversight of the \$1.2 million dollar system, including construction observation, preparation and administration of contract documents, process contractor payment requests, conduct construction meetings, and review contractor submittals. Work also included development of specialized techniques to sample soil and groundwater at temperatures of 180°F, and specialized system and remediation monitoring plans to ensure public safety, protect nearby utilities, protect the river environment, and collect data to assess the remediation.

- **Electric Company – Appleton, Wisconsin**

Project manager for Quality Assurance testing for in-situ stabilization at a former manufactured gas plant site. Responsible for overseeing sample collection and preparation, coordination and communication with the consultant and contractor, and timely reporting of the results

EDUCATION

*Master of Science, Geology, 1991,
New Mexico State University*

*Bachelor of Science, Geology and
Geography, 1986, University of
Wisconsin-Platteville*

REGISTRATIONS

Professional Geologist-WI

CERTIFICATIONS

40-Hour HAZWOPER

AFFILIATIONS

*Wisconsin Groundwater
Association*

WORK HISTORY

*Terracon, Senior Project Geologist,
April 2007- present*

*Miller Engineers & Scientists,
Project Engineer/Scientist, 2005
to April 2007; Staff
Engineer/Scientist, 1995-2005;
Junior Engineer/Scientist, 1992-
1995*

PROJECT EXPERIENCE (Continued)

- **Shilobrit Dry Cleaners, Wisconsin Department of Natural Resources State Lead Site – Oshkosh, Wisconsin**
Project manager responsible for site investigation activities and development of remedial action options for chlorinated solvent contamination. Investigation techniques included evaluating the integrity of the storm sewer lateral and adjacent box culvert with a small diameter video camera; collecting soil and groundwater samples adjacent to basement walls using suction lysimeters installed through the wall, and sampling a full program of groundwater natural attenuation parameters. Activities also included coordinating asbestos inspection and demolition of the site building after it partially collapsed under the weight of heavy snowfall and it became too unstable to perform soil borings through the basement floor. Seven remedial options were considered. The low-cost remedial option was an innovative passive iron diffusion technology.
- **Ripon Wells 6 & 9, Wisconsin Department of Natural Resources State Lead Site – Ripon, Wisconsin**
Project manager and lead author for a city-wide Phase I and limited Phase II Environmental Assessment to identify potential source(s) for trichloroethene contamination in City of Ripon Municipal Wells No. 6 and No. 9. The Phase I ESA identified a number of potential sources that were previously unknown. Phase II activities involved identifying and sampling existing monitoring wells, private potable wells, and surface water localities throughout the city.
- **Oil Company – Various Sites, Wisconsin**
Project manager responsible for site investigations, remedial action plans, system design, system operation and monitoring, evaluation and reporting at various sites throughout Wisconsin. Site investigation techniques included soil borings, construction of monitoring well nests, vapor well construction, soil vapor testing, residential drinking water sampling, soil characteristic testing, suction lysimeters installation in manholes to investigate contaminant migration along utilities, and aquifer testing/analysis. Remedial action ranged from soil excavation to design, operation, and evaluation of a large-scale dual-phase extraction system with 45 extraction wells.
- **Former Service Station – Sister Bay, Wisconsin**
Project manager responsible for site investigation and remediation of petroleum contamination within a complex fractured dolomite geologic setting. Site investigation techniques included nested vapor well construction, construction of deep monitoring well nests, vadose zone vapor testing, videotaping bedrock borings and existing potable well to identify fractures, packer testing to isolate individual fractures for pump tests and sample collection, and residential drinking water sampling. Designed a soil vapor extraction system for remediation of the source area bedrock.
- **Lakewood Pelky DX, Wisconsin Department of Natural Resources State Lead Site – Lakewood, Wisconsin**
Project manager and lead investigator for a diving trichloroethene plume in a complex geologic setting. The plume was identified at depths greater than 150 feet, covered an area of over ½ square mile, and contaminated more than seven private wells. The investigation successfully identified the hydrogeologic characteristics responsible for plume migration and identified several additional contaminated or at-risk private potable wells.

PUBLICATIONS

Hodgson, S.A., Structural Geology and Laramide Tectonics of the Little Hatchet Mountains, Southwestern New Mexico (New Mexico Geological Society Guidebook, 51st Field Conference, Southwest Passage—A Trip through the Phanerozoic, 2000), pp. 109-116.

ACORD™ CERTIFICATE OF LIABILITY INSURANCE

01/01/2007

DATE (MM/DD/YY)
11/14/2006

PRODUCER
Lockton Companies
444 W. 47th Street, Suite 900
Kansas City Mo 64112-1906
(816) 960-9000

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.

