STS CONSULTANTS, LTD.

Express Dry Cleaners
Racine, Wisconsin

Ehrlich Family Limited Partnership
c/o DeWitt, Ross & Stevens, S.C.

STS Project No. 200700484

STS CONSULTANTS

STS Consultants, Ltd.
11425 West Lake Park Drive, Suite 100
Milwaukee, Wisconsin 53224

voice (414) 359-3030
fax (414) 359-0822
web www.stsconsultants.com

February 2, 2007

Ehrlich Family Limited Partnership
c/o DeWitt, Ross & Stevens, S.C.
13935 Bishop's Drive – Suite 300
Brookfield, WI 53005-6605
Attn: Mr. A.H. "Skip" Glor
Senior Scientist

RE: Proposal for Environmental Services for the Express Dry Cleaners Property Located at 3921 North Main Street in Racine, Wisconsin - BRRTS# 02-52-547631 - STS Proposal No. 200700484

Dear Mr. Glor:

In response to the DeWitt, Ross & Stevens letter dated January 23, 2007, STS Consultants, Ltd. (STS) appreciates the opportunity to submit this proposal for your consideration to provide environmental services at the Express Dry Cleaners property in Racine, Wisconsin. As requested, the proposed scope of services includes completion of an NR 716, WAC Site Investigation of the referenced property.

The objective of this project is to implement a technically sound and cost-effective investigative and remedial strategy that leverages the Dry Cleaning Environmental Response Fund program (DERF) eligibility of project costs, while maintaining compliance with applicable rules, regulations and guidance. The attached proposal offers our scope, schedule and cost for environmental services. Pursuant to Wisconsin Administrative Code (WAC) Chapter NR 169.23 and to expedite the project timing, this document also represents a Site Investigation Work Plan that is consistent with WAC NR 716.09.

Key strengths that demonstrate the STS Team's ability to successfully assist you with completion of this project include the following:

- **Experience with the DERF Program** – STS has extensive experience in conducting environmental restoration projects under the DERF program. We are currently working on 10 projects in the DERF program. I addition, Ms. Jeanne Tarvin, P.G., C.P.G. – Senior Principal Hydrogeologist with STS, is a member of the Governor's DERF Advisory counsel. STS is also an active member of the Wisconsin Fabric Care Institute, an trade organization of independent dry cleaners.

- **Experience with Chlorinated Solvent Investigation and Remediation** – STS has extensive experience in conducting environmental restoration projects, including the implementation of state-of-the-practice remediation techniques. Mr. Mark Mejac has presented technical papers at several nationally-based remediation conferences about our experiences (refer to the project profiles in Appendix A and Mark's resume in Appendix B).

- **Geographic Presence** – The STS Milwaukee and Vernon Hills, Illinois offices are both located within approximately 60 minutes of the project site, which will result in cost-effective execution of field work and ample availability of trained staff.

Ehrlich Family Limited Partnership
STS Project No. 200700484
February 2, 2007

- **Value-Added** – Our expertise in environmental, civil, construction and geotechnical engineering gives us the foundation to provide integrated solutions that specialists in one particular area may not be able to offer. STS has created value for our clients in these assignments in excess of the related project costs.

- **Innovation-Focused Approach** – STS focuses on innovative project execution methods and solutions that have resulted in demonstrated cost savings to our clients.

Regarding the scope of services requested, STS has made the following changes:

- STS has structured our summary of the proposed scope of services for this proposal as an WAC NR 716 Work Plan. We understand that the DERF program typically requires this approach.
- STS has included a soil vapor assessment in our scope of services as receptor inhalation pathway assessment is more commonly requested recently. We anticipate collecting a sub-floor soil vapor sample from the soil probe in the adjacent vacant tenant space to evaluate potential exposures in the nearest, not-dry cleaning facility use.
- We have included piezometer in the proposed scope of services at this time, though we would want to discuss the potential for remobilizing to the site to install the piezometer after groundwater flow and the extent of impacts is better understood.
- We have included the preparation of a Remedial Action Options Report in the proposed scope of services, though we understand that the DERF program may be changing the manner in which this activity is completed and by who it is completed. Should that be ultimately determined to be the case, the consulting hours in the cost estimate tables identified for that activity can be removed.

Thank you again for the opportunity to prepare this proposal. We will contact you within two weeks to discuss this proposal and answer any questions you may have. In the meantime, if you have any questions, please contact Mr. Kevin Brehm or Ms. Jeanne Tarvin at (414) 359-3030.

Respectfully,

STS CONSULTANTS, LTD.

Kevin L. Brehm, P.E.
Associate

Ms. Jeanne M. Tarvin, P.G., C.P.G.
Senior Principal - Hydrogeologist

ACCEPTED BY:_____

SIGNATURE:_____

TITLE:_____

FIRM:_____

DATE:_____

STS Proposal No. 200700484

cc: Mr. Mark Drews – Wisconsin Department of Natural Resources, 141 Northwest Barstow Street – Room 180, Waukesha, WI 53188

Attachments

Table of Contents

Attachments

Figure 1 – Recommended Sampling Locations

Appendix A – Project Spotlights
Appendix B – Professional Resumes
Appendix C – Detailed Field Procedures
Appendix D – Fee Schedule
Appendix E – General Conditions of Service/Certificate of Insurance
Appendix F - DERF Site Investigation Bid Summary Documents

Express Dry Cleaners
STS Proposal No. 200700484
February 2, 2007

1.0 INTRODUCTION

STS Consultants, Ltd. (STS) appreciates the opportunity to submit this proposal for your consideration to conduct a Wisconsin Administrative Code (WAC) NR 716 Site Investigation at the Express Dry Cleaners property at 3921 North Main Street in Racine, Wisconsin. STS views this submittal as an opportunity to provide our value-oriented and responsive investigation and remediation capabilities that emphasize technically sound, cost-effective services, and solutions.

This proposal offers a strategy and approach for successfully implementing and completing an NR 716 Site Investigation. We have also summarized key project team members, including their relevant experience with remediation of sites with chlorinated volatile organic compound (CVOC) affected soil and groundwater. We have also included a Statement of Qualifications that highlights additional unique capabilities that will allow us to achieve and maintain a successful relationship with Express Dry Cleaners. Key strengths that demonstrate the STS team's ability to successfully complete this project include the following:

Experienced Team: The project team will be lead by Kevin Brehm, P.E. who has 16 years of environmental site investigation and remediation experience. The team will also include a Professional Hydrogeologist, Mark Mejac, P.G., CGWP, who has demonstrated site investigation, remediation and monitoring experience with numerous projects involving chlorinated solvents. Mr. Mejac has specific experience with the Dry Cleaner Environmental Response Fund (DERF) program. The project team will be enhanced by a Project Advisor, Ms. Jeanne Tarvin, P.G., C.P.G., who will bring her DERF Governor's Advisory Counsel and 20+ years of consulting experience to the benefit of the Ehrlich family.

Innovative Technology Leader: As a full-service environmental engineering firm, STS has access to and uses a wide range of investigative and remedial technologies, including many technologies considered "emerging" or "innovative". Our experience includes utilizing state-of-the-practice technologies and identifying appropriate methods to apply them in the constructed environment. These technologies include in-situ electrical resistance heating, bio sparging and carbon amendment, though we often find that a source removal and groundwater natural attenuation approach is typically most appropriate in fine-grained geologic settings. Our approach is to comprehensively evaluate site-specific hydrogeology and contaminant conditions to identify the most proven, cost-effective remedial alternative. Our risk assessment team of

toxicologists, ecological and air specialists, chemists, modelers and other professionals will be relied upon for technical support.

Local Presence: Proximity to the site is an important component of cost control. As demonstrated in this proposal, STS and its subcontractors are familiar with local and regional hydrogeologic conditions. The STS Milwaukee, Wisconsin and Vernon Hills, Illinois offices are within approximately 60 minutes of the site and will assist with execution of field tasks as directed by the project management team in Milwaukee. Travel-related costs are therefore minimized while service to Express Dry Cleaners is maximized.

2.0 STS QUALIFICATIONS

2.1 Introduction to STS

STS is a 600-person, employee-owned consulting engineering firm that provides an integrated approach to engineering design and environmental management in commercial, industrial, and government markets. For over 50 years, STS has provided innovative and practical solutions for a wide-range of private and public clients. The firm has experience throughout the United States and in several foreign countries. We attribute our longevity and success to the commitment of management to technical and service quality as well as to professionalism and a keen awareness of risk management issues in professional practice.

STS' corporate headquarters is located in Vernon Hills, Illinois with six additional regional offices in Peoria, Illinois; Milwaukee and Green Bay, Wisconsin; Minneapolis, Minnesota; and Lansing and Marquette, Michigan. STS provides world-class Infrastructure Services through three major operating groups: Environmental, Engineering, and Construction Services.

The Environmental and Engineering groups specialize in hydrogeologic studies, environmental assessments, risk assessments, soil and groundwater modeling, landfill siting, permitting, feasibility studies, remedial design, wastewater conveyance and treatment, and regulatory compliance assistance. STS has been in the business of site remediation for the 30 years.

The Engineering group also focuses on soil/structure interaction including site evaluation, foundation analysis, underground engineering, ground improvement, earth structures, shoreline protection, flood prevention, and surface water hydrology. The Construction Services group specializes in the monitoring, testing and evaluation of construction and construction materials, which includes materials evaluation testing, program consultation, field instrumentation, and design-build services. STS' technical support capabilities include subsurface exploration, geophysical evaluation, instrumentation programs, surveying, geographic information systems (GIS), and soil and geosynthetic testing. Computer services include interactive design and analysis, modeling simulation, as well as CADD and Microstation capabilities.

STS has a multi-disciplined staff of professionals to support the three operating groups. These professionals include architects, asbestos inspectors, civil engineers, chemists/chemical engineers, construction inspectors/managers, drillers, environmental engineers, geologists,

geophysicists, geotechnical engineers, hazardous materials managers, hydrogeologists/ hydrologists, industrial hygienists, landfill engineers, mechanical engineers, meteorologists, risk assessors, structural engineers, toxicologists, urban planners, and wetland specialists.

STS provides science and engineering solutions for the constructed environment. We blend our passion for technical excellence with our commitments to personal integrity and professional ethics to be the best in class among our peers and in the eyes of our clients. We maximize value to our stakeholders (collectively, our clients, employees, shareholders, communities, and business partners) to achieve an equitable balance between their interests.

To deliver these services, STS Consultants provides a wide range of consulting services that are represented by our tagline - The Infrastructure Imperative. We provide solutions that are imperative to our clients' systems, structures, technologies, buildings, organizations and people - all of which make up the infrastructure that helps our clients maintain and enhance their business objectives and profitability. It is our role to assist our clients in maintaining their infrastructure using all available means, whether that includes designing, redesigning, or optimizing your current systems. As consultants in engineering, environmental and construction-related services for over 50 years, we provide infrastructure guidance and services that our clients rely on.

STS continues to deliver superior returns to its stakeholders by employing best-in-class performance in our business and professional practices and by planned growth. We excel in customer service, asset management, project management and employee career development as the means to create stakeholder return and growth.

2.2 Representative Experience

STS has conducted thousands of investigations, remediations, and other environmental compliance projects at facilities involving chlorinated solvents and stoddard solvents as well as petroleum-related substances or byproducts throughout the United States. Clients have ranged from multi-national Fortune 500 corporations, to municipalities, to small and mid-sized manufacturing firms. **These projects include 10 current sites in the DERF program and approximately 20 others that have already been through the program.** Project profiles of some of the more recent and notable sites are included in Appendix B. This relevant experience has enabled us to develop a streamlined-phased investigation approach by identifying and evaluating known source areas, while understanding overall groundwater quality and its affect on receptors.

As indicated above, as a full-service engineering firm, STS has access to, and uses a wide range of remedial technologies, including many technologies considered to be "emerging" or "innovative". We do not, however, have a preferred technology that we attempt to apply at most sites. Although the firm has the ability to utilize emerging technologies and presumptive remedies where appropriate, our engineers and scientists consistently select the most basic, proven and cost-effective strategies for our clients.

Recent regulatory guidance has increasingly specified the application of risk assessment principles, such that the implementation of active or engineered remedial systems can be minimized. With a proven record in negotiating risk-based closures throughout the country, our risk assessment team of toxicologists, ecological and air specialists, chemists, modelers and other professionals will be appropriately utilized during the course of this project.

In short, STS has the necessary commitment, experience, resources and a dedicated project team to work with Imperial Cleaners to develop and implement a cost-effective remedial solution. At a time when it can be difficult for companies to identify consultants who will competently and vigorously advocate their position, STS clearly stands out as a client-oriented firm, integrated across technical disciplines with a comprehensive geographic presence throughout the Midwest.

2.3 Local Experience

Proximity to the site is an important component of cost control. As demonstrated in this proposal, STS and its subcontractors are familiar with local and regional hydrogeologic conditions. STS has been serving Wisconsin for greater than 50 years through the completion of environmental site assessments (ESAs), geotechnical engineering and foundation designs, and construction quality management projects. Relevant project profiles and references are provided as Appendix A.

2.4 Project Team

STS has assembled a project team to lead the subject site to regulatory closure. The following is a brief description of each project team member:

- **Mr. Kevin Brehm, P.E.,** will serve as the Project Manager. He will be the primary contact for Express Dry Cleaners and their designated representatives. Mr. Brehm has greater than 16 years of experience in the consulting industry, specializing in both engineering and environmental issues. He has performed numerous site investigations and subsequent remediation of contaminated soil and groundwater. Mr. Brehm has led efforts in remedial action planning of numerous solvent and petroleum-impacted sites (including major railroad properties), as well as several former coal gasification sites. The anticipated billing rate for Mr. Brehm will be $140 per hour as an Associate Engineer.

- **Mr. Mark Mejac, P.G., C.G.W.P.,** will serve as the Project Hydrogeologist. Mr. Mejac has greater than 22 years of environmental consulting experience. He has extensive experience in a variety of hydrogeologic investigations, environmental risk assessments, and remedial alternatives evaluations. He specializes in the evaluation and implementation of innovative and cost effective remedial alternatives at contaminated groundwater and soil sites. Mr. Mejac routinely applies his expertise in groundwater flow and contaminant transport modeling, and migration analysis of dense, non-aqueous phase liquid contaminants (DNAPLs) in porous and fractured media. The anticipated billing rate for Mr. Mejac will be $125 per hour as a Senior Consultant.

- **Ms. Jeanne M. Tarvin, P.G., C.P.G.,** will serve as the Project Principal and Advisor for the project. Ms. Tarvin has over 21 years of experience in managing environmental investigation and remediation projects. As a Principal in the Milwaukee office, she is responsible for various hydrogeologic studies, environmental assessments, landfill studies, feasibility studies, remedial designs and remedial actions. Ms. Tarvin has also received Gubernatorial Appointment to the Technical Advisory Committee for the Drycleaners Environmental Reimbursement Fund (DERF). The anticipated billing rate for Ms. Tarvin as a Senior Principal will be $160 per hour.

The project will be supported by a team of environmental technicians from the STS Milwaukee and Vernon Hills offices. The technician billing rate ranges from $55 per hour to $65 per hour. Professional resumes for key personnel dedicated to the success of this project are provided as Appendix B. These staff members will be available to complete all tasks associated with this project on a prompt and timely basis.

3.0 NR 716 SITE INVESTIGATION WORK PLAN

3.1 Introduction

3.1.1 Purpose and Scope

The purpose of this Work Plan is to describe the intended scope of services for a NR 716 Site Investigation of soil and groundwater at and near the Express Dry Cleaners site in Racine, Wisconsin. The subject site is located in the NE 1/4 of the NE 1/4 of Section 33, T4N, R23E, City of Racine, Racine County. This Work Plan is prepared to provide information required under Section NR 716.09 of the Wisconsin Administrative Code (WAC). The Work Plan provides background information and a description of existing site conditions. Field and laboratory procedures are proposed and a schedule for execution of the Work Plan and report submittal are also provided.

3.1.2 Involved Parties

Parties currently involved with this project include the following:

- Responsible Party: Ehrlich Family Limited Partnership
  Express Dry Cleaners
  3921 North Main Street
  Racine, Wisconsin 53402

- Department of Natural Resources:
  Mr. Mark Drews
  Southeast Region
  141 Northwest Barstow Street, Room 180
  Waukesha, WI 53188

- Consultant: Mr. Kevin Brehm, P.E.
  STS Consultants, Ltd.
  11425 West Lake Park Drive
  Milwaukee, WI 53224-3025
  414-359-3030

3.1.3 Objectives and Scope of Services

The objectives of the scope of services presented herein are as follows:

- Evaluation of degree and extent of soil and groundwater impacts;
- Evaluation of contaminant fate and transport; and
- Evaluation of risk to potential receptors.

To address the above stated objectives, STS has developed the following general scope of services (based on the request for proposal):

- Drilling of 14 soil borings;
- Installation of four groundwater monitoring wells and one shallow piezometer on the exterior of the building;
- Sampling of five hydraulic probes in the footprint of the building and installation of two 1-inch diameter monitoring wells;
- Collection of sub-slab indoor vapor sample;
- Collection of soil samples from the soil borings, monitoring wells, and hydraulic probe locations;
- Groundwater sampling and water level measurement of new monitoring wells;
- Completion of in-situ hydraulic conductivity testing of new monitoring wells; and
- Completion of location and elevation survey of new monitoring wells.
- Preparation of a NR 716 Site Investigation and NR 722 Remedial Actions Options Report.

