

**COMPETITIVE BID SOLICITATION
FIXED-PRICE DEFINED SCOPE OF WORK TO COMPLETE
ADDITIONAL SITE CHARACTERIZATION ACTIVITIES**

**Dandy Mini Mart #3
Route 6
Wysox Township, Bradford County, Pennsylvania
PADEP Facility ID # 08-14555; USTIF Claim # 2007-019(S)**

October 5, 2011

The Pennsylvania Underground Storage Tank Indemnification Fund (USTIF) has issued this Request for Bid (RFB) on behalf of the Claimant, Williams Oil Company, who hereafter is referred to as the Client or Solicitor to prepare and submit a fixed price proposal for a defined scope of work (SOW) to complete additional site characterization activities at the Dandy Mini Mart #3 store located in Wysox Township, Bradford County, PA.

Corrective action under Chapter 245 is being conducted in response to a confirmed petroleum release at the Dandy Mini Mart #3 property in February 2007. Chambers Environmental Group (CEG) submitted to the Pennsylvania Department of Environmental Protection (PADEP) a Site Characterization Report (SCR) in December 2007. CEG submitted an Additional SCR to the PADEP in December 2008. A second Additional SCR was submitted by CEG to the PADEP in March 2010. No Remedial Action Plan has been submitted to the PADEP.

The general SOW for this RFB Solicitation is to obtain access to off-site properties, replace destroyed monitoring wells, install additional monitoring wells to complete off-site groundwater plume delineation, advance soil borings to delineate impacts to soil, assess the potential for vapor intrusion, and prepare and submit an SCR in accordance with Pennsylvania Code Title 25, Chapter 245.310. Previous SCR submittals may be included by reference, but summary data tables should be comprehensive and include all characterization data gathered for the site including but not limited to soil and groundwater data.

The Solicitor, Williams Oil Company, Inc. (Williams Oil) has an open claim (claim number referenced above) with the USTIF and the corrective action work will be completed under this claim. Reimbursement of Solicitor-approved, reasonable, necessary, and appropriate costs up to claim limits for the continuing characterization corrective action work described in this RFB will be provided by the USTIF. Costs for work to complete site characterization, including costs for the completion of work described in this RFB, will be reimbursed by the USTIF at a rate of 100%. Later costs associated with site remediation following site characterization will be reimbursed at a proration of 50%.

Should your company elect to respond to this RFB Solicitation, one (1) copy of the signed bid package must be provided directly to the ICF Claims Handler at the address indicated in Section A. In addition to the one hard copy submittal, the bid package must also be submitted in electronic format (as a single file in Adobe PDF format) on a CD to be included with the hard copy bid package to the ICF International (ICF) Claims Handler. The complete electronic bid package, including attachments, must be provided as one PDF file on the CD. **The outside of the bid package must be clearly labeled with "BID – CLAIM # 2007-019(S)".** No bid

packages will be accepted via email. The ICF Claims Handler and the Technical Contact will assist¹ the Solicitor in evaluating the competitive bids received; however, it is the Solicitor who will ultimately select the successful bidder with whom it will negotiate a mutually agreeable contract.

The signed response to this RFB (both hard copy and electronic copy) must be provided as directed above no later than close of business (5 p.m. EST) on November 21, 2011. Bid evaluation will consider, among other factors, estimated total cost, unit costs, schedule, discussion of technical and regulatory approach, qualifications, and contract terms and conditions. The cost will be the most heavily weighted evaluation criteria. The Solicitor (via the Technical Contact) will inform the successful bidder by email. The unsuccessful bidders will be informed by email and by posting the name of the successful bidder on the USTIF's website, following the full execution of the Remediation Agreement by the Solicitor and the successful bidder.