INSURERS AFFORDING COVERAGE

INSURED
1054125 Terracon Consultants, Inc.
Ms. Natalie Terry
16000 College Blvd.
Lenexa KS 66219


INSURER A: CONTINENTAL CASUALTY COMPANY**
INSURER B: ***(V.O. SCHINNERER)
INSURER C: A MEMBER OF CNA INSURANCE COMPANIES
INSURER D:
INSURER E:

COVERAGES **PC** **THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER AND THE CERTIFICATE HOLDER.**

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	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS
	GENERAL LIABILITY <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC	NOT APPLICABLE			EACH OCCURRENCE \$ XXXXXXXX FIRE DAMAGE (Any one fire) \$ XXXXXXXX MED EXP (Any one person) \$ XXXXXXXX PERSONAL & ADV INJURY \$ XXXXXXXX GENERAL AGGREGATE \$ XXXXXXXX PRODUCTS - COMP/OP AGG \$ XXXXXXXX
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS	NOT APPLICABLE			COMBINED SINGLE LIMIT (Ea accident) \$ XXXXXXXX BODILY INJURY (Per person) \$ XXXXXXXX BODILY INJURY (Per accident) \$ XXXXXXXX PROPERTY DAMAGE (Per accident) \$ XXXXXXXX
	GARAGE LIABILITY <input type="checkbox"/> ANY AUTO	NOT APPLICABLE			AUTO ONLY - EA ACCIDENT \$ XXXXXXXX OTHER THAN EA ACC \$ XXXXXXXX AUTO ONLY: AGG \$ XXXXXXXX
	EXCESS LIABILITY <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> DEDUCTIBLE <input type="checkbox"/> UMBRELLA FORM RETENTION \$	NOT APPLICABLE			EACH OCCURRENCE \$ XXXXXXXX AGGREGATE \$ XXXXXXXX \$ XXXXXXXX \$ XXXXXXXX
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	NOT APPLICABLE			WC STATUTORY LIMITS OTH-ER E.L. EACH ACCIDENT \$ XXXXXXXX E.L. DISEASE - EA EMPLOYEE \$ XXXXXXXX E.L. DISEASE - POLICY LIMIT \$ XXXXXXXX
A	OTHER PROFESSIONAL LIABILITY	EXN 114141026	01/01/2006	01/01/2007	\$1,000,000 EACH CLAIM & \$1,000,000 ANNUAL AGGREGATE

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS
For Information Purposes Only. \$25,000 per claim deductible

CERTIFICATE HOLDER	ADDITIONAL INSURED; INSURER LETTER: _____	CANCELLATION
Specimen		SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL <u>30</u> DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES. AUTHORIZED REPRESENTATIVE 

AGREEMENT FOR SERVICES

This AGREEMENT is between Martino's Master Dry Cleaners ("Client") and Terracon Consultants, Inc. ("Consultant") for Services to be provided by Consultant for Client on the 7513 41st Avenue, Kenosha project ("Project"), as described in the Project Information section of Consultant's Proposal dated 9/25/08 ("Proposal") unless the Project is otherwise described in Exhibit A to this Agreement (which section or Exhibit is incorporated into this Agreement).