3.2 Site Setting and History

The subject property is located on the north side of the City of Racine. It is bounded to the west by North Main Street; to the north by a gas station with petroleum soil and groundwater impacts; to the east by vegetable gardens; and, to the south by commercial businesses. The facility has operated as a dry cleaning business since approximately 1991. Based on laboratory results of subsurface soil samples collected from the property in 2006, the Wisconsin Department of Natural Resources (WDNR) was notified of a release of tetrachloroethene (PCE). The dry cleaning facility continues operations and the facility building is currently occupied.

Three hydraulic probes were sampled on April 12, 2006 and are identified as B1, B2, and B3 at the locations shown on Figure 1. Soil samples collected from hydraulic probes B1 and B2 on the east side of the facility had highly-elevated PCE near the ground surface (approximately 4 feet) and lesser or less than detectable PCE near the water table. The shallow soil sample collected from hydraulic probe B3 had highly-elevated PCE near the ground surface as well, but no deeper soil samples were tested. Groundwater quality was not evaluated for the presence of PCE at that time.

3.3 Hydrogeologic Setting and Local Water Usage

3.3.1 Site Geology and Hydrogeology

Native soils in the area consist of till deposits of the Oak Creek Formation (Mickelson, et al., 1984). The Oak Creek Formation generally consists of silty clay till deposited by ice of the Lake Michigan and Green Bay Lobes and associated fluvial and lacustrine deposits. This formation typically overlies older glacial sediments or Ordovician-age dolomitic bedrock (Mickelson, et al., 1984). Based on the soil descriptions logged during previous investigation of the property, the soil at the site consists of discontinuous units of sand, clay, and sandy clay. The depth to bedrock ranges from 50 to 100 feet below ground surface in the area of the property. Shallow groundwater was encountered on the adjacent gas station site at 4 to 16 feet below ground surface and shallow flow is expected to be to the north in the area of the property.

3.3.2 Local Water Usage

The area of the property receives its potable water supply from Lake Michigan and the there are no anticipated uses of the shallow groundwater.

3.4 Potential Receptors and Hazardous Substance Migration Pathways

The previous subsurface investigation has indicated the presence of PCE in soil at the subject site. Potential scenarios by which PCE may come in contact with receptors include direct dermal contact during boring activities associated with the site investigation. Investigation activities at the site will be monitored to reduce potential risk due to inhalation of vapors or particulate matter and dermal protection will be utilized as necessary to protect investigators from direct contact. Monitoring activities will be conducted by qualified personnel. Potential ingestion of constituents associated with PCE-impacted groundwater could occur if affected groundwater were to migrate off-site to a

private or municipal well used for potable supply. The Express Dry Cleaners site area is served by municipal water from Lake Michigan. We are also aware that vapor intrusion into the facility building is a potential concern to regulators, and the need to conduct appropriate air monitoring will be evaluated throughout the course of this project.

3.5 Field Investigation Scope of Services

The proposed NR 716 Site Investigation will be conducted as generally described in the *Bid Package Scope of Work* provided with the request for proposal. The following subsections provide a description of the site investigation scope of services in detail and provide the rationale for sampling approaches.

3.5.1 Pre-field Activities

STS will contact Digger's Hotline for the location of public utilities in the area of the investigation, and will also review maps and other available information regarding the locations of private utilities. STS requires that we be notified of the type and location of all private utilities on the property. STS will prepare a site-specific health and safety plan for our personnel.

STS will prepare a letter to the WDNR notifying them of STS being selected to perform the site investigation, in accordance with the requested scope of services.

3.5.2 Soil Sampling and Analysis

The following soil borings and hydraulic probe soil sampling will be completed:

- Seven soil borings to 16 feet below finished grade with semi-continuous sampling and three boreholes converted to permanent, flush-mounted, 2-inch monitoring wells.
- One soil boring (adjacent to the piezometer) to 16 feet below finished grade with blind drilling and converted to a permanent, flush-mounted, 2-inch monitoring well.
- One soil boring to 30 feet below finished grade with semi-continuous sampling and converted to a permanent, flush-mounted, 2-inch piezometer.
- 5 soil probes to 16 feet below finished floor level in the building with continuous sampling and two converted to 1-inch monitoring wells with protective covers and locking caps.

The penetrated soil boring and hydraulic probe locations will patched with like materials (e.g., concrete or cold-patch asphalt). We have assumed that there will be no carpet or other floor coverings at the interior boring locations that will require removal or replacement. We have further assumed that the work will be completed during standard working hours.

Semi-continuous (sampling every 2.5 feet with a 2.0 foot split-spoon sampler) soil samples will be obtained from the soil borings/monitoring well soil borings using hollow-stem auger drilling and split spoon sampling techniques, as described above. Hydraulic probes will be advanced using a 1-1/2 inch diameter sampler to collect continuous soil samples. Our subcontractor has a two-wheeled soil probe rig that is 32.5 inches wide to allow for easy site access and to limit distrubtion in the facility. Nonetheless, we have assumed that the approximate soil probe locations depicted on the figure provided with the Request for Proposal will be accessible. A shop-vac will be utilized to immediately collect concrete powder during the advancement through the concrete floor. We have assumed that the building does not have a basement.

The hydraulic probe soil samples will be collected inside of a polyethylene sheath inserted into the end of the drive rod. When the selected sample depth is reached, a spring release allows the soil sample to be collected inside of the sheath. A new sheath will be used to collect each soil sample at the specified depth. To extract the soil sample, the sheath is cut open using a razor blade.

Representative soil samples from each stratigraphic unit, including fill materials, will be described according to the Unified Soil Classification System and field screened with a flame-ionization detector (FID). The FID will allow for part-per-million level field screening and is the available technology for field screening. STS does not recommend the use of a field gas chromatograph at this time, which would be necessary to achieve parts-per-billion level field screening results.

Selected soil samples collected during advancement of the soil borings and hydraulic probes will be submitted for laboratory analysis for VOCs. Two soil samples from the soil borings and hydraulic probes are planned for laboratory analysis (total of 26); however, additional soil samples may be retained for laboratory analysis based on the results of in-field screening, in accordance with WDNR guidance. The soil samples will be submitted for laboratory analysis of VOCs (EPA Method 8260). Soil samples for analytical testing will be selected based on the desire to confirm elevated FID field screening results, to confirm high and low levels of impacts in the stratigraphic soil units, and to provide a representative characterization vertically across the unsaturated zone.

Soil and groundwater samples will be analyzed by a Wisconsin-certified analytical laboratory. The samples will be collected, transported, and analyzed in accordance with WDNR requirements and will follow proper chain-of-custody procedures.

Documentation of the soil borings will be completed using the boring log format required by WDNR Form 4400-122 for each boring. Each soil boring/hydraulic probe not converted to a monitoring well will be abandoned in accordance with NR 141 requirements. Soil cuttings and decontamination water will be containerized and left on-site pending disposal coordination as described herein.

3.5.3 Monitoring Well Installation/Groundwater Sampling and Analysis

The recommended exterior monitoring wells will be installed in accordance with WAC NR 141, and will be installed with flush-mount protectors so that vehicular traffic is not affected. The monitoring wells will have 10-foot monitoring well screens that will intersect the water table and the piezometer will have a 5-foot screen. The interior monitoring well locations are likely to be: 1) at the location in the Clothing Ironing Area to provide data to the west of the expected source area and 2) a location of high impacts to characterize groundwater in the source area. The monitoring well and piezometer construction will be documented using WDNR Form 4400-113A.

Once the wells are installed, they will be developed in accordance with WAC NR 141. Pre- and post-development groundwater elevations will be measured. Well development will generate water that will be contained onsite in 55-gallon drums until laboratory results from the water sampling are obtained and disposal is coordinated, as specified herein.

After development, groundwater samples will be collected from new monitoring wells using a low-flow sampling technique. Groundwater samples collected from the monitoring wells will be analyzed in the field for the parameters pH, specific conductivity, temperature, dissolved oxygen and oxidation-reduction potential, and submitted for laboratory analysis of VOCs. One duplicate groundwater sample and one laboratory trip blank sample will be submitted for laboratory analysis of VOCs, for purposes of quality assurance/quality control.

3.5.4 Sub-Slab Vapor Sampling and Analysis

USEPA guidance currently recommends collection of a vapor sample from the soils beneath the building slab at a central location away from the building walls. Such a sample provides the last point of monitoring to determine whether contaminants are migrating from the source to the building interior. A grab soil vapor sample will be collected from a hydraulic probe location inside the adjacent tenant space of the overall building using an evacuated sampling (Summa) canister and the collected vapor sample will be submitted for laboratory analysis of VOCs using USEPA Method TO-15.

3.5.5 In-Situ Hydraulic Conductivity Testing

A rising or falling head in-situ hydraulic conductivity (slug or baildown) test will be conducted as necessary on the monitoring wells after well development to estimate the aquifer hydraulic conductivity at those locations. This information will be used to estimate groundwater flow velocity in the vicinity of the subject site. The slug tests are conducted by bailing the wells until they are dry or nearly dry and then allowing the groundwater to recharge into the well. If the well or piezometer does not bail dry, a slug is placed in the piezometer and the water level in the piezometer is allowed to equilibrate. Once the water level is static, the slug is removed and groundwater measurements are monitored and recorded. The rise or fall of the groundwater level over time is measured with an electric water level measuring device or a data logger (if quick recharge). This data is input into a commercial computer program that computes the hydraulic conductivity using the Bouwer and Rice method (1976).

3.5.6 Investigative Waste Handling/Disposal

Soil cuttings generated during advancement of monitoring well installation borings and hydraulic probes will be placed into 55-gallon drums that will be temporarily staged on-site until the cuttings are properly characterized and managed. The Site Investigation Report will document handling of any wastes generated during the investigation. Based on STS' experience, investigative and remedial action generated soil cuttings associated with current or former dry cleaner sites can be classified as non-hazardous wastes for purposes of disposal under the Resource Conservation and Recovery Act (RCRA), if the following two conditions are met:

1. The waste material does not exhibit the characteristic of toxicity as defined under 40 CFR 261.24.

2. Constituent concentrations do not exceed risk-based direct contact exposure criteria.

For cost estimating purposes, STS assumes that the investigative-derived drill cuttings and development water will be managed as non-hazardous waste. We have included the analytical waste characterization testing in our proposed scope of services.

3.5.7 Location and Elevation Survey

STS will conduct a location and elevation survey of PVC well casings and ground surfaces at each soil boring, hydraulic probe, monitoring well and piezometer locations. STS will obtain a minimum of one round of water level measurements in the monitoring wells, to determine local groundwater flow directions and hydraulic gradients. The locations of the wells and piezometer will be measured relative to the existing building and an elevation survey of the ground surface and casing elevations relative to the National Geodetic Vertical Datum of 1929, based on a nearby fire hydrant of other governmentally-established bench mark convertible to the reference datum.

3.6 Project and Data Management

3.6.1 Data Evaluation

The information obtained from the field exploration program as well as the data obtained from the analytical testing will be compiled into tables, boring logs, and figures to allow for evaluation of site conditions. Geologic cross-sections will be prepared as appropriate to illustrate the stratigraphy of the site. A groundwater table map will be prepared to evaluate groundwater flow direction. A figure that illustrates key contaminant concentrations will be developed to identify the extent of affected groundwater. Drawings will be prepared as required by WAC NR 716.15(3) for Site Investigation Reports.

Laboratory results of soil samples will be compared to WAC Chapter NR 720 RCLs. If concentrations exceed these standards, some additional evaluation may be required, such as the development of site-specific RCLs, modeling, further investigation, or remediation. Laboratory results of groundwater samples will be compared to NR 140 Enforcement Standard (ES) and Preventive Action Limit (PAL) values. Should additional subsurface investigation be required to

more accurately delineate soil and/or groundwater impacts after the above scope of services is completed, such additional work would be recommended to be completed prior to completing the Site Investigation Report.

3.6.2 Site Investigation and Remedial Actions Options Report

Following completion of the data evaluation and remedial alternatives evaluation, a Site Investigation and Remedial Action Options Report will be prepared that will document the methodology and results of the investigation and evaluate remedial options. The report will be prepared in accordance with WAC NR 716.15 and NR 722.13. Department forms, such as the Soil Boring Log Form 4400-122 and Monitoring Well Development Form 4400-11313, etc., will be appended to the report.

3.6.3 Health and Safety Plan

STS has developed a Health and Safety Plan for personnel working during field activities. This Plan is a separate document and is available for the WDNR's review upon request. Project field personnel will read and be familiar with the Plan prior to beginning the fieldwork. Subcontractors will be provided with a copy of the project Health and Safety Plan and STS will conduct a briefing on-site prior to commencement of work. Subcontractors, however, are responsible for developing their own Site Safety Plan to cover the activities for which they are responsible.

3.7 Project Schedule

STS is prepared to initiate the field investigation activities within approximately one to two weeks from receipt of authorization to proceed from Express Dry Cleaners, and WDNR approval of this project Work Plan. The field investigation and laboratory analysis activities can be completed within approximately three weeks. Approximately three weeks will be required to complete the Site Investigation Report, such that the report will be available approximately 8 weeks after start-up of the field investigation. In the event that the second phase of investigative activities as described herein is conducted, then an additional three weeks will be required to complete the Site Investigation Report, for a total of 11 weeks from authorization to proceed.

4.0 PROJECT FEES AND TERMS OF SERVICE

We propose to provide the services outlined in this proposal on a time-and-expense basis in accordance with our Fee Schedule provided as Appendix D. The Fee Schedule indicates the unit prices for the various elements of service that we expect will be utilized to provide the services outlined in this proposal. Invoice amounts will be based on actual units utilized at the rates shown on the Fee Schedule.

STS' Conditions of Service and Certification of Insurance (Appendix E) are expressly incorporated into, and are an integral part of our contract for professional services. DERF Site Investigation Bid Summary documents are provided as Appendix E. Please note that the DERF applicant should sign and date page 1 of the DERF Site Investigation Bid Summary prior to submittal of this proposal to the WDNR.

Additional proposal-specific conditions are summarized as follows:

1. Investigative-derived soil cuttings and purge water can be transported and disposed of as non-hazardous waste.

2. The project-specific subcontractor markup rate is 5 percent to cover our increased insurance costs for the pass-through, which is 60 percent less than STS' standard subcontractor markup rate. Alternatively, the Client can contract directly with some or all of the subcontractors to avoid the subcontractor markup. The subcontractor markup is not included in DERF tables appended. Subcontractor markups are not reimbursable under the DERF program.

3. Meetings with the WDNR outside the context of interaction in the field as part of scheduled activities is not included as part of the attached project budget. Any such meetings will be invoiced on a time-and-expense basis in accordance with our Fee Schedule.

4. Evaluation of site investigation data may lead to the conclusion that installation of additional hydraulic probes and/or monitoring wells may be appropriate to better assess soil and

groundwater conditions. In that event, STS will provide recommendations for specific locations and depths of additional probes and/or wells.

STS will work in cooperation with Express Dry Cleaners throughout the course of this project to identify potential opportunities for cost savings. Additionally, as site information is generated, it may be necessary and advantageous to modify the scope of services from that which is presented in this proposal. Any modification to the scope of services will be discussed in detail with you and approval will be obtained prior to implementation.

Consultant and contract services will be completed in accordance with §292.65, Wis. Stat., and WAC Chapters NR 169, NR 140 and NR 700 series. STS will obtain and evaluate bids for commodity services, including drilling and analytical testing services. In addition, STS will coordinate and supervise drilling, laboratory and such other subcontractors as required for completion of investigation activities. STS will make available to the WDNR upon request, for inspection and copying, the consultant's documents and records related to the contract services.