A. SOLICITOR, ICF CLAIMS HANDLER, AND TECHNICAL CONTACT INFORMATION

<u>Solicitor</u>	<u>ICF Claims Handler</u>	<u>Technical Contact</u> ²
Mr. Terry Taylor Williams Oil Co., Inc. York Avenue North P.O. Box 207 Towanda, PA 18848	Ronald Moore ICF International, Inc. 4000 Vine Street Middletown, PA 17057 Phone: (800) 888-7843 Fax: (717) 944-8389 rmoore@icfi.com Cc: dcassel@icfi.com	Lawrence F. Roach, P.G. Groundwater Sciences Corporation 2601 Market Place Street Suite 310 Harrisburg, PA 17110 Phone: (717) 901-8184 Fax: (717) 657-1611 lroach@groundwatersciences.com

NOTE: Submitted bid responses are subject to Pennsylvania's Right-to-Know Law. All questions regarding this RFB Solicitation and the subject site conditions must be directed via e-mail to the Technical Contact identified above with the understanding that all questions and answers will be provided to all bidders. The email subject line must be "Dandy Mini Mart #3 2007-019(S) – RFB QUESTION". Bidders must neither contact nor discuss this RFB Solicitation with the Solicitor, USTIF, PADEP, or ICF unless approved by the Technical Contact. Bidders may discuss this RFB Solicitation with subcontractors and vendors to the extent required for preparing the bid response. **All questions must be received by close of business on November 11, 2011.**

B. ATTACHMENTS TO THIS RFB SOLICITATION

The following attachments have been included with this RFB to assist in bid preparation:

Attachment 1:	Previous Reports and Supporting Documents
Attachment 2:	Standard Bid Format
Attachment 3:	Standard Remediation Agreement

¹ This assistance is being provided on behalf of ICF who is the USTIF claims administrator.

² Subcontractor to ICF.

C. SITE SETTING AND BACKGROUND INFORMATION

The following figures, included in **Attachment 1**, have been prepared by the Technical Contact based on information provided by CEG and others and collected by the Technical Contact:

- Figure 1 – Site Location Map
- Figure 2 – Site Plan
- Figure 3 – Property Ownership Map
- Figure 4 – Shallow Soil Aquifer Benzene Concentration Contour Map, June 2010
- Figure 5 – Shallow Soil MTBE Concentration Contour Map, June 2010
- Figure 6 – Shallow Soil Naphthalene Concentration Contour Map, June 2010
- Figure 7 – Shallow Soil 1,2,4-Trimethylbenzene Concentration Contour Map, June 2010
- Figure 8 – Deep Soil Aquifer Benzene Concentration Contour Map, June 2010
- Figure 9 – Deep Soil MTBE Concentration Contour Map, June 2010
- Figure 10 – Deep Soil Naphthalene Concentration Contour Map, June 2010
- Figure 11 – Deep Soil 1,2,4-Trimethylbenzene Concentration Contour Map, June 2010
- Figure 12 – Shallow Soil Aquifer Groundwater Elevation Map, June 2010
- Figure 13 – Deep Soil Aquifer Groundwater Elevation Map, June 2010
- Figure 14 – Bedrock Groundwater Sampling Results for MTBE and Toluene
- Figure 15 – Soil Boring Location Map Showing Proposed Locations

The following information summarizes, and is derived from, relevant information provided in previous environmental reports, including the reports attached to this RFB. If there is any conflict between the summary provided herein and the source documents, the bidder should defer to the source documents.

Site Name/Address

The Dandy Mini Mart #3; Route 6, Wysox Township, Bradford County, Pennsylvania (Figure 1).

USTIF Eligibility

Following the documented release from the unleaded gasoline UST system in 2007, the Solicitor filed a claim with the USTIF and eligibility was granted under USTIF Claim No. 2007-019(S). The Solicitor has selected the Site Specific Standard (SSS) by lack of complete exposure pathway as the remedial goal to be pursued to obtain Relief from Liability (RfL) from the PADEP, and USTIF has agreed to 100% reimbursement of Solicitor-approved reasonable and necessary costs up to claim limits for the corrective action work described in this RFB.

Site Use Description

The site is currently an active retail petroleum dispensing facility and convenient store. A site plan showing pertinent features of the site and surrounding properties is included as Figure 2.

USTs and ASTs on Site

Currently, there is one 20,000-gallon and one 6,000-gallon unleaded gasoline underground storage tank (UST), one 10,000 on-road diesel UST, one 10,000-gallon off-road diesel UST, and one 1,000-gallon kerosene UST located on the Dandy Mini Mart property. There are no petroleum above ground storage tanks (ASTs) located on the Dandy Mini Mart #3 property.