- 1. Scope of Services.** The scope of Consultant's services is described in the Scope of Services section of the Proposal ("Services"), unless Services are otherwise described in Exhibit B to this Agreement (which section or exhibit is incorporated into this Agreement). Portions of the Services may be subcontracted. Consultant's Services do not include the investigation or detection of, nor do recommendations in Consultant's reports address the presence or prevention of biological pollutants (e.g., mold, fungi, bacteria, viruses, or their byproducts) or occupant safety issues, such as vulnerability to natural disasters, terrorism, or violence. If Services include purchase of software, Client will execute a separate software license agreement. Consultant's findings, opinions, and recommendations are based solely upon data and information obtained by and furnished to Consultant at the time of the Services.
- 2. Acceptance.** Client agrees that execution of this Agreement is a material element of the consideration Consultant requires to execute the Services, and if Services are initiated by Consultant prior to execution of this Agreement as an accommodation for Client at Client's request, both parties shall consider that commencement of Services constitutes formal acceptance of all terms and conditions of this Agreement. Additional terms and conditions may be added or changed only by written amendment to this Agreement signed by both parties. In the event Client uses a purchase order or other form to administer this Agreement, the use of such form shall be for convenience purposes only and any additional or conflicting terms it contains are stricken. This Agreement shall not be assigned by either party without prior written consent of the other party.
- 3. Change Orders.** Client may request changes to the scope of Services by altering or adding to the Services to be performed. If Client so requests, Consultant will return to Client a statement (or supplemental proposal) of the change setting forth an adjustment to the Services and fees for the requested changes. Following Client's review, Client shall provide written acceptance. If Client does not follow these procedures, but instead directs, authorizes, or permits Consultant to perform changed or additional work, the Services are changed accordingly and Consultant will be paid for this work according to the fees stated or its current fee schedule. If project conditions change materially from those observed at the site or described to Consultant at the time of proposal, Consultant is entitled to a change order equitably adjusting its Services and fee.
- 4. Compensation and Terms of Payment.** Client shall pay compensation for the Services performed at the fees stated in the Compensation section of the Proposal unless fees are otherwise stated in Exhibit C to this Agreement (which section or Exhibit is incorporated into this Agreement). If not stated in either, fees will be according to Consultant's current fee schedule. Fee schedules are valid for the calendar year in which they are issued. Consultant may invoice Client at least monthly and payment is due upon receipt of invoice. Client shall notify Consultant in writing, at the address below, within 15 days of the date of the invoice if Client objects to any portion of the charges on the invoice, and shall promptly pay the undisputed portion. Client shall pay a finance fee of 1.5% per month, but not exceeding the maximum rate allowed by law, for all unpaid amounts 30 days or older. Client agrees to pay all collection-related costs that Consultant incurs, including attorney fees. Consultant may suspend Services for lack of timely payment.
- 5. Third Party Reliance.** This Agreement and the Services provided are for Consultant and Client's sole benefit and exclusive use with no third party beneficiaries intended. Reliance upon the Services and any work product is limited to Client and third parties granted reliance in Section B(5) of the Report, if any, and is not intended for other third parties. For a limited time period not to exceed three months from the date of the report, Consultant will issue additional reports to others agreed upon with Client, however Client understands that such reliance will not be granted until those parties sign and return Consultant's reliance agreement and Consultant receives the agreed-upon reliance fee.
- 6. LIMITATION OF LIABILITY.** CLIENT AND CONSULTANT HAVE EVALUATED THE RISKS AND REWARDS ASSOCIATED WITH THIS PROJECT, INCLUDING CONSULTANT'S FEE RELATIVE TO THE RISKS ASSUMED, AND AGREE TO ALLOCATE CERTAIN OF THE RISKS SO, TO THE FULLEST EXTENT PERMITTED BY LAW, THE TOTAL AGGREGATE LIABILITY OF CONSULTANT (AND ITS RELATED CORPORATIONS AND EMPLOYEES) TO CLIENT AND THIRD PARTIES GRANTED RELIANCE IS LIMITED TO \$1,000,000 FOR ANY AND ALL INJURIES, DAMAGES, CLAIMS, LOSSES, OR EXPENSES (INCLUDING ATTORNEY AND EXPERT FEES) ARISING OUT OF CONSULTANT'S SERVICES OR THIS AGREEMENT REGARDLESS OF CAUSE(S) OR THE THEORY OF LIABILITY, INCLUDING NEGLIGENCE, INDEMNITY, OR OTHER RECOVERY. THIS LIMITATION SHALL NOT APPLY TO THE EXTENT THE DAMAGE IS PAID UNDER CONSULTANT'S COMMERCIAL GENERAL LIABILITY POLICY.
- 7. Indemnity/Statute of Limitations.** Consultant and Client shall defend, indemnify, and hold harmless the other, their agents, and employees, from and against legal liability for all claims, losses, damages, and expenses to the extent such claims, losses, damages, or expenses are caused by their negligent acts, errors, or omissions. In the event such claims, losses, damages, or expenses are caused by the joint or concurrent negligence of Consultant and Client, they shall be borne by each party in proportion to its own negligence under comparative fault principles. Causes of action arising out of Consultant's services or this Agreement regardless of cause(s) or the theory of liability, including negligence, indemnity or other recovery shall be deemed to have accrued and the applicable statute of limitations shall commence to run not later than the date of Consultant's substantial completion of services on the project.
- 8. Warranty.** Consultant will perform the Services in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. **CONSULTANT MAKES NO WARRANTIES OR GUARANTEES, EXPRESS OR IMPLIED, RELATING TO CONSULTANT'S SERVICES AND CONSULTANT DISCLAIMS ANY IMPLIED WARRANTIES OR WARRANTIES IMPOSED BY LAW, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**
- 9. Insurance.** Consultant represents that it now carries, and will continue to carry: (i) workers' compensation insurance in accordance with the laws of the states having jurisdiction over Consultant's employees who are engaged in the Services, and employer's liability insurance (\$1,000,000); (ii) commercial general liability insurance (\$1,000,000 occ / \$2,000,000 agg); (iii) automobile liability insurance (\$1,000,000 B.I. and P.D. combined single limit); and (iv) professional liability insurance (\$1,000,000 claim / agg). Certificates of insurance will be provided upon request. Client and Consultant shall waive subrogation against the other party on all general liability and property coverage.