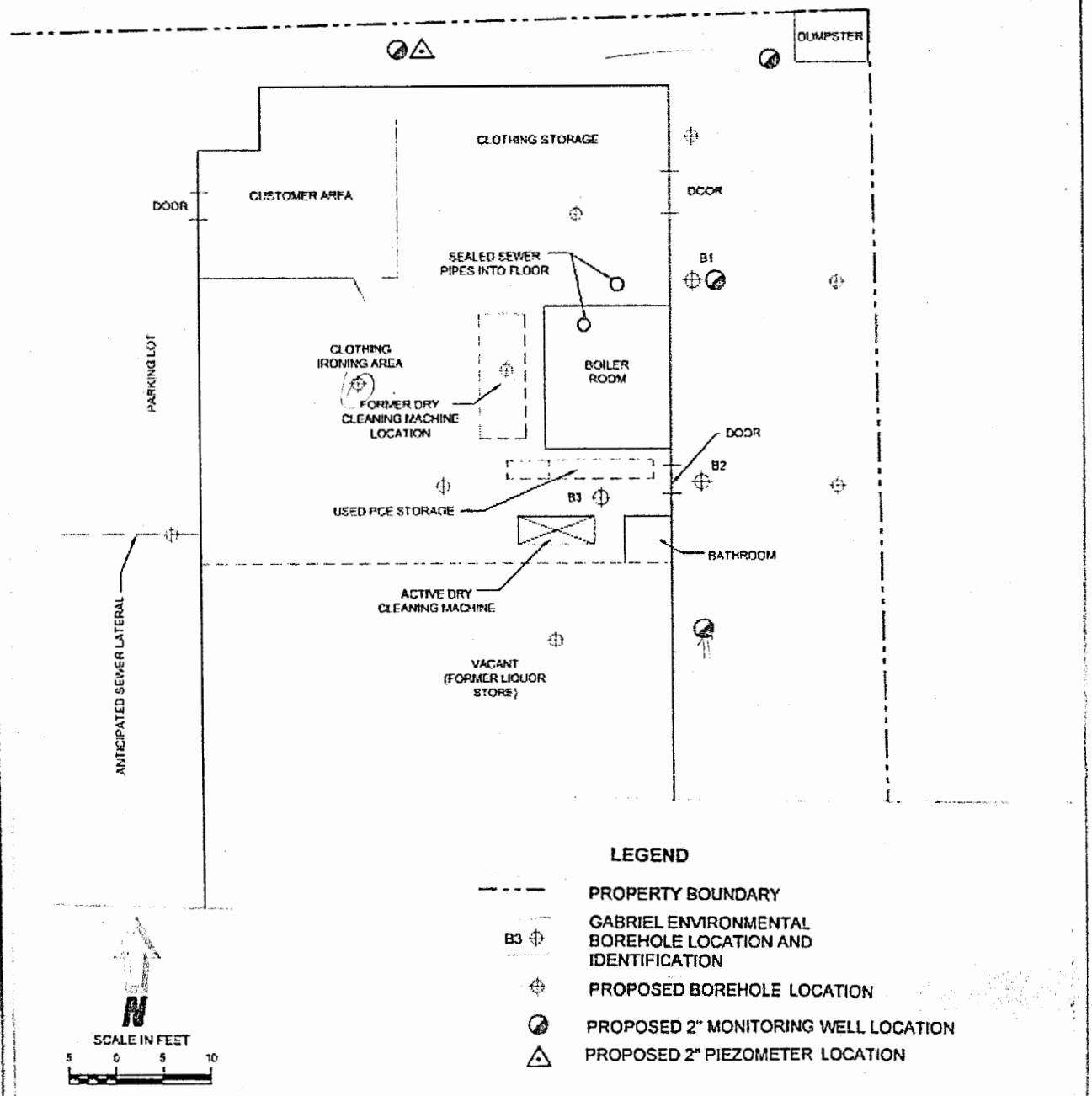
In accordance with NR 169.21, STS will do the following:

1. Be fully informed about the project's scope and required services, and have the experience and ability to analyze alternatives and design the most suitable response action consistent with technical and economic feasibility, environmental statutes and rules, restoration timeframes, and the latest technical advances.
2. Provide necessary staff and facilities for all phases of planning, investigation, design, construction, and operation.
3. Retain and confer with specialists on unusual matters; provide qualified technical reviewers, who will keep the owner advised on technical and regulatory matters and work toward planned remediation goals.
4. Perform all services in an ethical, professional and timely manner.

ATTACHMENTS

Figure 1 – Recommended Sampling Locations

Appendix A – Project Spotlights
Appendix B – Professional Resumes
Appendix C – Detailed Field Procedures
Appendix D – Fee Schedule
Appendix E – General Conditions of Service/Certificate of Insurance
Appendix F - DERF Site Investigation Bid Summary Documents



Source: DeWitt, Ross & Stevens

DEWITT ROSS & STEVENS S.C.
LAW FIRM
13935 Bishop's Drive •Suite 300
Brookfield, Wisconsin 53005
Phone: (262) 754-2840
Fax: (262) 754-2845

PROJECT/CLIENT

Express Cleaners, Inc.

Site Map

Dry Cleaner Environmental Response

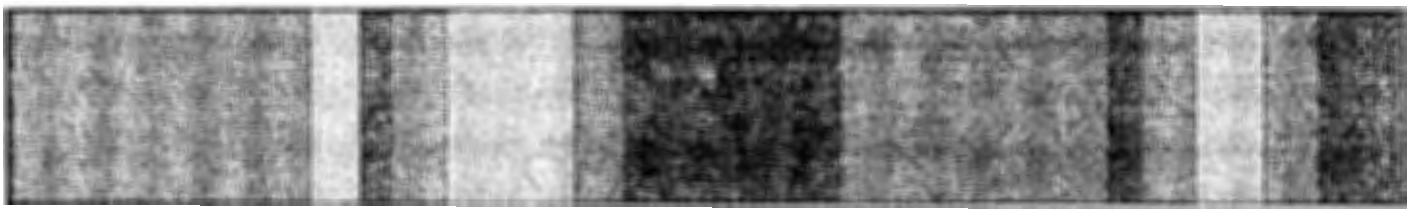
3921 North Main Street
Racine, Wisconsin

Drawn by	AHG	1/17/07
Checked by	AHG	1/17/07
Approved by	WPS	1/18/07
Scale on Drawing		Figure 1

STS CONSULTANTS

Project Spotlight

Reedsburg Active Dry Cleaning Facility



Client Information
Confidential Client

Location
Reedsburg, Wisconsin

Services Provided
- Regulatory Negotiations
- Remedial Alternatives Evaluation
- Soil Excavation Oversight

Challenge

Site investigations that were completed in 2001 revealed substantial areas of soil and groundwater impacted with high concentrations of tetrachloroethene (PCE). STS subsequently conducted a remedial action options evaluation to cost-effectively apply remaining DERF funds to remediate the PCE-impacted soil and groundwater.

Solution

Working with the Wisconsin Department of Natural Resources and local solid waste facilities, STS developed a cost-effective approach to remediate PCE-impacted soils above the water table. Under a Wisconsin Administrative Code (WAC) Chapter NR 700 agreement with the USEPA, impacted soils associated with current or former dry cleaner sites can be classified as non-hazardous wastes for purposes of disposal under the Resource Conservation and Recovery Act (RCRA), if the following two conditions are met:

1. The waste material does not exhibit the characteristic of toxicity as defined under 40 CFR 261.24.
2. Constituent concentrations do not exceed risk-based direct contact exposure criteria for industrial land use.

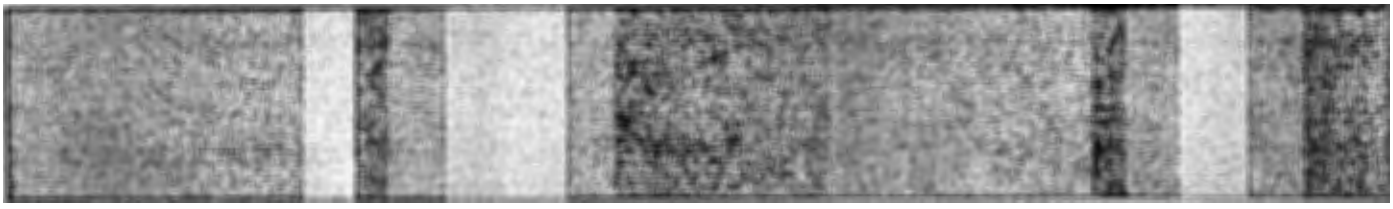
STS used real-time mobile laboratory data to demonstrate that both conditions identified above were met, as part of soil excavation that was completed in 2006.

Key Benefits

The successful demonstration that the excavated soils could be classified as non-hazardous wastes for purposes of disposal resulted in project cost savings of at least $50,000. The results of future groundwater monitoring events will be evaluated to determine if completion of active groundwater remediation is appropriate for the site.

Project Spotlight

Inactive Manufacturing Facility



Client Information
Confidential Client

Location
Southeastern, Wisconsin

Services Provided
- Regulatory Negotiations
- Site Investigation
- Remedial Alternatives Evaluation
- Innovate Soil and Groundwater Electro-Thermal Remediation

Challenge

Site investigations that were completed by STS in 2004 revealed an extensive area of soil and groundwater impacted with high concentrations of tetrachloroethene (PCE), and its degradation products. The high PCE concentrations were indicative of the presence of denser-than-water non-aqueous phase liquids. Remediation of the impacted soil and groundwater was complicated by the presence of low permeability soils at the site.

Solution

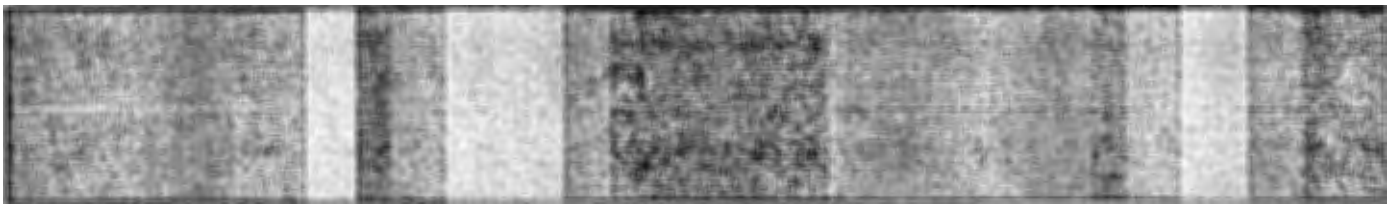
Based on evaluation of effectiveness, implementability, and cost criteria, in-situ chemical oxidation using Fenton's reagent and in-situ electro-thermal remediation were identified as feasible remedial alternatives. In-situ chemical oxidation pilot testing was subsequently conducted in late 2004. The results of that pilot testing revealed that low permeability soils precluded injection of reagent at depths greater than approximately 14 feet bgs. Based on evaluation of existing soil quality information, it was estimated that the in-situ chemical oxidation remedial alternative would not treat approximately three-quarters of the contaminant mass present below 14 feet bgs. As such, the in-situ chemical oxidation remedial alternative was not implemented, and it was concluded that implementation of in-situ electro-thermal remedial technologies can reliably result in remediation of impacted soil and groundwater at the subject site.

A numerical simulation study was performed using resistivity data from site-specific soil samples, hydrogeologic data, and the identified subsurface distribution of CVOCs to determine the placement of electrodes and extraction wells, and estimate the necessary groundwater and vapor extraction rates to capture the CVOCs. The thermal remediation technology applied at the site is known as the Electro-Thermal Dynamic Stripping Process (ET-DSP™). The thermal remediation system consisted of an array of 31 electrode boreholes each spaced 23 feet apart, 12 vapor extraction wells, and 21 temperature sensor boreholes. The application of ET-DSP™ at this site was the first of its kind in Wisconsin.

Key Benefits

The thermal remediation system commenced operations in February 2006 and was completed in January 2007. Based on laboratory results of soil samples collected in July 2006, the geometric mean of the total concentration of tetrachloroethene, trichloroethene, and cis-1,2-dichloroethene had decreased by 81 percent. Based on laboratory results of groundwater samples collected in December 2006, the total concentration of tetrachloroethene, trichloroethene, and cis-1,2-dichloroethene at three groundwater monitoring locations had decreased by 99.8 percent, 95 percent, and 86 percent. The results of future groundwater monitoring will be used to establish stable or decreasing volatile organic compound concentrations, prior to securing regulatory case closure.

Project Spotlight
Atlas Metals



Client Information
Lesmar Corporation

Location
Waukesha, Wisconsin

Services Provided
- Defined the extent of soil impacts through soil sampling and analysis
- Defined the extent of groundwater impacts through groundwater sampling and analysis as well as modeling of contaminant plume.
- Observed the construction of a soil vapor extraction system
- Conducted performance monitoring of the soil vapor extraction system
- Prepared a case closure request to the Wisconsin Department of Natural Resources

Challenge
Chlorinated solvent contamination trichloroethylene (TCE) was identified in soil and groundwater at the site during a routine removal of a gasoline underground storage tank. A site investigation was conducted by others and groundwater monitoring was continued for approximately 10 years. The WDNR required source removal/control, additional investigation to determine extent and additional ground water monitoring before the project could be considered closed. The results of the additional investigation defined the on-site source area and identified a groundwater contaminant plume that extended over 4 contiguous properties, each with a different owner.

Soil vapor extraction had been proposed by the prior consultant and approved by the WDNR as a source control measure.

The client's objective was to minimize the level of effort required to bring the project to completion. An additional consideration was the owner's retirement and sale of the business to a third party. Case closure was a requirement of the property transaction.

Solution
STS implemented the soil vapor extraction (SVE) system and monitored its operation. The system operated within design parameters and a reduction in PCE concentrations in the vapor was realized. Groundwater monitoring was continued and four additional off-site, downgradient wells were installed to define the extent of the groundwater plume. PCE was detected in the furthest downgradient well at a concentration equal to the state's enforcement standard. Placement of a downgradient well beyond this last well was not feasible due to the presence of other industrial buildings and operations also using chlorinated solvents.

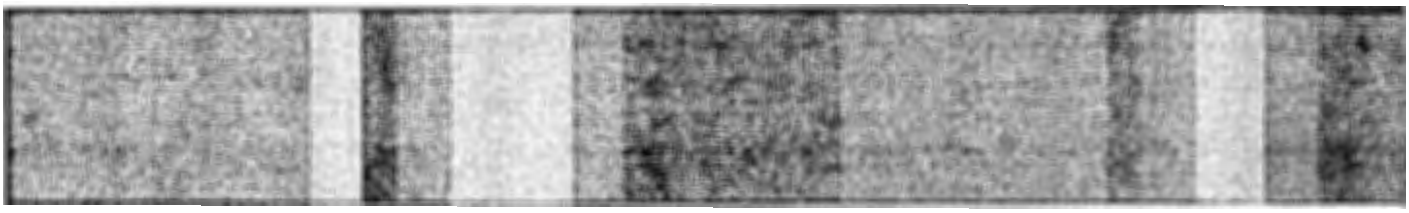
STS used a two-dimensional groundwater flow model combined with a transport model to demonstrate that the contaminant plume was stable and receding. The initial data collected was used as a baseline and the model was calibrated using the existing data until the model predicted the concentrations observed at the current time.
Next the future status of the contaminant plume was predicted with the model using the reduction in the source zone concentrations observed after the operation of the SVE system. The model demonstrated that the contaminant plume would recede to within the site's boundaries within 5 years.

STS prepared and submitted a case closure request to the WDNR using the groundwater modeling to demonstrate compliance with the requirements for case closure. The WDNR case closure review committee reviewed the information and case closure was granted.

STS CONSULTANTS

Project Spotlight

Confidential Railroad Client – Southern Illinois



Client Information
Confidential Railroad

Location
Southern Illinois

Services Provided
- Remediation Site Operation
- Maintenance & Monitoring
- Capital Improvements
- Design & Contract Administration – Derailment Site Spill

Challenge

Confidential Rail Client retained STS Consultants, Ltd. (STS) to assist them with ongoing operation, maintenance and monitoring and capital improvements at a derailment site in southern Illinois where two railcars of percholoethylene were spilled in 1994

Solution

STS began work at the project site in 2000. Our scope of services includes the following:

- Groundwater extraction and treatment system operation, maintenance and monitoring as a turn-key operation including a fulltime site operator. STS prepares monthly and quarterly reports for submittal to the Illinois Environmental Protection Agency.
- Groundwater monitoring well sampling and reporting for compliance with agency agreements.
- Design, bid document preparation, bid administration, construction management, contract administration and documentation of a new cover system over the 5 acre spill containment area.
- Design, bid document preparation, bid administration, construction management, contract administration and documentation of improvements to the groundwater extraction and treatment system.
- Design, bid document preparation, bid administration, construction management, contract administration and documentation new PLC/SCADA-based process control system. The control and SCADA system will be accessible via the internet.
- Completion of additional subsurface exploration to evaluate long-term strategies for site remediation and closure.

The project execution involves design-build delivery requiring integration of design, permitting, construction, and environmental activities; STS holds the construction contracts. Field activities include full time management and oversight, and development of project records including system map updates, record documentation, O&M Manuals, operator training and system start-ups.

STS CONSULTANTS

Project Spotlight

Marshfield Active Dry Cleaning Facility

Client Information
Confidential Client

Location
Marshfield, Wisconsin

Services Provided
- Regulatory Negotiations
- Remedial Alternatives Evaluation
- Soil Excavation Oversight
- Innovate Groundwater Bioremediation

Challenge

Site investigations that were completed in 2003 revealed an area of tetrachloroethene (PCE)-impacted groundwater that extended 3,000 feet hydraulically downgradient from the subject site, resulting in impact to a municipal water supply well. STS was retained in 2005 cost-effectively apply remaining DERF funds to remediate this large-scale impacted site.

Solution

Working with the Wisconsin Department of Natural Resources and local solid waste facilities, STS developed a cost-effective approach to remediate PCE-impacted soils above the water table. Under a Wisconsin Administrative Code (WAC) Chapter NR 700 agreement with the USEPA, impacted soils associated with current or former dry cleaner sites can be classified as non-hazardous wastes for purposes of disposal under the Resource Conservation and Recovery Act (RCRA), if the following two conditions are met:

1. The waste material does not exhibit the characteristic of toxicity as defined under 40 CFR 261.24.
2. Constituent concentrations do not exceed risk-based direct contact exposure criteria for industrial land use.

STS used real-time mobile laboratory data to demonstrate that both conditions identified above were met, as part of soil excavation that was completed in 2005. With respect to the impacted groundwater, STS implemented anaerobic bioremediation through the injection of emulsified vegetable oil (EVO) as an electron donor. A combination pilot test/source remedial action consisted of injection of EVO through ten injection wells in December 2005, followed by bioaugmentation with microbial culture through the ten injection wells in April 2006. The injection of EVO and microbial culture at this dry cleaner site was the first of its kind in Wisconsin, according to the Wisconsin Department of Natural Resources.

Key Benefits

The successful demonstration that the excavated soils could be classified as non-hazardous wastes for purposes of disposal resulted in project cost savings of at least $50,000. With respect to the PCE-impacted groundwater, the results of July and October 2006 monitoring events indicate that anaerobic conditions have been created, the presence of EVO persists, and successful reductive dechlorination of tetrachloroethene to trichloroethene, cis-1,2-dichloroethene and vinyl chloride is occurring in the vicinity of the injection area. The July and October 2006 *Dehalococcoides* group organisms (Dhc) count indicates geochemical conditions supportive of Dhc development. The results of future groundwater monitoring events will be evaluated to determine if completion of full-scale injection of EVO followed by bioaugmentation is appropriate for the site.