Site Description

The site, located along the southern side of State Route 6 in Wysox, PA, has been an active retail petroleum dispensing facility for at least the last 30 or 40 years (Figure 1). Williams Oil acquired the property from United Refineries, who also used the property as a retail petroleum dispensing facility, in the early 1980's.

There is a one-story convenient store located on the Dandy Mini Mart #3 property. The petroleum dispensers are located beneath a canopy between the convenient store and State Route 6. The petroleum USTs are located to the southwest of the dispensers (Figure 2).

The property located immediately to the south of the Dandy Mini Mart #3 property was acquired by Williams Oil in 2010.

There are commercial and residential properties in the immediate area surrounding the Dandy Mini Mart #3 property. A restaurant (The Riverstone Inn), owned by Robert and Lawrence Fulmer is located immediately to the southwest and a newly constructed hotel, also owned by Robert and Lawrence Fulmer, is located immediately to the south of the Dandy Mini Mart #3. Commercial buildings, owned by Robert Reeves, are located immediately to the southeast of the Dandy Mini Mart #3. A natural food store (Jurnack's, Naturally) is located immediately to the east of the Dandy Mini Mart #3. Beyond the Riverstone Inn is Leisure Road and a residence (the former Chaffee Residence, currently owned by Scott Middendorf) lies beyond Leisure Road. The former Chaffee Residence is currently being used as a commercial property. Beyond the new hotel to the south is an unnamed road/drive and beyond that, a commercial building owned by Robert Reeves. Residential buildings are located across State Route 6 and to the east beyond the natural food store. A Property Ownership Map is included as Figure 3.

The site and surrounding properties are supplied by public sewer and private water supply wells. Public water is anticipated to be available to the Dandy Mini Mart #3 and the surrounding properties in 2012.

Current and Historical Constituents of Concern

The constituents of concern (COCs) at this site, for which a RfL will be necessary, are the substances on the PADEP's New Shortlist for unleaded gasoline (benzene, toluene, ethylbenzene, total xylenes, cumene, methyl tert-butyl ether (MTBE), naphthalene, 1,2,4-trimethylbenzene (124TMB), and 1,3,5-trimethylbenzene (135TMB)). Concentration contour maps showing dissolved concentrations of benzene, MTBE, naphthalene, and 124TMB in the shallow and deep soil aquifers are included as Figures 4 through 11.

Site Topography

The site is situated at approximately 750 feet above mean sea level (Figure 1). Topography is primarily flat across the site, sloping radially to the west, southwest, and south towards the Susquehanna River which flows in a meander that lies at approximately 700 feet above mean seal level. The Susquehanna lies approximately 1,000 feet to the southwest of the Dandy Mini Mart #3 property.

Site Geology

Fill was encountered up to five feet below grade in soil borings advanced by CEG. Soil from the surface (or below fill) was generally described in well logs as loamy sand or sandy loam. Deeper soil was generally more fine-grained than shallower soil. Thin gravel units and thin clay units were occasionally encountered in soil borings. Bedrock was not encountered in any soil borings, many of which were advanced up to 45 feet below grade. Bedrock wells typically encountered bedrock at approximately 100 feet below grade (fbg).

Site Hydrogeology

Based on water level measurements collected from the monitoring wells by CEG, depth-to-groundwater (water table) in the shallow soil aquifer ranges from approximately 12 to 19 fbg and depth-to-groundwater (potentiometric surface) in the deeper soil wells ranges from approximately 17 to 39 fbg. The shallow soil groundwater flow direction at the site is generally toward the southwest while the deep soil groundwater flow direction at the site is generally towards the south. Both the shallow and deep groundwater flow direction is towards the Susquehanna River which is located approximately 1,000 feet to the southwest of the Dandy Mini Mart #3 (refer to Figures 12 and 13 for shallow and deep soil aquifer groundwater elevation contour maps for June 2010).

Nature of Confirmed Releases and Subsequent Activities

The following information is based on documents submitted to the PADEP, some of which are included as attachments to this RFB, and work performed by the Technical Contact. The information associated with activities not conducted by Groundwater Sciences Corporation (GSC) has not been independently verified by ICF or the Technical Contact.