Agreement Reference Number (Terracon Proposal or Project Number):P58087039

- 10. Dispute Resolution.** Client shall not be entitled to assert a Claim against Consultant based on any theory of professional negligence unless and until Client has obtained the written opinion from a registered, independent, and reputable engineer, architect, or geologist that Consultant has violated the standard of care applicable to Consultant's performance of the Services. Client shall provide this opinion to Consultant and the parties shall endeavor to resolve the dispute within 30 days, after which Client may pursue its remedies at law. This Agreement shall be governed by and construed according to Kansas law.
- 11. Subsurface Explorations.** Subsurface conditions throughout the site may vary from those depicted on logs of discrete borings, test pits, or other exploratory services. Client understands Consultant's layout of boring and test locations is approximate and that Consultant may deviate a reasonable distance from those locations. Consultant will take reasonable precautions to reduce damage to the site when performing Services; however, Client accepts that invasive services such as drilling or sampling may damage or alter the site. Site restoration is not provided unless specifically included in the Services.
- 12. Testing and Observations.** Client understands that testing and observation are discrete sampling procedures, and that such procedures indicate conditions only at the depths, locations, and times the procedures were performed. Consultant will provide test results and opinions based on tests and field observations only for the work tested. Client understands that testing and observation are not continuous or exhaustive, and are conducted to reduce - not eliminate - project risk. Client agrees to the level or amount of testing performed and the associated risk. Client is responsible (even if delegated to contractor) for notifying and scheduling Consultant so Consultant can perform these Services. Consultant shall not be responsible for the quality and completeness of contractor's work or their adherence to the project documents, and Consultant's performance of testing and observation services shall not relieve contractor in any way from its responsibility for defects discovered in its work, or create a warranty or guarantee. Consultant will not supervise or direct the work performed by contractor or its subcontractors and is not responsible for their means and methods.
- 13. Sample Disposition, Affected Materials, and Indemnity.** Samples are consumed in testing or disposed of upon completion of tests (unless stated otherwise in the Services). Client shall furnish or cause to be furnished to Consultant all documents and information known or available to Client that relate to the identity, location, quantity, nature, or characteristic of any hazardous waste, toxic, radioactive, or contaminated materials ("Affected Materials") at or near the site, and shall immediately transmit new, updated, or revised information as it becomes available. Client agrees that Consultant is not responsible for the disposition of Affected Material unless specifically provided in the Services, and that Client is responsible for directing such disposition. In the event that test samples obtained during the performance of Services (i) contain substances hazardous to health, safety, or the environment, or (ii) equipment used during the Services cannot reasonably be decontaminated, Client shall sign documentation (if necessary) required to ensure the equipment and/or samples are transported and disposed of properly, and agrees to pay Consultant the fair market value of this equipment and reasonable disposal costs. In no event shall Consultant be required to sign a hazardous waste manifest or take title to any Affected Materials. Client shall have the obligation to make all spill or release notifications to appropriate governmental agencies. The Client agrees that Consultant neither created nor contributed to the creation or existence of any Affected Materials conditions at the site. Accordingly, Client waives any claim against Consultant and agrees to indemnify and save Consultant, its agents, employees, and related companies harmless from any claim, liability or defense cost, including attorney and expert fees, for injury or loss sustained by any party from such exposures allegedly arising out of Consultant's non-negligent performance of services hereunder, or for any claims against Consultant as a generator, disposer, or arranger of Affected Materials under federal, state, or local law or ordinance.
- 14. Ownership of Documents.** Work product, such as reports, logs, data, notes, or calculations, prepared by Consultant shall remain Consultant's property. Proprietary concepts, systems, and ideas developed during performance of the Services shall remain the sole property of Consultant. Files shall be maintained in general accordance with Consultant's document retention policies and practices.
- 15. Utilities.** Client shall provide the location and/or arrange for the marking of private utilities and subterranean structures. Consultant shall take reasonable precautions to avoid damage or injury to subterranean structures or utilities. Consultant shall not be responsible for damage to subterranean structures or utilities that are not called to Consultant's attention, are not correctly marked, including by a utility locate service, or are incorrectly shown on the plans furnished to Consultant.
- 16. Site Access and Safety.** Client shall secure all necessary site related approvals, permits, licenses, and consents necessary to commence and complete the Services and will execute any necessary site access agreement. Consultant will be responsible for supervision and site safety measures for its own employees, but shall not be responsible for the supervision or health and safety precautions for any other parties, including Client, Client's contractors, subcontractors, or other parties present at the site.
- 17. Termination.** Either party may terminate this Agreement or the Services upon written notice to the other. In such case, Consultant shall be paid costs incurred and fees earned to the date of termination plus reasonable costs of closing the project.