Project Spotlight

Multi-Tenant Building: Former Dry Cleaning Facility

Client Information
Confidential Client

Location
Southeastern Wisconsin

Services Provided
- Regulatory Negotiations
- Remedial Alternatives Evaluation
- Soil Excavation Oversight

Challenge

Site investigations that were completed by STS in 2001 revealed substantial areas of soil and groundwater impacted with high concentrations of tetrachloroethene (PCE), in the immediate vicinity of private water supply wells. STS subsequently conducted a remedial action options evaluation to cost-effectively apply remaining DERF funds to remediate the PCE-impacted soil and groundwater.

Solution

Working with the Wisconsin Department of Natural Resources and local solid waste facilities, STS developed a cost-effective approach to remediate PCE-impacted soils above the water table. Under a Wisconsin Administrative Code (WAC) Chapter NR 700 agreement with the USEPA, impacted soils associated with current or former dry cleaner sites can be classified as non-hazardous wastes for purposes of disposal under the Resource Conservation and Recovery Act (RCRA), if the following two conditions are met:

1. The waste material does not exhibit the characteristic of toxicity as defined under 40 CFR 261.24.
2. Constituent concentrations do not exceed risk-based direct contact exposure criteria for industrial land use.

STS used real-time mobile laboratory data to demonstrate that both conditions identified above were met. In 2004, a total of 2,800 tons of soil were excavated from the site for off-site disposal.

Key Benefits

The successful demonstration that the excavated soils could be classified as non-hazardous wastes for purposes of disposal resulted in project cost savings of at least $250,000. The results of future groundwater monitoring events will be evaluated to determine if completion of active groundwater remediation is appropriate for the site.

Areas of Specialization

- Brownfields Redevelopment
- Railroad Property Investigation
- Manufactured Gas Plant Sites
- Environmental Remediation
- Subsurface Exploration
- Civil Engineering

Education

- Continued Graduate Studies in Environmental Engineering, University of Wisconsin-Milwaukee
- B.S., Civil and Environmental Engineering, University of Wisconsin-Madison, 1990

Training/Certifications

- FRA Railroad Workplace Safety (49 CFR 214 Subpart C)
- OSHA HASWOPER
- PECFA Consultant
- First Aid/CPR

Registrations

- Professional Engineer: Wisconsin
- Class K Wastewater Treatment Plant Operator, State of Illinois.

Affiliations

- ACEC – Wisconsin
- Federation of Environmental Technologists
- ASFE

Awards

- Wisconsin Association of Consulting Engineers – 2000 Engineering Excellence Achievement Award for Environmental Remediation Category

Kevin L. Brehm, P.E.

Associate Engineer/Regional Sciences Manager

Mr. Brehm is currently the business leader for the Milwaukee Region Sciences group and previously held the same position for the Milwaukee Region Engineering group. He has a strong base of experience in business management, project management, and technical execution. Mr. Brehm has fifteen years of progressively responsible positions in the engineering field. Experience with Brownfields redevelopment; railroad property assessments; Manufactured Gas Plant (MGP) site investigation and remediation; Underground Storage Tank (UST) investigation and remediation; landfill engineering, civil engineering and geotechnical engineering.

Business Management Experiernce

- Regional Science Manager – 1999 to 2001 and 2004 to Present: Management responsibility for the Milwaukee Region prectice (e.g., staff management, marketing plan development/implementation, and financial management). Managed a staff of 14 to 18 people.
- Regional Engineering Manager – 2001 to 2004: Management responsibility for the Milwaukee Region practice (e.g., staff management, marketing plan development/implementation and financial management). Managed a staff of 16 to 20 people.

Brownfield Experience

- Project Manager, Beerline "B" Redevelopment Area. Project Manager for City of Milwaukee-lead area initial evaluation to promote redevelopment of the area. Project Manager for private development of six different developments within the redevelopment area for four developers/owners. Services included initial property acquisition due diligence investigation, geotechnical investigation, site investigation to meet NR 716, WAC requirements, negotiation of approvals with regulators to construct on historic sites, civil engineering, and soil methane gas investigation system design and permitting.
- Project Manager, 5th Ward Redevelopment. Assisted a developer with transaction due diligence and purchase negotiation of a 6 acre former chemical plant for future commercial use. Mr. Brehm's
- Project Manager, Schlitz Park RiverBend Place Manpower Brownfield Redevelopment. Managed the environmental and engineering aspects of this brownfield redevelopment. Integrated the geotechnical, environmental and civil engineering project requirements into cost-effective and buildable solutions for this 370,000 square foot office building and 7-level parking structure project.

Railroad Property Cleanup Experience

- Project Manager/Engineer on ten former railroad properties, including switch yards, refueling depots, service areas, locomotive manufacturing facilities and passenger depots. Environmental issues encountered included petroleum from fueling operations, lead from brake service and battery operations, metals from paint operations, chlorinated solvents from degreasing practices, pesticides, PCBs, impacts from wastewater treatment and oil water separators, and non-exempt fills. STS' services included site investigation and remediation, regulatory agency negotiations, Phase I and II environmental site assessments, wastewater treatment plant abandonment, free product removal, expert witness testimony related to municipal condemnation proceedings, and site development assistance.
- Project Manager. Railroad derailment site groundwater containment, extraction and treatment system; oversee and direction the operation, maintenance and monitoring of a remediation site where 22,000 gallons of PCE were spilled. Oversee and direct efforts of a full-time on-site operator. Oversee and direct engineering and construction of site improvements and maintenance activities including on-site road construction and process control instrumentation.

Manufactured Gas Plant Remediation Experience

- MGP Program Coordinator. Assisted utility company with management, remediation and successful closure of their former MGP sites for the past ten years. Assisted with overall program scheduling and budgeting as well as regulatory negotiations.
- Project Manager, Watertown MGP Site Soil and Groundwater Investigation. Completed a site investigation and remedial alternatives analysis for the site. Groundwater sampling was completed using low-flow sampling techniques to minimize colloids in the groundwater samples and, thereby, obtain groundwater samples representative of the true groundwater quality by not quantifying contaminants adsorbed to solids in the samples. Data obtained during the site investigation was used to support the selection of a remedial alternative.
- Project Manager, Burlington MGP Site Interim Remedial Action. Assisted Owner with the evaluation and implementation of a fast-track Interim Remedial Action at a site in Wisconsin to provide the soil needed for a pilot bioremediation study for MGP soil remediation, while providing a material benefit toward the ultimate remediation and closure of the site for the Owner. Assisted Client with regulatory negotiation and approvals. Developed an approach to cost-effectively reduce the soil benzene concentration in-situ by tilling and aeration, completed a pilot test to demonstrate the aeration effectiveness and received agency approval within days to allow for the initiation of construction. Handling of soil as a solid waste rather than hazardous waste resulted in a cost savings of $382,000. Project included contractor retention and construction management.
- Project Manager, Waukesha MGP Site Soil and Groundwater Investigation and Remediation. Completed subsurface investigation and remediation of a former MGP site and off-site oxide box waste disposal area. Remediation included thermal desorption of 8,000 tons of soil at a specially permitted facility.
- Project Manager, Fort Atkinson MGP Site Soil and Groundwater Investigation and Remediation. Completed a site investigation of a former MGP site in Wisconsin. River sediment contamination also evaluated. Immuno-assay testing used in the field to dynamically guide the investigation to efficiently complete the site characterization. Developed a natural attenuation model of the site to evaluate the potential to use this low-cost remedial approach. Prepared the site investigation and remedial alternatives evaluation report for submittal to the Department of Natural Resources. Natural attenuation/risk-based approach saved the owner several million dollars. Source area soil removal of 24,000 tons and thermal desorption treatment was designed and implemented. The site was closed in 2002 using natural attenuation to address residual ground water impacts.

Manufactured Gas Plant Remediation Experience (continued)

- Project Manager, Racine MGP Site Containment System Operation and Maintenance. Assist owner with operating and maintaining a groundwater extraction containment system designed by another consultant. Completed equipment trouble shooting, equipment repair and system retrofitting. Provide recommendations for system redesign to provide more reliable service and optimize operation.
- Project Manager, Kenosha MGP Site Soil and Groundwater Investigation and Remediation. Implemented a site closure strategy which includes DNAPL containment/removal, limited source area removal/treatment and groundwater natural attenuation. Worked closely with both our client and local municipality on this MGP site remediation which is within a city TIF district Brownfield redevelopment.
- Design Manager, Michigan Upper Peninsula MGP site dredging cleanup responsible for engineering design and plan production including dredging operations, sediment stabilization and carriage water treatment/discharge.

Landfill Engineering Experience

- Project Engineer, Spickler Superfund Landfill Leachate Collection System Design and Construction. Prepared design drawings and calculations. Assisted with construction oversight and documentation.
- Project Manager, Pleasant Prairie Ash Landfill Groundwater Separation Layer Rework. Prepared construction drawings, technical specifications, Construction Quality Assurance Plan and construction cost estimate for the reworking of a landfill cell liner.
- Project Manager, South Beloit Landfill Gas Extraction System Construction Oversight and Documentation. Assisted a local municipality with the construction oversight and documentation of a landfill gas extraction system. Provided review of materials submittals, contractor monitoring and construction documentation.
- Project Manager, Wisconsin Electric Landfill Engineering Operation Assistance. Assisted Owners with a wide variety of landfill operation difficulties including leachate collection system evaluation, leachate control and materials handling.
- Project Manager, Caledonia Ash Landfill Cell Liner and Leachate Collection System. Designed ash landfill liner systems and leachate collection systems. Prepared construction drawings and technical specifications.

Underground Storage Tanks Experience

- Project Manager, Numerous underground storage tank assessment, removal and site investigation projects. Knowledge of the Wisconsin PECFA Fund program. Evaluation and interpretation of chemical soil and groundwater data, soil nutrient analysis and microbial studies. Knowledge of Wisconsin NR 700. Prepared site investigation reports.
- Project Manager, Underground storage tank remedial action alternatives evaluation and site remediation design. Familiar with Wisconsin Department of Natural Resources, U.S. Air Force and ASTM Natural Attenuation protocols. Designed several in-situ and ex-situ soil and groundwater remediation systems including bioremediation, soil vapor extraction, groundwater extraction and free product collection. Prepared construction plans and specifications. Assisted Owner's with installation, contracting, construction oversight, and operation.
- Project Manager, Remediation system operation and maintenance. Familiar with Wisconsin Department of Natural Resources sampling and reporting requirements for WPDES and air discharge monitoring and reporting. Completed remediation system start-up and operation. Assisted clients with redesign of non-functioning systems designed by other consultants.

Geotechnical Engineering Experience

- Project Manager, geotechnical engineering evaluation of shopping mall development site. Prepared recommendations for building foundations, pavement design and construction considerations.
- Project Manager, geotechnical engineering evaluation of proposed freeway on-ramp realignment. Prepared recommendations for pavement design, retaining wall design, retaining wall foundation design and construction considerations.

Civil Engineering Experience

- Project Manager for engineering design, permitting, and construction of a passenger rail station depot including 2,000 square foot building, parking lots, access roads (dedicated and private), passenger platforms/access ramps and overhead pedestrian bridge. Included direct coordination responsibility for subcontract architectural, mechanical, electrical, plumbing, structural, and landscape design services.
- Project Manager for engineering design and plan production for erosion control measures permitting and Chapter 30 permitting of a 17-mile natural gas pipeline construction project.
- Project Manager for sediment sampling and characterization for a proposed 700,000 cubic yard inland lake navigational dredging project including column settling and effluent elutriate testing program.
- Project Manager for engineering design and plan production for stormwater management and site preparation for a 200-acre urban redevelopment.
- Project Manager for engineering design, permitting and construction oversight of a 5,000 cubic yard navigational dredging operation.

Publications

"Kenosha Manufactured Gas Plant Remediation – Site Redevelopment/Closure Strategy Implementation," Brehm, K.L., Lingle, J.W., 2001. Presented at the Gas Technology Institute 14th International Symposium, December 2001, Orlando, FL

"Evaluation of a Source Removal and Natural Attenuation Remediation Strategy at Three MGP Sites in Wisconsin," Brehm, K.L., Lingle, J.W., 2002. Presented at the Gas Technology Institute 15th International Symposium, December 2002, Orlando, FL.

"Evaluation of a Source Removal and Natural Attenuation Remediation Strategy at Three MGP Sites in Wisconsin," Brehm, K.L., Lingle, J.W., 2003. Presented at the AEHS 13th Annual West Coast Conference on Contaminated Soils, Sediments and Water, March 2003, San Diego, CA.

"Evaluation of a Source Removal and Natural Attenuation Remediation Strategy at Two MGP Sites in Wisconsin," Brehm, K.L., Lingle, J.W., 2003. Published in Remediation Journal, Autumn 2003, Wiley Publishing

"Remediation of Tetrachloroethene in Fractured Sandstone – A Case Study in Initial Successes and Long-Term Technological Barriers to Timely and Cost-Effective Closure", Brehm, K.L., Kalluri, V. and Tarvin, J.M., 2004 USEPA/NGWA Fractured Rock Conference: State of the Science and Measuring Success in Remediation, September 2004, Portland, ME.

Areas of Specialization

- Evaluation and Implementation of Remedial Alternatives at Contaminated Soil and Groundwater Sites
- Mathematical modeling of groundwater flow and contaminant transport

Education

- M.S., Geology, Northern Illinois University, 1984
- B.S., Geology, University of Wisconsin-Milwaukee, 1981

Registrations

- Professional Geologist: WI, IL
- Certified Groundwater Professional, National Groundwater Association

Training

- FRA Railroad Workplace Safety (49 CFR 214 Subpart C)
- 40-Hour USEPA Health & Safety (1985)

Mark M. Mejac, P.G.

Senior Hydrogeologist

Representative Experience

As a Senior Hydrogeologist in the Environmental Group, Mr. Mejac has more than 22 years of environmental consulting experience. He has extensive experience in a variety of hydrogeologic investigations, environmental risk assessments and remedial alternatives evaluations. He specializes in the evaluation and implementation of innovative and cost-effective remedial alternatives at contaminated groundwater and soil sites. Mr. Mejac routinely applies his expertise in groundwater flow and contaminant transport modeling, and migration analysis of dense, non-aqueous phase liquid contaminants (DNAPLs) in porous and fractured media. A representative sampling of project experience includes:

- Directed the technology selection and successful implementation of a large-scale cometabolic aerobic horizontal biosparge well system, and prepared a Tier 2 Remedial Objective Risk Assessment for a northern Illinois industrial site affected with chlorinated VOCs.
- Directed the technology selection and successful implementation of a large-scale cometebolic aerobic horizontal biosparge well system at an eastern Wisconsin industrial facility impacted with chlorinated VOCs.
- Directed the technology selection and implementation of Electro-Thermal Dynamic Stripping Process technology at a chlorinated VOC-impacted industrial site in southeastern Wisconsin, which was the first application of this remedial technology in Wisconsin.
- Directed the technology selection and implementation of emulsified vegetable oil injection technology at a large-scale CVOC impacted dry cleaner site in central Wisconsin, which was the first application of this remedial technology in Wisconsin.
- Project Manager of a Superfund Remedial Investigation and Risk Assessment of a paper sludge lagoon facility located in northern Wisconsin.
- Managed the implementation of a Superfund Remedial Design Investigation of a trichloroethene-contaminated aquifer in central Nebraska, which involved analysis of a large-scale aquifer pumping test, followed by groundwater capture zone analysis to design a high-capacity groundwater extraction well field.
- Directed a Remedial Investigation and Feasibility Study of a former hazardous waste disposal site affected with volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs) and metals in eastern Michigan.

Representative Experience (continued)

- Project Manager of a Remedial Investigation of a U.S. Department of Energy (DOE) facility in Northern Illinois affected with radionnucleides, VOCs and metals.
- Project Manager of a Wisconsin Administrative Code (WAC) NR 722 Feasibility Study of remedial alternatives for a spent sulfite liquor contaminated paper mill site in northern Wisconsin.
- Directed a Site Assessment/Remedial Action Plan of an industrial facility in northern Illinois affected with VOCs, which involved presentation of investigation results to the City Mayor and local organizations.
- Project Manager of a Remedial Investigation of a U.S. Department of Energy (DOE) facility in northern Illinois affected with radionnucleides, VOCs and metals.
- Project Manager of a Wisconsin Administrative Code (WAC) NR 722 Feasibility Study of remedial alternatives for a spent sulfite liquor contaminated paper mill site in northern Wisconsin.
- Managed a soil and groundwater investigation of an industrial facility in central Illinois affected with chlorinated VOCs in dense immiscible phase form.
- Implementation of numerous Phase I Environmental Assessments throughout the U.S. and Canada.
- Managed a hydrogeologic investigation of an industrial facility in central Indiana affected with metals and cyanide.
- Directed a WAC NR 716 site investigation of a former dry cleaning facility in southeast Wisconsin affected with chlorinated VOCs.
- Managed an NR 716 site investigation and water supply alternatives evaluation for a former landfill in central Wisconsin that was previously a proposed National Priorities List (NPL) site.
- Provided environmental litigation support services to demonstrate zero contribution of chlorinated VOCs from an industrial facility to a contaminated municipal well field in southern Michigan.
- Provided litigation support expert witness testimony to demonstrate source contribution and estimate contaminant travel time in anticipation of cost recovery action associated with tetrachloroethene contamination of a central Wisconsin dry cleaning facility.
- Provided litigation support expert witness testimony services in anticipation of cost recovery action associated with phthalate ester contamination of an industrial site in northwestern Ohio.
- Provided litigation support expert witness testimony to estimate contaminant travel time in anticipation of cost recovery action associated with petroleum hydrocarbon contamination of a private water supply located in central Wisconsin.
- Provided litigation support expert witness services to demonstrate source contribution and estimate contaminant travel time associated with petroleum VOCs from a fuel terminal to a contaminated private potable well in eastern Wisconsin.