1984 Release

A release of unleaded gasoline was confirmed at the Dandy Mini Mart #3 facility in August 1984. Approximately 800 to 1,400 gallons of unleaded gasoline was released to the environment as a result of a leaking O-ring. The on-site water supply well and the water supply wells on the Riverstone Inn property and the former Chaffee property were affected as a result of the release. The former Chaffee residence well was replaced and a treatment system was installed on the Riverstone Inn water supply well. Characterization and remedial efforts with regard to the 1984 release included a test pit in the vicinity of the USTs, periodic operation and maintenance of the Riverstone Inn treatment system, monitoring well installation, and product recovery. Details on these characterization and remedial activities are limited and the original monitoring wells have been destroyed.

The PADEP conducted a follow-up investigation in May 2000. Analytical results of groundwater samples collected from the Riverstone Inn water supply well by the PADEP revealed concentrations of MTBE above the Used Aquifer Residential Statewide Health Standard Medium Specific Concentration (SHS MSC). In correspondence dated January 23, 2001 the PADEP required Williams Oil to perform an "interim remedial action" consisting of monitoring the water supplies of the former Chaffee residence, the Riverstone Inn, and the Dandy Mini Mart #3 on a quarterly basis for a period of one year to evaluate the persistence of the contamination. CEG conducted the quarterly sampling and submitted the sampling results to the PADEP. In correspondence dated October 31, 2001, the PADEP required Williams Oil to perform a site characterization as a result of the presence of MTBE in the sampled water supply wells that the PADEP considered to be the result of the 1984 release. CEG conducted a limited site investigation, which included the installation and sampling of monitoring wells MW-1S (shallow), MW-1D (deep), and MW-2 (deep), and presented the results in a Summary Status Report in January 2003. Based on the January 2003 Summary Status Report, the PADEP concluded that the Dandy Mini Mart #3 was likely the source of the contamination and in correspondence dated February 11, 2003, the PADEP required Williams Oil to complete a full site characterization.

In September 2003, CEG prepared an SCR for Williams Oil which included groundwater data from five monitoring wells installed at the Site (MW-1S, MW-1D, MW-2, and newly installed deep monitoring wells MW-3, and MW-4). No soil sampling data was presented in the SCR.

Although no SCR or RAP was approved by the PADEP, quarterly sampling data through 2006 was submitted to the PADEP in Remedial Action Progress Reports (RAPRs). In the RAPR dated July 2006, CEG states that a pump test was scheduled for the week of July 17, 2006 and a temporary discharge permit for the pump test was approved by the PADEP.

2007 Release

A second confirmed release, from the dispensers, occurred on February 1, 2007. During the initial inspection/investigation of the dispensers, soil beneath the dispensers was identified as stained and saturated with petroleum product. CEG was present during the dispenser repair and collected soil samples from the excavation performed to repair the dispenser(s). Concentrations of petroleum substances in the samples collected from the small excavation by CEG were greater than their respective SHS MSCs. The PADEP issued a Notice of Violation (NOV) on February 13, 2007 to Williams Oil.

CEG performed site characterization activities in response to the 2007 release that included the advancement and sampling of fifteen soil borings (SB-1 through SB-15), the installation of nine monitoring wells (shallow monitoring wells MW-5, MW-6, MW-7, MW-9, MW-10, and MW-11 and deep monitoring wells MW-8, MW-12, and MW-13), and performed a vapor intrusion evaluation. An SCR was submitted to the PADEP in December 2007. In correspondence dated January 23, 2008 the PADEP identified deficiencies and provided comments on the December 2007 SCR.

On February 6, 2008 CEG met the PADEP at the Dandy Mini Mart #3 to review the January 23, 2008 SCR deficiencies and comments. As a result of the site meeting, a work plan was formulated that included investigating the Dandy Mini Mart #3 water

supply well as a potential source of contamination between the shallow and deep aquifer, installing and sampling additional monitoring wells, aquifer testing, and the resubmission of the SCR. An Additional Site Characterization Work Plan, containing details of the additional proposed characterization activities, was submitted to ICF in correspondence dated March 5, 2008.