Consultant: **Terracon Consultants, Inc.**

By:  Date: 9/25/08

Name/Title: Blaine Schroyer, Office Manager

Address: 9856 South 57th Street

Franklin, Wisconsin 53132

Phone: 414.423.0255 Fax: 414.423.0566

Client: Martino's Master Dry Cleaners

By: _____ Date: _____

Name/Title: _____

Address: _____

Phone: _____ Fax: _____

Agreement Reference Number (Terracon Proposal or Project Number): P58087039

**TERRACON ENVIRONMENTAL SERVICES FEE SCHEDULE
2008**

I. PERSONNEL

Note #1

A. Professional Staff

- 1. Staff Professional \$60.00 hour
- 2. Project Professional I 76.00 hour
- 3. Project Manager I 90.00 hour
- 4. Senior Project Manager 105.00 hour

B. Support Staff

- 1. Clerical \$40.00 hour
- 2. Draftsperson 36.00 hour

Note #1 Increase hourly rate by 1.3 for Saturday, Sunday and holiday work or off shift work when required by client or for emergency response with less than 36 hour notice.

II. EXPENSES/SUPPLIES/SUBCONTRACTED SERVICES

Note #2

- 1. Transportation 0.55/mile
- 2. Packaging and Shipping Test Samples Cost+15%
- 3. Subcontracted Services Cost+15%
- 4. Equipment Rental Cost+15%
- 5. Materials and Supplies Cost+15%
- 6. Analytical Laboratory Tests Cost+15%

Note #2 Subcontract services, materials, and equipment can be paid directly by the client to avoid the mark up

III. TERRACON EQUIPMENT SCHEDULE

A. Monitoring Equipment

- 1. Photoionizer (HNU or OVM) \$95.00 Daily
- 2. Water Level Indicator \$21.00 Daily
- 3. ORP Meter \$10.00 Daily
- 4. Disposable Bailers \$13.00/each

DERF Site Investigation Bid Sheet

Consultant Bid Summary

Form 4400-233 (R 4/04) Page 2 of 6

Site Information

Site Name: Martino's Master Dry Cleaners on 41st Avenue

Consultant Name: Terracon Consultants, Inc.

Applicant Name

Bid Summary

Drilling Costs Total =	\$9,455.00
Analytical Costs Total =	\$5,118.00
Consulting Costs Total =	\$9,713.00
Misc Costs Total =	\$2,170.00
Grand Total =	\$26,456.00

I certify that the costs are an accurate estimate of my total projected costs for the site investigation and I understand and will adhere to s.292.65 Stats. and ch NR 169, Wis. Adm. Code.

Consultant Signature



Date

9/25/08

Please attach to these forms a written narrative specifying how the tasks outlined in these sheets will be performed.

Consultant Name: Terracon Consultants, Inc.
 Site Name: Martino's
 BRRTS #:
 Date: September 25, 2008