Representative Experience (continued)

Publications and Presentations

"A Geochemical Study of Surface Water-Groundwater Interaction in Lake Ellyn, Glen Ellyn, Illinois", unpublished Master's thesis, Northern Illinois University, 1984.

McGill University, Montreal, Canada, "Application of Analytical Contaminant Transport Modeling to Evaluate Public Health Risks", Guest Lecturer, 1989.

"Application of Horizontal Biosparge Wells for Aerobic Co-metabolic Groundwater Remediation", Proceedings of the Eighth International In-Situ and On-Site Bioremediation Symposium, June 6-9, 2005 Baltimore, MD, Battelle Press, Columbus, Ohio.

"Cost Effectiveness of Horizontal Biosparge Well Application for Aerobic Co-metabolic Groundwater Remediation", Proceedings of the National Groundwater Association (NGWA) Conference on Remediation: Site Closure and the Total Cost of Cleanup, November 7-8, 2005, Houston, TX, NGWA Press, Westerville, Ohio.

Jeanne M. Tarvin, P.G., CPG

Senior Principal Scientist – Hydrogeologist

Areas of Specialization

- Project Strategy Development
- Agency Negotiations
- Remedial Investigation/Feasibility Studies
- Property Acquisition/Due Diligence
- Environmental Compliance and Management
- RCRA and Superfund Project Management

Education

- Graduate Studies in Environmental Engineering/Hydrogeology, University of Wisconsin-Milwaukee
- B.S., Engineering Geophysics, Michigan Technological University, 1984

Training

- FRA Railroad Workplace Safety (49 CFR 214 Subpart C)
- HAZWOPER 40 Hour and 8 Hour Supervisor Safety Training

Registrations

- Certified Professional Geologist
- Professional Geologist: Wisconsin
- NR712 Wisconsin Certified Hydrogeologist

Affiliations

- American Institute of Professional Geologists
- National Water Well Association
- Society of Exploration Geophysicists

Representative Experience

As a Principal Hydrogeologist, Ms. Tarvin is responsible for directing and managing projects with the Environmental Group, including various hydrogeologic studies, environmental assessments, landfill studies, feasibility studies, remedial designs and remedial actions.

A representative sampling of project experience includes:

- Project Environmental Principal for Confidential Railroad Derailment Site in Illinois. STS was retained to provide operation and maintenance services and develop a closure strategy on a groundwater pump and treatment system/bentonite containment wall installed in response to a release of 30,000-gallons of tetrachloroethene. In addition, STS performed a hydrogeologic evaluation and risk assessment of the remedial system performance to develop a closure strategy for the site.
- Project Manager for a pre-design study, remedial design and remedial action for a multi-million dollar Superfund NPL project in Central Wisconsin. Directly responsible for EPA Region 5 and WDNR negotiations, project scheduling and budgeting, development of project work plans, technical direction of NCP level field and laboratory testing program, regulatory liaison and preparation and review of technical work plans and reports.
- Responsible for negotiating Administrative Orders on Consent and Consent Decrees with state and federal regulatory agencies on Superfund, RCRA and state-led remediation projects.
- Project Principal on a RCRA Part B Permit Modification for a Hazardous Waste Kiln in Missouri. Project included U.S. EPA Region 3 negotiations, design plans and specifications and preparation of the permit modification.
- Project Manager for an RFI at an industrial facility in Little Rock, Arkansas. STS is currently negotiating a scope of work with ADEQ and U.S. EPA Region 6. The work will be completed under the U.S. EPA Region 6 Corrective Action Strategy (CAS) Pilot Program.
- Preparation of siting studies, feasibility studies, hydrogeologic studies, and facility designs for industrial and municipal landfills, including permitting.
- Project Manager for a RCRA Part B closure of four cupola sludge lagoons at an iron works foundry. Duties included an RFI and preparation and implementation of the closure plan. As part of the closure plan, a confirmation of removal of hazardous soils was performed and a groundwater monitoring system was installed.

Representative Experience (Continued)

- Project Manager for preparation and negotiation of a RCRA Facility Investigation (RFI) Work Plan at a solvent recovery facility in Wisconsin which contains nine SWMUs.
- Closure of industrial and commercial sites using natural attenuation and risk based evaluation.
- Management of underground and above ground storage tank facilities including site assessments, corrosion analysis, design of tank installations, tank abandonment and closure documentation, regulatory compliance and remedial action.
- Project Manager for RCRA closures of numerous hazardous waste disposal facilities in the United States. Duties included preparation of plans, specifications, remedial design, site safety plans and construction management.
- Manager for RCRA facility and compliance audits at several industrial sites and a power plant.
- Project Principal on RI/FS' for Manufactured Gas Plant Sites. Former member of MGP Advisory Committee for major utility in Midwest.
- Project Manager for a Superfund NPL site in Central Wisconsin. STS negotiated a Record of Decision (ROD) Amendment to delete an Alternative Water Supply as part of the final remedy.
- Managed and performed numerous environmental site assessments for property transfer including preparation of work plans for soil and groundwater sampling, soil gas surveying, interpretation of chemical analysis, development of remedial action plans and final report preparation.
- Project Manager on a Superfund site in Wisconsin. STS is currently negotiating a Record of Decision Amendment to remove the requirement for an active groundwater pump and treat system.
- Performed geophysical surveys including seismic refraction, thermography, electromagnetics, electrical resistivity, downhole bore logging and subsurface interface radar for contamination assessments; development of groundwater monitoring plans, hydrogeologic analysis and engineering design of drilling activities for major exploration programs.
- Provided expert and fact witness testimony on contested cases involving hydrogeologic characterization and landfill design and operation.
- Presentation of technical data/ interpretation at public meetings on behalf of responsible parties.

Publications

"Cost Effectiveness of the Horizontal Biosparge Well Application for Aerobic Co-Metabolic Groundwater Remediation", 2005 NGWA Remediation Conference, November 2005

"Application of Horizontal Biosparge Wells for Aerobic Co-metabolic Groundwater Remediation", Eighth International In-Situ and On-Site Bioremediation Symposium, June 2005.

"Avoiding RCRA and CERCLA Liabilities", Client Training Seminar, 2002.

"Waste Management, Risks and Liabilities", Client Training Seminar, 2001.

"Brownfields From a Technical Standpoint", Brownfields Development in Wisconsin Seminar, 2000.

"Mergers and Acquisitions: Audits and Due Diligence Strategies," STS Client Seminar, 1999.

"Drycleaner Cleanup Rules Legislative Update," Wisconsin Fabricare Institute, September 1998.

"Spill Response Awareness Training", Client Training Seminar, 1998.

"Remediation: A Case Study", Client Training Seminar, 1997.

"Strategic Regulatory Negotiations", Client Seminar, 1996.

"Comparison of Sludge Lagoon Covers", TAPPI Conference Proceedings, 1995.

Honors and Awards

Recipient of Supply Chain Award of Excellence for 1996 and 1997 from Wisconsin Electric.

BT1 client Service A-team's roster in 1996 for delivering truly superior client services.

Gubernatorial Appointment to the Technical Advisory Committee for the Drycleaners Environmental Reimbursement Fund (DERF)

APPENDIX C

Standard Procedures

1.0 SOIL SAMPLING PROCEDURES

1.1 Soil Probe

Typically, the soil probe unit is van mounted and hydraulically advances a 1-1/2 inch diameter drive rod to collect soil samples. Soil samples are collected inside of a 2-foot polyethylene sheath inserted into the end of the drive rod. When the selected sample depth is reached, a spring release allows the soil sample to be collected inside of the sheath. A new sheath is used to collect each sample at the specified depth.

To extract the soil sample, the sheath is cut open using a razor blade. Upon opening the sheath, each soil sample to be submitted for analytical testing is preserved in accordance with the procedures outlined in Section 1.5. Soil samples to be used for screening purposes are placed in 8-ounce glass jars and screened according to the procedure outlined in Section 1.3. Probe equipment is decontaminated as outlined in Section 4.2.

1.2 Auger Drilling

Typically, 4-1/4 inch hollow stem augers are utilized to advance boreholes during auger drilling. The augers are advanced using a truck or all-terrain vehicle (ATV) mounted auger drilling rig. Soil samples are collected at 2.5 foot intervals, using standard split-barrel sampling procedures. A copy of the American Society for Testing and Materials (ASTM) Procedure (ASTM D-1586) is appended at the end of this section. Drilling equipment is decontaminated in accordance with procedures outlined in Section 4.1. Soil cuttings generated during the drilling procedure are handled in accordance with the procedures outlined in Section 5.1.

1.3 Soil Screening

Each soil sample collected during soil probe or auger drilling methods is split to form duplicate samples, upon collection. A portion of the sample, to be utilized for screening purposes and classification is placed in an 8-ounce glass jar, covered with aluminum foil and sealed with a screw-on lid. The remainder of the sample is placed in laboratory provided jars, if the sample is to be submitted to a laboratory for analytical testing (Refer to Section 1.5).

1.3.1 PID Screening

STS utilizes an HNu Model PI-101 photoionization detector (PID) equipped with a 10.2 electron volt (eV) lamp or a MiniRae Plus (PGM-76) Professional PID equipped with a 10.6 eV lamp. Both instruments are capable of detecting certain volatile organic compounds (VOCs), including many of the volatile components characteristic of petroleum products and common solvents with ionization energies less than or equal to 10.6 eV.

PID screening is performed by first allowing the screening sample to warm to approximately room temperature (70° F). The sample is shaken vigorously for several seconds. This procedure breaks up the soil and increases the surface area of the soil particles exposed to the air inside of the jar. The tip of the PID probe is inserted about one inch into the jar through the aluminum foil.

The highest value read off of the meter during the first few seconds after inserting the probe tip is recorded as the PID reading for the soil sample.

Because organic compounds have varying ionization potentials, the response of the PID depends on the compounds being ionized. In addition, because the PID responds only to compounds which are present in the vapor phase, the relative volatility is also a factor in the response. As a result, when a variety of VOCs are present in the screening sample, the meter reading does not necessarily indicate the concentrations of any specific VOC, but a response to total VOCs present relative to the concentrations and ionization potential of each compound.

Prior to screening, the meter is zeroed and calibrated to an isobutylene standard per the manufacturer's specifications. All PID readings are reported in PID Instrument Units (IU). The readings are similar to parts per million, using an isobutylene equivalent to address the variability of the response factor. This nomenclature is recommended by the equipment manufacturer and required by the Wisconsin Department of Natural Resources (WDNR) field screening procedures guidance document.

1.3.2 FID Screening

The FID screening procedures are similar to the PID procedures. The sample is warmed and shaken before the FID probe is inserted into the jar. The highest reading is the FID reading recorded for the sample.

The Sensidyne flame ionization detector (FID) is a portable instrument used to measure organic vapors and gasses in the air. The air containing organic vapors is mixed with hydrogen and burned in a hydrogen flame near two high-voltage electrodes. Organic compounds in the gas stream cause an increase in electric current proportional to the concentration. The FID is calibrated with methane, but responds to nearly all volatile compounds containing carbon.

Prior to screening, the FID is calibrated to a methane standard per the manufacturer's specifications. All FID readings are reported in FID Instrument Units. The readings are in parts per million based on the methane standard.

1.4 Soil Classification

The soil samples are preliminary classified in the field, at the time of collection. Drilling notes regarding soil types, drilling conditions, PID screening, depth to water and location of stratigraphic changes are documented on the field boring logs. The soil samples are re-classified in the STS laboratory by a geologist or engineer. Soil classification is based upon the texture and plasticity of the soil, in general accordance with the Unified Soil Classification System (USCS). An abridged version of the USCS and "STS General Notes" are appended. The "STS General Notes" sheet describes nomenclature used on the final boring logs. Additional information regarding the preparation of the final boring logs from field logs and laboratory data is described on the sheets entitled "Field and Laboratory Procedures" and "STS Standard Boring Log Procedures" which are also appended.

The soil stratification indicated on the logs was selected by the geologist/engineer based upon the field log information and sample observations. Stratification lines should be considered as approximate. The transition between soil types in-situ may be gradual in both the horizontal and vertical directions.

1.5 Sample Preservation

Soil samples to be submitted for analytical testing are collected in accordance with standard WDNR protocol. Samples to be tested for polynuclear aromatic hydrocarbons (PAHs) and metals are collected in 4-ounce laboratory provided glass jars. The soil sample jar is labeled with the sample designation, sample date and time, samplers initials and project number. The samples are preserved by packing the samples in ice and maintained at a temperature of 4° C, or less.

Soil samples to be analyzed for Gasoline Range Organics (GRO), Diesel Range Organics (DRO) and VOCs are described in the following sections.

1.5.1 GRO/VOC Samples

Soil samples to be tested for GRO or VOCs are collected in a similar manner. Each soil sample is weighed immediately after collection. Approximately 25 to 35 grams of soil is placed in a pre-weighed laboratory provided 60-milliliter (ml) vial. A pre-measured amount (25-ml) of laboratory grade methanol is added to the sample. The entire soil sample is covered with the methanol. A separate soil sample is prepared for VOC analysis and GRO analysis. Each sample is labeled with the sample designation, sample date and time, sampler's initials, project No. and preservative added. The sample is placed in a cooler on ice to maintain a temperature of 4° C or less and submitted to the laboratory the same day, if possible.

1.5.2 DRO Samples

Soil samples to be tested for DRO are collected by weighing out approximately 25 to 35 grams of soil and placing the soil sample in a pre-weighed laboratory provided 60-ml vial. No preservative is added to the sample while in the field. However, the sample must be preserved at the laboratory within four days of collection. The samples are labeled and shipped to the laboratory as described in Section 1.5.1 and 1.5.3.

1.5.3 Chain of Custody

A chain-of-custody is filled out immediately after sample collection and accompanies the samples from time of collection until received at the laboratory. Any notes regarding soil sample collection are included in the field book while in the field.

1.6 Bore Hole/Probe Hole Abandonment

Each borehole or probe hole advanced at the site will be abandoned in accordance with the procedures outlined in Ch. NR141 of Wisconsin Administrative Code.

Typically, probe holes and borings which are not converted to groundwater monitoring wells are backfilled with bentonite chips from the bottom of the boring to the surface. If surface improvements are present (i.e., concrete or asphalt), bentonite is placed up to the bottom of the improvement and the surface is repaired with a like material.

The STS representative present in the field during abandonment procedures will complete WDNR form 3300-5B. A copy of this form will be prepared for each location and submitted with the final report prepared for WDNR review.

2.0 WELL INSTALLATION PROCEDURE

2.1 Temporary Wells

Typically, temporary wells are installed during a soil probe investigation. First the probe hole is advanced as outlined in Section 1.1. Typical well construction includes a 3-foot section of 1-inch diameter PVC well screen fitted with a stainless steel drive point. The drive point and screen are inserted into the probe hole and pushed into the hole using the hydraulics of the probe rig. Additional 3-foot sections of PVC casing are threaded onto the screened portion of the well until the drive point reaches the bottom of the probe hole and the PVC casing extends to the ground surface.

Typically, there is no sand pack or seal around temporary wells because they are approximately the same diameter as the probe hole. Temporary wells are used to collect samples for screening purposes and are commonly left in place a short period of time.

Once monitoring from the temporary well is complete the well is extracted from the ground either by using hand equipment or the hydraulics of the probe rig. After the well material is removed, the probe hole is abandoned in accordance with the procedures outlined in Section 1.6.

2.2 NR 141 Well Construction

Monitoring wells are installed in general accordance with the installation procedures in chapter NR 141 of the Wisconsin Administrative Code (WAC). This section describes the typical well installation procedure, any deviations from this procedure will be discussed in the text of this report.

Groundwater monitoring wells are installed at locations in which a borehole has been advanced using 4-1/4 inch or 6-1/4 inch diameter hollow stem augers. The well materials are placed while the augers are in the ground, and the well material is inserted inside of the hollow stem augers. If the borehole was advanced beyond the depth the well is to be installed, the borehole is backfilled with bentonite chips prior to installing the well materials. The well consists of a two-inch diameter, 10-foot long section of Schedule 40 polyvinyl chloride (PVC) screen threaded onto an end cap. The slot size of the screened portion depends upon the characteristics of the soil, though typically 0.006-slot screen is used in clayey and silty soils and 0.010-slot screen is used in sandy soils. The screened portion is threaded onto 5 or 10 foot sections of two-inch diameter PVC pipe (unscreened) which extends to either the ground surface or to no more than 2-feet above the ground surface at locations in which a stick-up well protector is required. A cap fitted with an expandable gasket and a lock is placed on top of the well casing.

The material filling the annular space between the borehole walls and the well casing is poured inside of the augers and the augers are pulled up during placement of the fill material. Approximately 6-inches of fine grained, washed silica sand is placed below the well screen. Silica sand is placed as a filter pack, around the screened portion of the well. The grain size is selected to retain a minimum of 50% of the surrounding formation. The filter pack is placed from 6-inches below the well to approximately 2-feet above the well screen. Above the filter pack, two feet of fine-grained sand is typically placed. If the depth to groundwater prohibits the placement of two feet of filter pack and/or fine sand, the thickness of these layers are reduced to no less than 6-inches of each material above the top of the well screen. Above the fine sand, a bentonite seal is placed and consists of a minimum of 2-feet of chipped bentonite or bentonite pellets (the type of material used depends upon the depth to groundwater). Bentonite is used to fill the

remaining annular space from the top of the seal to the bottom of the protector pipe which is placed at the top of the well to protect the well from damage.

At the top of the bentonite, either a flush mounted or a stick-up protector pipe is installed over the well. Typically, flush mounted protector pipes are used in areas in which a concrete or asphalt surface is present. In some instances, it is necessary to install a flush mounted protector pipe in a gravel traffic area. In these instances, a concrete pad is constructed around the pipe. The flush mounted protector pipe consists of a 10- or 12-inch diameter steel casing, 12-inches in length which is cemented flush with the surrounding concrete or asphalt improvement. The stick-up protector pipe consists of either a 5-foot or a 7-foot steel pipe inserted over the well casing that extends above the ground surface. A 5-foot pipe is used when a shallow water table is present. For PVC wells, the standard stick-up above the ground surface is approximately two feet. The steel protector pipe is installed over the PVC, with the top at 2.5 feet above the surrounding ground surface (PVC is approximately 6-inches below the top of the protector pipe). The remainder of the protector pipe is installed below ground. No fill material is placed between the well and the protector pipe, to eliminate heaving due to frost. Either bentonite or cement is used around the outside of the protector pipe, to secure it in place.

During well installation, a field boring log is completed as outlined in Section 1.4 and WDNR form 4400-113A (monitoring well construction form) are completed in the field. Copies of the boring logs (4400-133A) are provided to WDNR in the final report. Soil cuttings generated during the advancement of the borehole are handled in accordance with the procedure outlined in Section 5.1. All well material used in the well construction is new and care is taken to prevent contaminating the well material during installation.

Upon completion of the well installation activities, an elevation survey referenced to Mean Sea Level (MSL) or a local benchmark is completed. The elevation of the PVC casing and the ground surface are recorded. This survey information is used to determine the elevation of the groundwater surface and to determine groundwater flow direction at the site.

2.3 NR 141 Well Development

Well development is conducted using either a bailer or a pump. Typically, when it is necessary to remove a large volume of water, or the water is very turbid, a pump is used. If the well is anticipated to bail dry, due to the permeability of the aquifer, a bailer is used.

Prior to developing the well, the water level is measured, using an electronic water level indicator (m-scope). The water level is measured to the nearest 0.01-foot. Each well is developed by surge and purge methods and by removing 10 well volumes of water, calculated using the formula provided in chapter NR 141, WAC. If 10 well volumes of water can not be removed from the well because it bails dry (due to the presence of low permeability soils), the well is slowly purged dry several times or until the turbidity of the water is reduced. WDNR form 4400-113B (monitoring well development form) is completed in the field, during the development activities. A copy of the form is provided to WDNR with the final project report. Handling of well development purge water is discussed in Section 5.3.

3.0 GROUNDWATER SAMPLING PROCEDURES

3.1 Groundwater Sampling

Typically, more than one week is allowed between well development and the first groundwater sampling event. The following sections provide details relating to groundwater sampling.

3.1.1 Purging

Prior to collection of groundwater samples, the water level is again measured and each well is purged. If possible, four well volumes of water are removed from the well. If the well bails dry, the stagnant water is removed from the well and water is allowed to recharge into the well. Time permitting, the well is bailed dry again and allowed to recharge prior to collection of samples.

Typically, wells are purged using a Teflon© bailer or a disposable polyethylene bailer. In some instances, when it is necessary to remove a large volume of water from the well, a pump is used to purge the well. In these instances, a small submersible pump is used to purge the well. The pump and the hosing are decontaminated prior to inserting into the well. Handling of purge water is discussed in Section 5.3.

3.1.2 Well Sampling

Typically, wells are sampled using a disposable polyethylene bailer or a Teflon© bailer. In order to minimize disturbance of the water in the well, the bailer is slowly lowered using a rope tied to the top of the bailer, to the water table. The bailer is allowed to fill from the bottom of the bailer. Once the bailer is filled, it is gently brought to the surface and emptied into sample containers.

Duplicate samples and equipment blanks are collected from each site at a minimum of 10% of the total number of samples collected. This procedure complies with WDNR quality assurance/quality control requirements. The equipment blank is collected at the site by pouring distilled water through an unused bailer and collecting it in the specific vials required by the analytical method. If metals samples, or other samples that require filtering are to be collected the equipment blank is run through filtering equipment just as the other samples are collected.

Each cooler is sent to the laboratory with a trip blank and a temperature blank. The trip blank is prepared by the laboratory by filling a VOC vial with distilled water and sealing the bottle. The bottle remains sealed and stays with the sample bottles through shipment from the laboratory until it reaches the laboratory again. The water sample contained in the trip blank is analyzed by the laboratory, to verify that the samples were not affected by contaminants during transportation. The temperature blank is used to verify that the samples reached the laboratory at a temperature of 4°C, or less. The blank consists of a water sample in an unspecified type of container. No other analytical tests are performed on this sample.

VOC Sampling - A VOC sampling port is inserted into the bottom of the bailer, to allow for regulation of water flow from the bailer. This allows for minimization of disturbance of the sample.

The water is slowly discharged directly into laboratory provided 40-ml VOC vials containing hydrochloric acid (HCl) preservative. The bottle is filled to a positive meniscus and covered with a cap fitted with a Teflon© septum. The bottle is inverted and gently tapped to verify that air bubbles are not present in the sample. Each bottle is labeled, typically with a label provided by the laboratory, with the well No., sample No., date, sampler's initials, project No. and preservatives added. After labeling, the samples are placed in a cooler with the chain of custody, on ice, for shipment to the analytical laboratory.

GRO Sampling - Water samples to be analyzed for GRO are collected in the same manner as described above. The same quality assurance/quality control labeling and shipping procedures are followed as described in that section.

DRO Sampling - Water samples to be analyzed for DRO are collected using a bailer as described in Section 3.2.2, however, each water sample is discharged directly into 1-liter amber laboratory provided jars that does not contain preservative. The same quality assurance/quality control labeling and shipping procedures are followed as described above.

Metals Sampling - Water samples to be analyzed for total metals are collected from the wells as described in Section 3.2.2, however, a VOC sampling port is not necessary for discharging the water sample into the sample container, since disturbance by air is not a factor which affects sample integrity. The water is discharged from the bailer into a laboratory provided, clean plastic container, prior to filtering.

A filtering apparatus consisting of a disposable 0.045 micron filter fitted with silicon tubing is inserted into a peristaltic pump. The pump draws the water from the plastic container, up through the tubing and the filter and discharges the water out the bottom of the filtering apparatus. The filtered water sample is discharged directly into a 250-ml or 500-ml plastic laboratory provided bottle, containing nitric acid (NO_3) preservative. The bottle is filled to the neck of the bottle and capped. The bottle is inverted several times to mix the preservative into the sample and the bottle is placed in a cooler on ice for shipment to the laboratory.

3.1.3 In-Field Testing

Typically, several in-field tests are conducted prior to completion of sampling at each well location. These tests include testing the conductivity, pH and temperature of each sample after it is collected. The testing for pH, conductivity and temperature are usually conducted using one instrument that records all three measurements. Various brands of instruments are available and used for conducting this testing. Water color, odor and turbidity are also recorded by the technician in the field, for each sample.

The water sample to be collected for in-field testing is collected at the time of well sampling. The sample is collected after the samples to be laboratory tested are collected and placed in coolers. The field tested sample is collected using the same bailer used to collect the samples for analytical testing. The water is discharged from the bailer into an 8-ounce clear glass container. The instrument probe is inserted into the water sample and slowly swirled in the water until the instrument equilibrates. The measurements are recorded in a field book. The visual observations noted at this time are recorded in the field book.

3.2 Rising or Falling Head Slug Test

Field hydraulic conductivity tests are conducted for the newly installed monitoring wells and piezometers. These slug tests are conducted by bailing the wells until they are dry or nearly dry and then allowing the groundwater to recharge into the well (Rising Head). If the well does not bail dry a slug is placed in the well the well is allowed to equilibrate. Once the water level is static, the slug is removed and groundwater measurements are recorded as described earlier. Alternatively, a slug is placed in the well to displace water and the elevated groundwater level is allowed to decrease over time (Falling Head). The rise or fall of the groundwater level over time is measured with an electric water level measuring device or a data logger (if quick recharge). This data is input into a commercial computer program, AquiferTest Version 2.5 (Waterloo Hydrogeologic), that computes the hydraulic conductivity using the Bouwer and Rice method (1976).

4.0 DECONTAMINATION PROCEDURES

4.1 Drilling

To avoid cross-contamination between borings, the drilling equipment (i.e., augers and rig) is decontaminated using a high pressure hot-water washer after each boring. The down hole sampling equipment is decontaminated using a wash of Alconox© soap and clean water, followed by a rinse with clean water. Equipment is scrubbed with a brush during each step of the decontamination process to remove soil particles which may adhere to the equipment.

4.2 Soil Probes/Hydraulic Probes

To avoid cross-contamination between probe locations, the soil probe rods are decontaminated between each bore hole. The decontamination procedure consists of washing the rods with a solution of Alconox© soap and clean water, followed by a clean water rinse. The rods are scrubbed with a brush during each step of the decontamination process to remove any soil particles which may adhere to the equipment.

4.3 Groundwater Sampling

Typically, disposable bailers are used during well sampling. A new bailer is used to sample each well, therefore there is no need to decontaminate down hole equipment between locations. The in-field testing equipment (pH, conductivity and temperature meter and m-scope) are decontaminated between samples using a double rinse of distilled water. The water is containerized with the decontamination water generated during the advancement of the boring/well or purge water.

If disposable bailers are not used at the site, the Teflon© bailer is decontaminated using a wash of Alconox© soap and distilled water, followed by a double rinse using distilled water. The bailers are scrubbed with brushes during the washing process and the during the first rinse to remove sediment or other particles which may adhere to the bailer.

New rope and gloves are used at each well location, therefore no decontamination of this equipment is necessary. If sample filters are used (i.e., for metals analysis), a new disposable filter and new tubing are used for each sample.

During hydraulic conductivity testing, all downhole equipment is decontaminated using the double wash procedure (Alconox© wash followed by clean water rinse). In addition, the tests are typically conducted in order from the least contaminated well location to the most contaminated well location.

5.0 WASTE HANDLING PROCEDURES (SITE INVESTIGATION)

5.1 Soil Cuttings

Typically, soil cuttings generated during the advancement of borings are containerized in 55-gallon Department of Transportation (DOT) approved barrels. Refer to the text for any project or site specific arrangements. Each barrel is labeled with the date it was filled, contents (soil cuttings) and telephone No. of the contact or owner. The barrel is sealed with a lid and ring assembly. Depending upon site usage, the barrels either remain adjacent to the boring locations

or are placed in secured storage on the site, at a location approved by the owner or operator of the site.

The cuttings remain on-site until disposal options are reviewed and proper disposal arrangements can be made. The cuttings are the responsibility of the owner.

5.2 Decontamination Water

Water generated during the decontamination of field equipment is containerized in 55-gallon DOT approved barrels or as specified in the text of this report. If placed in barrels, each barrel is labeled with the date it was filled, contents (decon water) and telephone No. of the contact or owner. The location of the barrel and disposal of the contents are handled in the same manner as described in Section 5.1.

5.3 Well Development and Purge Water

Since each project is different, handling or purge water depends upon site specific arrangements. This water could be containerized in 55-gallon drums, discharged to the storm sewer or sanitary sewer or treated. Refer to the text for the site specific arrangements for this waste.

FEE SCHEDULE

ENVIRONMENTAL SERVICES

Charges for technical personnel will be made for time spent in the field, in consultation, in preparation of reports and invoices, in administrating contracts and project coordination, and in traveling.

*Overtime will be charged after 8 hours per day; before 7:00 am and after 6:00 pm Monday through Friday; or all day Saturday--technical rate x 1.25. Doubletime will be charged on Sundays or Holidays--technical rate x 2.

Expert Witness Testimony will be billed at the rates shown here x 1.5.

Laboratory test programs will be identified in our proposal and billed out on a lump sum basis. Additional laboratory work will be billed on the following hourly basis plus expenses, expendables and equipment.

The cost of equipment to complete the project will be identified in our proposal.

Drill rig rates include two (2) persons. Additional persons will be charged according to the technical classifications.

Technical Classifications Grade

Senior Principal	Per Hour	$	160.00
Principal	Per Hour	$	145.00
Associate	Per Hour	$	140.00
Senior Consultant	Per Hour	$	125.00
Consultant	Per Hour	$	105.00
Technical Project Staff	Per Hour	$	90.00
Technical Staff	Per Hour	$	85.00
CAD Specialist	Per Hour	$	60.00
Technical Support Staff*	Per Hour	$	50.00
Senior Technician*	Per Hour	$	65.00
Technician*	Per Hour	$	55.00

Technical Support Services

Subsurface Exploration

Drill Rig Mobilization (Local within 30 miles)	Per Trip	$	300.00
(Out-of-Town)	Per Mile One Way	$	6.25
All-Terrain Rig	Per Hour	$	200.00
Drill Rig-Class I	Per Hour	$	185.00
Drill Rig - Class II	Per Hour	$	170.00
PID or FID Rental	Per Day	$	85.00

Laboratory Services

Manager	Per Hour	$	85.00
Supervisor	Per Hour	$	60.00
Technician	Per Hour	$	50.00

Site Safety

Personnel Protection: Level D	Per Person Per Day	$	60.00
Personnel Protection: Level C	Per Person Per Day	$	170.00
Personnel Protection: Level B			Upon Request

Expenses and Expendables

All Expenses to Complete the Project **			Cost + 12%
	Per Mile	$	0.55
All Expendables to Complete the Project			Cost + 12%

STS General Conditions of Service

STS CONSULTANTS, LTD.

GENERAL CONDITIONS OF SERVICE

These General Conditions of Service, including any Supplemental Conditions of Service which are or may become applicable to the services described in STS's Proposal, are incorporated by reference into the foregoing Proposal and shall also be incorporated by reference into any Agreement under which services are to be performed by STS for the Client. No agreement or understanding, oral or written, which in any way modifies or waives these General Conditions of Service, shall be binding on STS (whether contained in the Client's purchase forms or otherwise) unless hereafter made in writing and executed by STS's authorized representative.

SECTION 1: SCOPE OF WORK

a. The scope of work and the time schedules defined in the Proposal are based on the information provided by the Client and shall be subject to the provisions of this agreement. If this information is incomplete or inaccurate, or if site conditions are encountered which materially vary from those indicated by the Client, or if the Client directs STS to change the original scope of work established by the Proposal, a written amendment to the Agreement equitably adjusting the costs, performance time, and/or terms and conditions thereunder, shall be executed by the Client and STS as soon as practicable. STS, at its discretion, may suspend performance of its services until such an Amendment has been executed and, if such an Amendment is not agreed to within a reasonable time, STS may terminate this Agreement. In the event this Agreement is terminated pursuant to this Section, the Client shall pay STS for all services performed prior to termination and termination expenses as set forth in Section 15c of these General Conditions of Service.

SECTION 2: BILLINGS AND PAYMENTS

a. Payments for services and reimbursable expenses will be made on the basis set forth in the attached proposal. STS shall periodically submit invoices for services performed and expenses incurred and not previously billed. Payment is due upon receipt. For all amounts unpaid after 30 days from the invoice date, as set forth on STS's invoice form, the Client agrees to pay a finance charge of one and one-half percent (1-1/2%) per month, eighteen percent (18%) annually. The fees described in this agreement may be adjusted annually on the anniversary date of the effective date of this agreement.

b. The Client shall provide STS with a clear written statement within fifteen (15) days after receipt of the invoice of any objections to the invoice or any portion or element thereof. Failure to provide such a written statement shall constitute a waiver of any such objections and acceptance of the invoice as submitted.

c. The Client's obligation to pay for the services performed by STS under this Agreement shall not be reduced or in any way impaired by or because of the Client's inability to obtain financing, zoning, approval of governmental or regulatory agencies, or any other cause, reason, or contingency. No deduction shall be made from any invoice on account of penalty or liquidated damages nor will any other sums be withheld or set off from payments to STS. Client further agrees to pay STS any and all expenses incurred in recovering any delinquent amounts due, including, but not limited to reasonable attorney's fees, arbitration, or other dispute resolution costs, and all court costs.

d. If any subpoena or court order is served upon STS and/or any of its staff, subconsultants or subcontractors requiring presentation of documents or the appearance of STS's staff, subconsultants or subcontractors at a trial, deposition, or for other discovery purposes arising out of STS's services performed under this Agreement, Client will pay STS's fees (if any) applicable to STS's compliance with the subpoena or court order. Fees will be based on actual units used at the standard rates in effect at time of service upon STS of the subpoena or court order. Billings shall include time and expenses incurred gathering, organizing, duplicating documents, preparing to give testimony, travel, and testifying in deposition or trial.