DERF Site Investigation Bid Sheet Drilling Costs

Form 4400-233 (R 4/04) Page 3 of 6

Drilling Costs						
Task	Interval	Number of Borings or Wells	Number of Days	Total Number Feet Drilled	Cost/feet, Day or Well	Total Cost
Well installation and Completion						
4 OWs	0 ft to 20 ft	4		80	\$38	\$3,040
1 PZ	0 ft to 40 ft	1		40	\$45	\$1,800
	___ ft to ___ ft					
	> ___ ft					
Decontamination Costs						Incl.
Mobilization Costs						Incl.
Auger Borings (continuous sampling)						
	___ ft to ___ ft					
	___ ft to ___ ft					
	___ ft to ___ ft					
	> ___ ft					
Decontamination Costs						Incl.
Mobilization Costs						Incl.
Auger Borings (specify split spoon sampling interval)						
	___ ft to ___ ft					
	___ ft to ___ ft					
	___ ft to ___ ft					
	> ___ ft					
Decontamination Costs						
Mobilization Costs						
Direct Push Borings (per point)						
Soil Assessment	< 40 ft depth	11	2		\$1,750	\$3,500.00
	___ ft - ___ ft depth					
	> ___ ft depth					
Decontamination Costs						Incl.
Mobilization Costs						Incl.
Well Development (if done by subcontractor)						
Well Development (subcontractor)	Monitoring Wells					\$0
	Piezometers					
	Recovery Wells					
Other						
Drums		6			\$50	\$300
Flush Mount Covers		5			\$150	\$750
Soil Gas Sampling Ports		1			\$65	\$65
Total Drilling Costs						\$9,455.00

Parameter	WI Certified Lab			Field Test/Field Kit			Mobile Lab			Total Costs	
	\$/sample	# samples	Method Used	\$/sample	# samples	Method Used	\$/Sample \$/Day	# Samples # Days	Method Used		
Solids Analysis											
VOCs	55	35	8260							\$1,925.00	
TCLP	210	1								\$210.00	
RCRA Metals										\$0.00	
Duplicate Analyses										\$0.00	
Blank Analyses										\$0.00	
Other: (Specify) 24-hr VOC										\$0.00	
										\$0.00	
Water Analysis (low flow sampling assumed unless otherwise indicated at bottom of this sheet)											
VOCs	55	35	8260							\$1,925.00	
Nitrate*	10	6								\$60.00	
Dissolved Oxygen*				2	5	field				\$10.00	
Temperature*						field				\$0.00	
Ferrous Iron*				2	5	field				\$10.00	
Sulfate*	10	6								\$60.00	
Sulfide*										\$0.00	
ORP*				0	5	field				\$0.00	
pH*				2	5	field				\$10.00	
TOC*	30	6								\$180.00	
Alkalinity*										\$0.00	
Chloride*	10	6								\$60.00	
Spec. Conductance*				0	5	field				\$0.00	
Ethene/Ethane/Methane*	45	6								\$270.00	
Hydrogen*										\$0.00	
Carbon Dioxide*										\$0.00	
RCRA Metals										\$0.00	
Duplicate Analyses	Included in above quantities										\$0.00
Blank Analyses										\$0.00	
Other: (Specify) 24-hr VOC										\$0.00	
										\$0.00	
Mn (dissolved)	8	6								\$48.00	
Air Analysis											
VOCs										\$0.00	
TCE										\$0.00	
PCE (minimum detection limit is <10 ppbv)										\$0.00	
Other: TO-15	350	1								\$350.00	
										\$0.00	
Waste Analyses (soil/water)											
										\$0.00	
										\$0.00	
Miscellaneous (specify)											
										\$0.00	
										\$0.00	
Charge for Mobile Lab (indicate # days and daily fee)											
										\$0.00	
Total Analytical Costs										\$5,118.00	

* Natural Attenuation parameters required for consideration of NA as remedy.

Consultant Name: Terracon
 Site Name: Martino's
 BRRTS #:
 Date: September 25, 2008

DERF Site Investigation Bid Summary
Consultant Costs

Form 4400-233 (R 4/04) Page 5 of 6

Position (specify)	Hourly Rate	Hours/Task															Total Costs			
		Workplan Development	Access	Receptor Survey	Waste Determination	Drilling Oversight	Soil Sampling	Drilling sampling	Well Development	Hydraulic Conductivity Test	Groundwater sampling	Soil gas/vapor intrusion survey	SSRCL calculations (contained out or remedial actions)	SI Report preparation	RAOR Report preparation	Project Management		Other (specify)		
																		Surveying		
Professional Staff																				
Senior Project Manager	\$105		1											3		6				\$1,050.00
Project Manager I	\$90		5		0.5															\$495.00
Project Professional I	\$76			2		39								30				3		\$5,624.00
																				\$0.00
																				\$0.00
Field Staff																				
Staff Professional	\$60								3		33									\$2,160.00
																				\$0.00
																				\$0.00
																				\$0.00
																				\$0.00
Office Support Staff																				
Draftsperson	\$40		2	1										3						\$240.00
Clerical	\$36													2		2				\$144.00
																				\$0.00
																				\$0.00
																				\$0.00
Total Consulting Costs																				\$9,713.00