SECTION 3: RIGHT OF ACCESS

a. If services to be provided under this Agreement require the agents, employees, or contractors of STS to enter onto the Project site, Client shall provide right-of-access to the site to STS, its employees, agents and contractors, to conduct the planned field observations or services.

b. If the scope of services includes, or is amended to include, the performance of exploratory borings or test pit excavations, Client will furnish to STS all diagrams, and other information in its possession or reasonably attainable by Client indicating the location and boundaries of the site and subsurface structures (pipes, tanks, cables, sewers, other utilities, etc.) in such detail as to permit identifying, in the field, boring/test pit locations which will avoid interferences with any subsurface structures. Client shall indemnify and hold STS harmless from liability on account of damages to subsurface structures or injury or loss arising from damage to subsurface structures, the locations of which are not indicated or are incorrectly indicated by the information provided by the Client.

c. STS reserves the right to deviate a reasonable distance from prescribed or selected exploratory boring or test pit locations.

d. STS shall take reasonable precautions to minimize damage to the site due to its operations, but STS has not included in its fee, and is not responsible for, the cost of restoration for any damage resulting from its operations. At the Client's request and for additional fee, STS will, to the extent reasonably practicable, restore the site to conditions substantially similar to those existing prior to STS's operations.

SECTION 4: SAFETY

a. It is understood and agreed that, with respect to Project site health and safety, STS is responsible solely for the safe performance by its field personnel of their activities in performance of the required services. It is expressly agreed that STS's professional services hereunder do not involve any responsibility for the protection and safety of persons on and about the Project nor is STS to review the adequacy of job safety on the Project. It is further understood and agreed, and not in limitation of the foregoing, that STS shall not be in charge of, and shall have no control or responsibility over any aspect of the erection, construction or use of any scaffolds, hoists, cranes, stays, ladders, supports, or other similar mechanical contrivances or safety devices as defined and interpreted under any structural work act or other statute, regulation, or ordinance relating in any way to Project safety.

b. Unless otherwise specifically provided in this Agreement, Client shall provide, at its expense, facilities and labor necessary to afford STS field personnel access to sampling, testing, or observation locations in conformance with federal, state, and local laws, ordinances, and regulations specifically, including, but not limited to regulations set forth in OSHA 29 CFR 1926.

c. If, in STS's opinion, its field personnel are unable to access required locations and perform the required services in conformance with federal, state, and local laws, ordinances and regulations due to Project site conditions or operations of other parties present on the Project site, STS may, at its discretion, suspend its services until such conditions or operations are brought into conformance with applicable laws, ordinances and regulations. If, within a reasonable time, operations or conditions are not in conformance with applicable laws, ordinances, and regulations, STS may, at its discretion, terminate this Agreement. In the event that the Agreement is terminated pursuant to this Section, the Client shall pay STS for services and termination expenses as set forth in Section 15 of this Agreement.

d. Current regulations promulgated by the Occupational Safety and Health Administration (OSHA) require that a "competent person" conduct inspections of excavations and review any supporting system if workers are to enter the excavations. See OSHA 29 CFR Part 1926 (Subpart P). Under the scope of work incorporated in this Agreement, STS does not provide and has not assumed any duties of inspection and/or monitoring of excavations required of the "competent person" under OSHA 29 CFR Part 1926 (Subpart P). STS has neither been assigned nor assumed the authority required of the "competent person" under OSHA 29 CFR Part 1926 (Subpart P).

SECTION 5: SAMPLES

a. Unless otherwise specifically provided in this Agreement or amendments thereto, STS reserves the right to discard samples immediately after testing. Upon request, the samples will be shipped (shipping charges collected) or stored at the rate indicated in the fee schedule attached.

SECTION 6: REPORTS AND OWNERSHIP OF DOCUMENTS

a. STS shall furnish up to six (6) copies of each report to Client. Additional copies shall be furnished at the rates specified in the fee schedule. With the exception of STS reports to Client, all documents, including original boring logs, field data, field notes, laboratory test data, calculations, and estimates are and remain the property of STS. Client agrees that all reports and other work product furnished to the Client not paid for in full will be returned upon demand and will not be used for any purpose, including, but not limited to design, construction, permits, or licensing.

SECTION 7: STANDARD OF CARE

a. STS represents that it will perform its services under this Agreement in conformance with the care and skill ordinarily exercised by reputable members of the professional engineering community practicing under similar conditions at the same time in the same or similar locality.

b. NO OTHER WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, AT COMMON LAW OR CREATED BY STATUTE, IS EXTENDED, MADE, OR INTENDED BY THE RENDITION OF CONSULTING SERVICES OR BY FURNISHING ORAL OR WRITTEN REPORTS OF THE FINDINGS MADE.

c. Any exploration, testing, surveys, and analysis associated with the work will be performed by STS for the Client's sole use to fulfill the purpose of this Agreement and STS is not responsible for interpretation by others of the information developed. The Client recognizes that subsurface conditions beneath the Project site may vary from those encountered in borings, surveys, or explorations and the information and recommendations developed by STS are based solely on the information available.

d. STS is not responsible for supervising, directing, controlling, or otherwise being in charge of the construction activities at the Project site; or supervising, directing, controlling or otherwise being in charge of the actual work of the contractor, its subcontractors, or other materialmen or service providers not engaged by STS.

SECTION 8: HAZARDOUS SUBSTANCES

a. Upon entering into this Agreement, the Client shall notify STS of all such hazardous substances which it knows or which it reasonably suspects are or may be present at or contiguous to the Project site or which may otherwise affect the services to be provided. Thereafter, such notification to STS shall be required as soon as practicable after the Client discovers either the presence of hazardous substances which were not previously disclosed, increased concentrations of previously disclosed hazardous substances, or facts or information which cause the Client to reasonably suspect the presence of any such hazardous substances. Hazardous substances shall include, but not be limited to, any substance which poses or may pose a present or potential hazard to human health or the environment whether contained in a product, material, by-product, waste, or sample and whether it exists in a solid, liquid, semi-solid, or gaseous form.

b. If all or any part of the scope of work is to be performed in the general vicinity of a facility or in an area where asbestos, dust, fumes, gas, noise, vibrations, or other particulate or nonparticulate matter is in the atmosphere where it raises a potential health hazard or nuisance to those working in the area of such conditions, Client shall immediately notify STS of such conditions, potential health hazard, or nuisance which it knows, should know, or reasonably suspects exists and, thereafter, STS is authorized by the Client to take all reasonable measures STS deems necessary to protect its employees against such possible health hazards or nuisance. The reasonable direct cost of such measures shall be borne by the Client.

c. Following any disclosure as set forth in the preceding paragraphs, or if any hazardous substances or conditions are discovered or reasonably suspected by STS after its services are undertaken, STS may, at its discretion, suspend its services until reasonable measures have been taken at the Client's expense to protect STS's employees from such hazardous substances or conditions. Whether or not STS suspends its services in whole or in part, the Client and STS agree that the scope of services, terms, and conditions, schedule, and the estimated fee or budget shall be adjusted in accordance with the disclosed information or condition, or STS may, at its discretion, terminate the Agreement. In the event that this Agreement is terminated pursuant to this Section, the Client shall pay STS for all services rendered prior to termination and all termination expenses as set forth in Section 15 of these General Conditions of Service.

d. In the event that services under this Agreement may involve or relate to hazardous substances, or constituents, including hazardous waste (as defined by federal, state, or local statutes, regulations or ordinances), whether or not involvement or relationship was contemplated at the time this Agreement was made or when services by STS began under this Agreement, the following conditions shall also be incorporated into the Agreement and be made applicable thereto:

   d.1. In the event that samples collected by or received by STS on behalf of the Client contain hazardous substances or constituents, including hazardous waste, STS will, after completion of testing and, at Client's expense, (1) return such samples to Client, or (2) upon written request and using a manifest signed by the Client as generator, release such samples to a carrier selected by the Client to be transported to a location selected by the Client for final disposal. The Client agrees to pay all costs associated with the storage, transport, and disposal of samples. The Client recognizes and agrees that STS is acting as a bailee and at no time assumes title to said samples or substances.

   d.2. All laboratory and field equipment contaminated in performing services under this Agreement which cannot be reasonably decontaminated shall become the property and responsibility of the Client. All such equipment shall be delivered to the Client or disposed of in a manner similar to that indicated for hazardous samples above. The Client agrees to pay the fair market value of any such equipment which cannot reasonably be decontaminated and all other costs associated with the storage, transport, and disposal of such equipment.

SECTION 9: CONSTRUCTION MONITORING SERVICES

a. "Construction Monitoring Services" is defined as services, furnished by STS to the Client, which are performed for the purpose of evaluating and/or documenting general conformance of construction operations or completed work with Project specifications, plans, and/or specific reports of the Project. Such services may include taking of tests or collecting samples of natural or manmade materials at various locations on a project site, and making visual observations related to earthwork, foundations, and/or materials. If the services to be provided by STS under this agreement include or are amended to include Construction Monitoring Services, the provisions of this Section 9 shall be an integral part of this agreement and applicable thereto.

b. The presence of STS field personnel will be for the purpose of providing the client with a professional service based on observations and testing of the work which is performed by a contractor, subcontractor, or other materialmen or service provider. Such services will only be those specifically requested by the Client and agreed to by STS. Discrepancies between construction operations or completed work and project requirements which are noted by STS field personnel will be referred to the Client, or the Client's representative, as designated prior to STS's involvement in the project.

c. It is understood and agreed by the Client that the observation and testing of natural and/or man-made materials by STS in no way implies a guarantee or warranty of the work of the contractor, subcontractor, or other materialmen or service providers, and the services rendered by STS will in no way excuse such contractor, subcontractor, or other materialmen or service providers from liability in the event of subsequently discovered defects, omissions, errors or other deficiencies in their work. The presence or absence of STS on the Project site will not affect any obligation of any contractor, subcontractor, or other materialmen or service providers to perform in accordance with the specifications and plans of the Project. The Client further understands that STS is not a quality assurance representative for any contractor, subcontractor, or other materialman or service provider on the Project.

d. The Client agrees to supply STS with specifications, plans, and other necessary material for the Project pertinent to providing its services.

e. Due to the nature of its services, observing and field testing the work of contractors, subcontractors, or materialmen or service providers on the Project, STS cannot always be responsible for the schedule or length of time its field personnel remain on the Project site. The time STS's field personnel spend on the Project site is dependent upon the schedule of the contractor, subcontractor or materialman, or service provider whose work they are observing and/or testing. STS shall make reasonable effort to utilize its time on the Project site judiciously, but the Client understands and agrees that any delays, cancellations, rescheduling, overtime or other construction activities that may alter the anticipated number of hours and the anticipated costs of STS on the Project site and that are beyond the control of STS field personnel are legitimate and chargeable time and will be invoiced at the rates designated in the attached fee schedules.

f. Part-time work is defined as Construction Monitoring Services provided by STS where its field personnel are on the Project less than five (5) working days per week or less than forty (40) hours per week, or both. It is agreed that the Client will furnish STS with a minimum of one working day's notice, or twenty-four (24) hours notice, whichever is greater, on any part-time work of STS if field personnel are requested. STS shall make reasonable effort to provide field personnel on all projects, but reserves the right to schedule its field personnel as it deems appropriate, including the scheduling of different field personnel from day to day on any given part-time project of STS. The Client agrees to inform STS of the anticipated services required by STS field personnel on any day, including but not restricted to the kind and number of tests to be required and the anticipated amount of time the field personnel will be required on the Project site.

g. The Client agrees that STS shall charge a minimum of four (4) hours for any part-time Construction Monitoring Services, regardless of the actual number of hours utilized. All field personnel charges will be made on a portal-to-portal basis. Mileage to and from the Project site will be billed at the rate designated in the attached fee schedules as will any office engineering time needed to review, evaluate or analyze the field data. All calls made by the Client or the Client's representative to cancel requested part-time STS field personnel must be received by STS in time for STS to notify field personnel before they leave for the Project site. STS will make reasonable effort to contact its field personnel as quickly as possible, but reserves the right to bill the Client the four-hour minimum charge in the event STS received a cancellation call too late for it to intercept the field personnel enroute to the Project site.

SECTION 10: OPINIONS OF COST

a. STS's opinions of probable total Project costs and Project construction costs, if any, provided as part of the services under this Agreement are made on the basis of STS's knowledge, experience, and qualifications and represent STS's judgment as an experienced and qualified professional engineer, familiar with the construction industry; but STS cannot and does not guarantee that proposals, bids, or actual total Project costs or Project construction costs will not vary from opinions of probable cost provided by STS.

SECTION 11: SHOP DRAWINGS

a. In the event that the scope of services includes review and approval of Shop Drawings or other data which contractor(s) are required to submit, STS's review and approval will be only for conformance with the design concept of the Project and for compliance with the information given in the Project plans and specifications and shall not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.

b. STS's review and approval of Shop Drawings or other data shall not relieve the contractor(s) from responsibility for any variation from the requirements of the plans and specifications unless the contractor(s) has, in writing, called STS's attention to each such variation at the time of submission and STS has given written approval of each such variation by a specific written notation incorporated into or accompanying the Shop Drawing or other data. Approval by STS will not relieve the contractor(s) from responsibility for errors or omissions in the Shop Drawings or other data.

c. STS will accept Shop Drawings or other data submittals only from the contractor(s) required by the Project contract documents to furnish the Shop Drawings or data. STS will reasonably promptly review and approve, or take other appropriate action in regard to, Shop Drawings or data properly submitted to STS.

SECTION 12: ALLOCATION OF RISK

a. IT IS AGREED THAT THE CLIENT'S MAXIMUM RECOVERY AGAINST STS FOR THE PROFESSIONAL SERVICES PERFORMED UNDER THIS AGREEMENT, WHETHER IN CONTRACT, TORT, OR OTHERWISE, IS $50,000 OR THE AMOUNT OF STS'S FEE, WHICHEVER IS GREATER. IT IS EXPRESSLY AGREED THAT THE CLIENT'S SOLE AND EXCLUSIVE REMEDY AGAINST STS FOR PROFESSIONAL SERVICES PERFORMED UNDER THIS AGREEMENT, WHETHER BASED IN CONTRACT, TORT OR OTHERWISE, IS THE AWARD OF DAMAGES NOT TO EXCEED THE STIPULATED $50,000 FIGURE, OR THE AMOUNT OF STS'S FEE, WHICHEVER IS GREATER. IN NO EVENT SHALL STS BE LIABLE, WHETHER IN CONTRACT, TORT, OR OTHERWISE, FOR CLIENT'S LOSS OF PROFITS, DELAY DAMAGES, OR FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL LOSS OR DAMAGE OF ANY NATURE ARISING AT ANYTIME OR FROM ANY CAUSE WHATSOEVER.

b. Documents, including but not limited to, technical reports, original boring logs, field data, field notes, laboratory test data, calculations, and estimates furnished to the Client or its agents pursuant to this Agreement are not intended or represented to be suitable for reuse by the Client or others on extensions of the Project or on any other project. Any reuse without STS's written consent will be at Client's sole risk and without liability or legal exposure to STS or to STS's contractor(s) and Client shall indemnify and hold harmless STS and STS's contractor(s) from all claims, damages, losses, and expenses including attorney's fees arising out of or resulting therefrom.

c. Under no circumstances shall STS be liable for extra work or other consequences due to changed conditions or for costs related to failure of the construction contractor or materialmen or service providers to install work in accordance with the plans and specifications.

d. If any claim, suit, or legal proceeding, including but not limited to arbitration or meditation, (collectively "claim") arising out of the services under this Agreement is asserted against STS by a person or entity who is not a party to this Agreement, Client agrees, at its sole cost and expense, to defend STS from and against any such claim, suit or legal proceeding. The Client's obligation hereunder includes, but is not limited to, the payment of attorney's fees, court costs, and expert and consulting expenses required for the proper and vigorous defense of STS.

d.1 In no event shall continuation of Client's obligation to defend STS, as stated above, be conditional upon STS's contributing any sums of money toward settlement of any claim. In the event STS is held liable for a greater than pro rata share of any common liability for damage or injury to person(s) or property by operation of law, Client agrees to indemnify STS for those damages awarded in excess of its pro rata share.

d.2 In the event it is adjudicated that the event and/or damages giving rise to the claim were caused in whole or in part by the negligence of STS, Client's obligation to indemnify STS for costs of defense shall be reduced by an amount proportionately equal to the share of damages attributable to STS's negligence. STS shall reimburse Client for such proportionate defense costs incurred by client in defending STS as required by this paragraph 12.d.

e. Notwithstanding any other provision of this Agreement, it is further agreed that to the fullest extent permitted by law the Client shall indemnify and hold harmless STS and its employees, agents, contractors and consultants from and against all claims, damages, losses and expenses, direct and indirect, or consequential damages, including but not limited to attorneys' fees and all Court, arbitration or other dispute resolution costs, arising out of, resulting from, or related to the presence and/or involvement of hazardous substances or constituents, including hazardous waste, at or contiguous to the Project site or contained in samples collected by or received by STS from the Project site. The indemnification set forth in this paragraph 12.e. extends to claims against STS which arise out of, are related to, or are based upon, the dispersal, discharge, escape, release, spillage or saturation of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids, gases or any other material, irritant, contaminant or pollution in or into the atmosphere, or on, onto, upon, in or into the surface or subsurface (a) soil, (b) water or watercourses, (c) objects, or (d) any tangible or intangible matter, whether such event or circumstances is sudden or not. Nothing in this Paragraph 12.e. is intended to indemnify, or shall be construed as indemnifying, STS with respect to claims, losses, expenses or damages to the extent caused by STS's own negligent acts or omissions.

SECTION 13: LIABILITY INSURANCE

a. STS represents that it and its agents, and consultants employed by it, is and are protected by Worker's Compensation insurance and that STS has coverage under liability insurance policies which STS deems reasonable and adequate. Upon request, STS shall furnish certificates of insurance to the Client evidencing the risks insured against, and the limits of liability thereunder. In the event the Client requires specific inclusions of coverage in addition to that obtained by STS, or increased limits of liability in STS's liability policies, the cost of such inclusions or increased limits shall be borne by the Client. Except as otherwise provided in Section 12 the Client agrees to limit the liability of STS to the limits of STS's insurance. STS shall not be responsible for claims, damages, losses and expenses arising out of or resulting from acts and/or omissions of the Client, its employees, agents, staff, consultants, contractors or subcontractors employed by it or by any other entity.

SECTION 14: DISPUTE RESOLUTION

a. All claims, disputes, controversies or matters in question arising out of, or relating to this Agreement or any breach thereof, including but not limited to disputes arising out of alleged design defects, breaches of contract, errors, omissions, or acts of professional negligence, (collectively "disputes") shall be submitted to mediation before and as a condition precedent to any other remedy. Upon written request by either party to this Agreement for mediation of any dispute, Client and STS shall select by mutual agreement a neutral mediator. Such selection shall be made within ten (10) calendar days of the date of receipt by the other party of the written request for mediation. In the event of failure to reach such agreement or in any instance when the selected mediator is unable or unwilling to serve and a replacement mediator cannot be agreed upon by Client and STS within ten (10) calendar days, a mediator shall be chosen as specified in the Construction Industry Mediation Rules of the American Arbitration Association then in effect.

b. If a dispute cannot be settled through mediation as set forth above, then such dispute shall be decided by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association then in effect. Demand for arbitration shall be made by either party within ten (10) calendar days following termination of mediation. The date of termination of mediation shall be the date of written notice of closing of mediation proceedings issued by the mediator to each of the parties. Demand for arbitration shall be made by filing notice of demand, in writing, with the other party and the American Arbitration Association. The award rendered, if any, by the arbitrator(s) shall be final and binding on both parties and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction.

c. Notwithstanding any other provisions of this Section 14, in no event shall a demand for mediation be made more than two (2) years from the date the party making demand knew or should have known of the dispute or six (6) years from the date of substantial completion of STS's participation in the Project, whichever date shall occur earlier.

d. All mediation or arbitration shall take place in Chicago, Illinois unless Client and STS agree otherwise. The fees of the mediator or arbitrator(s) and the costs of transcription and other costs incurred by the mediator or arbitrator(s) shall be apportioned equally between the parties.

SECTION 15: TERMINATION

a. This Agreement may be terminated by either party upon at least seven (7) days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party. Such termination shall not be effective if that substantial failure has been remedied before expiration of the period specified in the written notice. The only exceptions to this seven-day written notice condition are STS's rights to terminate this Agreement as set forth in Sections 1, 4 and 8 of the Agreement.

b. In addition, STS may terminate this Agreement if the Client suspends STS's services for more than sixty (60) consecutive days through no fault of STS.

c. If this Agreement is terminated, STS shall be paid for services performed prior to the termination date set forth in the notice plus termination expenses. Termination expenses shall include personnel and equipment rescheduling and re-assignment adjustments and all other related costs incurred directly attributable to termination.

SECTION 16: EMPLOYMENT

a. Client agrees that, prior to the completion of STS's services on the Project, Client and its officers, agents or employees shall neither (1) offer employment to STS's employees, (2) advise STS's employees of employment opportunities with Client, Client's parent or affiliate organization(s), if any, nor (3) inquire into employment satisfaction of STS's employees.

SECTION 17: INDEPENDENT CONTRACTOR

a. The relationship between the Client and STS created under this Agreement is that of principal and independent contractor. Neither the terms of this Agreement nor the performance thereof is intended to directly or indirectly benefit any person or entity not a party hereto and no such person or entity is intended to be or shall be construed as being, a third-party beneficiary of this Agreement unless specified by name herein or in an Amendment hereto, executed by STS's authorized representative.

SECTION 18: SEVERABILITY

a. In the event that any provision herein shall be deemed invalid or unenforceable, the other provisions hereof shall remain in full force and effect, and binding upon the parties hereto.

SECTION 19: SECTION HEADINGS

a. The heading or title of a section is provided for convenience and information and shall not serve to alter or affect the provisions included herein.

SECTION 20: SURVIVAL

a. All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating responsibility or liability between the Client and STS shall survive the completion of services and the termination of this Agreement.

SECTION 21: ASSIGNS

a. Neither the Client nor STS may delegate, assign, sublet or transfer its duties, responsibilities or interests in this Agreement without the written consent of the other party.

SECTION 22: CHOICE OF LAW

a. This Agreement shall be governed by the law of the State of Illinois.

SECTION 23: WRITTEN NOTICE

a. Written notice shall be deemed to have been duly served if delivered in person to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended, or if delivered at or sent by registered or certified mail to the last business address known to the party giving notice.

This certificate is executed by Liberty Mutual Insurance Group as respects such insurance as is afforded by those companies. BM0068

Certificate of Insurance

This certificate is issued as a matter of information only and confers no rights upon you the certificate holder. This certificate is not an insurance policy and does not amend, extend, or alter the coverage afforded by the policies listed below.

This is to certify that (Name and address of Insured)

STS ACQUISITION CO. DBA
STS CONSULTANTS, LTD
11425 W LAKE PARK DR STE 100
MILWAUKEE, WI 53224

Liberty Mutual

is, at the issue date of this certificate, insured by the Company under the policy(ies) listed below. The insurance afforded by the listed policy(ies) is subject to all their terms, exclusions and conditions and is not altered by any requirement, term or condition of any contract or other document with respect to which this certificate may be issued.

Expiration Type	Eff./Exp. Date(s)	Policy Number(s)	Limits of Liability	
Workers Compensation [ ] Continuous* [ ] Extended [X] Policy Term	07/01/2006 / 07/01/2007	WC2-141-434549-016	**Coverage afforded under WC law of the following states:** All States Except Monopolistic States	**Employers Liability** **Bodily Injury By Accident** $500,000 **Each Accident** **Bodily Injury By Disease** $500,000 **Policy Limit** **Bodily Injury By Disease** $500,000 **Each Person**
General Liability [ ] Claims Made [X] Occurrence **Retro Date**	07/01/2006 / 07/01/2007	TB2-141-434549-036	**General Aggregate-Other than Prod/Completed Operations** $2,000,000 **Products/Completed Operations Aggregate** $2,000,000 **Bodily Injury and Property Damage Liability** $1,000,000 **Per Occurrence** **Personal and Advertising Injury** $1,000,000 **Per Person / Organization** **Other Liability** FIRE $100,000 **Other Liability** MEDICAL $5,000	
Automobile Liability [X] Owned [X] Non-Owned [X] Hired	07/01/2006 / 07/01/2007	AS2-141-434549-026	**Each Accident - Single Limit - B. I. and P. D. Combined** $1,000,000 **Each Person** **Each Accident or Occurrence** **Each Accident or Occurrence**	
UMBRELLA/EXCESS **PROPERTY**	07/01/2006 / 07/01/2007 07/01/2006 / 07/01/2007	TH2-641-434549-046 YU2-K4L-434549-066	$ $5,000,000 $ $4,628,125 $ $	

COMMENTS

CERTIFICATE FOR INFORMATIONAL PURPOSES ONLY. BLANKET ADDITIONAL INSURED STATUS APPLIES ON GENERAL LIABILITY WHERE REQUIRED BY WRITTEN CONTRACT VIA CG2010 10/01. BLANKET ADDITIONAL INSURED STATUS APPLIES ON AUTO LIABILITY WHERE REQUIRED BY WRITTEN CONTRACT. WAIVER OF SUBROGATION IN FAVOR OF THE ADDITIONAL INSUREDS APPLIES WHERE REQUIRED BY WRITTEN CONTRACT ON GENERAL LIABILITY, AUTO AND WORKERS COMPENSATION. PER PROJECT AGGREGATE APPLIES. UMBRELLA POLICY IS FOLLOWING FORM.

*If the certificate expiration date is continuous or extended term, you will be notified if coverage is terminated or reduced before the certificate expiration date. However, you will not be notified annually of the continuation of coverage.

Special Notice - Ohio: Any person who, with intent to defraud or knowing that he / she is facilitating a fraud against an insurer, submits an application or files a claim containing a false or deceptive statement is guilty of insurance fraud.

Important information to Florida policyholders and certificate holders: in the event you have any questions or need information about this certificate for any reason, please contact your local sales producer, whose name and telephone number appears in the lower left corner of this certificate. The appropriate local sales office mailing address may also be obtained by calling this number.

Notice of cancellation: (not applicable unless a number of days is entered below). Before the stated expiration date the company will not cancel or reduce the insurance afforded under the above policies until at least 30 days notice of such cancellation has been mailed to:

Office : BROOKFIELD, WI Phone: 262-782-9500

Sharon Bannach

SHARON BANNACH

Authorized Representative

Certificate Holder:

FOR INFORMATIONAL PURPOSES ONLY
11425 W LAKE PARK DR
MILWAUKEE, WI 53224

Date Issued: 06/23/2006 **Prepared By:** GB

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - OWNERS, LESSEES OR CONTRACTORS - SCHEDULED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

COMMERICIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Where Required By Contract and including:

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

A. Section II - Who Is An Insured is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of your ongoing operations performed for that insured.

B. With respect to the insurance afforded to additional insureds, the following exclusion is added:

2. Exclusions

This insurance does not apply to "bodily injury" or "property damage" occurring after:

(1) All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be Performed by or on behalf of the additional insured(s) at the site of the covered operations has been completed; or

(2) That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

State of WIsconsin
Department of Natural Resources
PO Box 7921, Madison WI 53707-7921
dnr.wi.gov

DERF Site Investigation Bid Summary
Consultant Selection Cover Sheet

Notice: Use this form to notify the Department of Natural Resources of the consultant you are selecting to conduct a site investigation and to submit and summarize the bids required in the Dry Cleaner Environmental Response Fund (DERF) Program. This form is authorized under s. 292.65, Wis. Stats. and s. NR 169.23, Wis. Adm. Code. Completion of this form is mandatory for any person applying for DERF reimbursement. Persons who do not submit a completed form will not be eligible for reimbursement under DERF. Personal information will be used to manage the DERF program, and be made available to requesters under Wisconsin's Open Records laws (ss. 19.32-19.39, Wis. Stats.) and requirements.

Complete the following information and submit it to your DNR regional project manager. Copy this form as necessary.

Site Information

Site name: Express Dry Cleaners	Facility Name: 3921 North Main Street, Racine	BRRTS # 02-52-547631

Consultant Selected

Consultant Name: STS Consultants, Ltd.	Consultant Address: 11425 West Lake Park Drive, Milwaukee, WI 53224

Summary of Costs:

Consultant Name: STS Consultants, Ltd.	
Consulting costs:	
Drilling costs:	
Analytical costs:	
Miscellaneous costs:	
Total Costs:	

Consultant Name:	
Consulting costs:	
Drilling costs:	
Analytical costs:	
Miscellaneous costs:	
Total Costs:	

Justification for Selection:

Consultant Name:	
Consulting costs:	
Drilling costs:	
Analytical costs:	
Miscellaneous costs:	
Total Costs:	

Optional 4th bid information:

Consultant Name:	
Consulting costs:	
Drilling costs:	
Analytical costs:	
Miscellaneous costs:	
Total Costs:	

Applicant Information and Certification

I certify that the information contained above is true and correct to the best of my knowledge.

Applicant Name		Date	
Street Address	City	State	Zip Code
Signature			

Department Use Only

Project Manager Approval Signature	Phone Number	Date

If not approved, reason for non-approval:

DERF Site Investigation Bid Sheet
Consultant Bid Summary

Site Information

Site Name **EXPRESS DRY CLEANERS**

Consultant Name **STS CONSULTANTS, LTD.**	Applicant Name **EXPRESS DRY CLEANERS**

Bid Summary

Drilling Costs Total =	**$**	**8,065**
Analytical Costs Total =		**$3,630**
Consulting Costs Total =	**$**	**11,710**
Misc Costs Total =	**$**	**1,871**
Grand Total =	**$**	**25,276**

Consultant Signature	Date
Karen L. Blum	2/2/07

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

Consultant Name:
Site Name:
BRRTS #:
Date:

DERF Site Investigation Bid Sheet
Drilling Costs

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						
Watertable Wells	0 ft to 16 ft	4		64	$ 15	$ 960
Piezometer	0 ft to 30 ft	1		29.5	$ 15	$ 443
	___ ft to ___ ft					
	> ___ ft					
Decontamination Costs						$ 250
Mobilization Costs						$ 350
Auger Borings (continuous sampling)						
Abandonment	0 ft to 16 ft	4		66	5	$ 330
Blind Drilling	0 ft to 16 ft	1		16	12	$ 192
	___ ft to ___ ft					
	> ___ ft					
Decontamination Costs						
Mobilization Costs						
Auger Borings (specify split spoon sampling interval)						
Driling & Sampling (sample 2 feet every 2.5 feet)	0 ft to 16ft	7		112	14	$ 1,568
Driling & Sampling (sample 2 feet every 2.5 feet)	___ ft to ___ ft	1		30	14	$ 420
	___ ft to ___ ft					
	> ___ ft					
Decontamination Costs						
Mobilization Costs						
Direct Push Borings (per point)						
Sampling	<16 ft depth	5			$ 250	$ 1,250
Wells	___ ft - __ ft depth	2		32	$ 6.00	$ 192
	> ____ ft depth					
Decontamination Costs						$ 50
Mobilization Costs						$ 250
Well Development (if done by subcontractor)						
	Monitoring Wells					
	Piezometers					
	Recovery Wells					
Other						
Drums		8			$45/drum	$ 360
Flush Mount Covers (2-inch wells)		5			$175 each	$ 875
Flush Mount Covers (1-inch wells)		2			$ 100	$ 200
Drill Crew Per Diem		2.5			$ 150	$ 375
Total Drilling Costs						$ 8,065

Consultant Name:
Site Name:
BRRTS #:
Date:

DERF Site Investigation Bid Sheet
Analytical Costs

Parameter	WI Certified Lab			Field Test/Field Kit			Mobile Lab			
	$/ sample	# samples	Method Used	$/ sample	# samples	Method Used	$/Sample $/Day	# Samples # Days	Method Used	Total Costs
Solids Analysis										
VOCs	$ 70	26	8260							$1,820.00
TCLP										$0.00
RCRA Metals										$0.00
Duplicate Analyses										$0.00
Blank Analyses										$0.00
Other: (Specify)										$0.00
										$0.00
Water Analysis (low flow										
VOCs	$70	5								$350.00
Nitrate*										$0.00
Dissolved Oxygen*	0	7								$0.00
Temperature*	0	7								$0.00
Ferrous Iron*										$0.00
Sulfate*										$0.00
Sulfide*										$0.00
ORP*	0	7								$0.00
pH*	0	7								$0.00
TOC*										$0.00
Alkalinity*										$0.00
Chloride*										$0.00
Spec. Conductance*	0	7								$0.00
Ethene/Ethane/Methane*										$0.00
Hydrogen*										$0.00
Carbon Dioxide*										$0.00
RCRA Metals										$0.00
Duplicate Analyses	$ 70	1								$70.00
Blank Analyses	$ 70	1								$70.00
Other: (Specify)										$0.00
										$0.00
Air Analysis										
VOCs	$ 300	1	TO-15							$300.00
TCE										$0.00
PCE (minimum detection limit is <10 ppbv)										$0.00
Other: (Specify)										$0.00
										$0.00
Waste Analyses (soil/water)										
Protocol B	$ 950	1	Protocol B							$950.00
VOCs	$ 70	1	8260							$70.00
Miscellaneous (specify)										
										$0.00
										$0.00
Charge for Mobile Lab (indicate										
Total Analytical Costs										$3,630.00

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

Consultant Name:
Site Name:
BRRTS #:
Date:

DERF Site Investigation Bid Summary
Consultant Costs

		Hours/Task																		
Position (specify)	Hourly Rate	Workplan Development	Access	Receptor Survey	Waste Determination/Disposal	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)			Total Costs
Professional Staff																				
Associate	$ 140		1		2	3			1				1	3	4	1				$2,240.00
Technical Staff	$ 85		3		2	5	1	1			1	1	4	24	10	6				$4,930.00
Consultant	$ 105									4										$420.00
																				$0.00
Field Staff																				
Technician	$ 50					32			8	8	6	2								$2,800.00
																				$0.00
																				$0.00
																				$0.00
																				$0.00
																				$0.00
Office Support Staff																				
CAD	$ 60													2.5	2					$270.00
Support Staff	$ 50													14	4	3				$1,050.00
																				$0.00
																				$0.00
																				$0.00
Total Consulting Costs																				$11,710.00

Consultant Name:
Site Name:
BRRTS #:
Date:

DERF SIte Investigation Bid Summary Sheet
Miscellaneous Costs

Major Activity	Specifications	Commodity Unit (specify)	Unit Rate	Number of Units	Total Cost
IDW Disposal					
Soil and Purge Water	Non-Hazardous	Drum	$ 150	7	$ 1,050
	Hazardous				
Mobilization		Each	$ 150	1	$ 150
Equipment Rental (list and include shipping costs if applicable)					
Flame Ionization Detector		Day	$150	2	$300
Groundwater Field Instrument		Day	$40	1	$40
Field Supplies (list)					
Bailers		Each	$12	5	$60
Poly Tubing		foot	$1	200	$200
Silicon Tubing		foot	$4	10	$40
Surveying					
Personal Protection Equipment (list)					
Sample Shipping Costs					
Air Sample		Each	$25	1	$25
Other (specify)					
Ice		bag	$1.50	4	$6.00
Total Miscellaneous Costs					$1,871.00

Reminders: DERF does not reimburse for attorney, closure or GIS fees. Mileage and meals are also non-reimbursable. Also, costs to prepare a reimbursement application and discuss the application with the department are not reimburseable. No expedited