On August 18, 2008, CEG prepared a revised Additional Site Characterization Work Plan.

Since August 2007, three SCR extension requests were submitted to the PADEP. The third SCR extension request was approved in writing by the PADEP on June 4, 2008 in the form of a NOV. In light of the three extensions, in correspondence dated September 24, 2008, the PADEP issued an Administrative Order to Williams Oil requiring a definitive schedule to “complete all requirements and maintain protection for human health and the environment”.

On September 16, 2008 CEG collected fourteen soil samples from seven soil borings (SB-16 through SB-22) to horizontally and vertically delineate impacts to soil. On September 16 and 17, 2008 an aquifer pump test was conducted on monitoring well MW-9. Insufficient sustained yield prevented the test from being completed. Between September 22, and October 1, 2008 six shallow and deep well couplets were installed (MW-1SR/DR (replacement wells for MW-1S and MW-1D which were abandoned on December 5, 2008), MW-3S/D, MW-14S/D, MW-15S/D, MW-16S/D, and MW-17S/D). Monitoring well MW-3 was abandoned following the installation of MW-3S and MW-3D. Between November 3, and November 5, 2008 three additional shallow and deep well couplets were installed (MW-18S/D, MW-19S/D, and MW-20S/D).

On December 3, 2008 ten soil samples were collected from five soil borings based on the analytical results of the September 2008 soil sampling event.

In December 2008 CEG submitted an Additional SCR detailing the above mentioned activities. The December 2008 Additional SCR identified the need for soil gas or indoor air sampling, additional soil delineation, and offsite groundwater delineation to the east prior to the preparation of a RAP.

In correspondence dated January 12, 2009 the PADEP identified deficiencies and provided comments on the December 2008 Additional SCR. CEG prepared a work plan to address the deficiencies and comments provided by the PADEP and incorporate the recommendations made by GSC. The work plan, which included a geophysical survey, additional monitoring well installation, additional groundwater sampling, slug testing of select monitoring wells, and soil gas sampling was reviewed by ICF, GSC, and the PADEP.

On March 5, and 6, 2009 the geophysical survey of the Site was completed and a shallow and deep well couplet (MW-21S/D) was installed. On April 16, 2009 six soil gas sampling points were installed and sampled to evaluate vapor intrusion at the Dandy Mini Mart #3 convenient store and the Riverstone Inn. On April 23, 2009 slug testing was completed on monitoring wells MW-7, MW-8, MW-21S, and MW-21D. On May 15, 2009 a second soil gas sampling event occurred.

On October 16, 2009 CEG prepared a work plan to address the groundwater characterization delineation requirements and on November 11, and 12, 2009 a shallow and deep monitoring well couplet (MW-22S/D) was installed and one deep monitoring well (MW-23) was installed. Due to property line discrepancies, monitoring well MW-23 was inadvertently installed on the wrong property and was subsequently abandoned on December 21, 2009 at the request of the property owner (following the collection of two rounds of groundwater samples and a top-of-casing elevation survey).

In March 2010 an Additional SCR was submitted by CEG. In correspondence dated April 26, 2010 the PADEP identified deficiencies and provided comments on the March 2010 Additional SCR.

In response to ICF requesting GSC to facilitate the site characterization, GSC began contacting adjacent property owners (Robert Reeves and Lawrence Fulmer) in October 2010 to discuss off-site access for groundwater and soil delineation. Telephone conversations and site visits occurring in October and November 2010 revealed significant development of the properties adjacent to the Dandy Mini Mart #3. Specifically, Robert and Lawrence Fulmer (owners of the Riverstone Inn) were constructing a 40-unit hotel on their property to the south of Dandy Mini Mart #3 and Robert Reeves was constructing and leasing multiple buildings on his property located to the southeast of the Dandy Mini Mart #3 and his property to the south of the proposed hotel. Additionally, Robert Reeves was installing water supply wells for the newly constructed buildings on his properties. The excavation and construction activities associated with the new hotel resulted in the loss of several off-site monitoring wells.

In November and December 2010 and April 2011 GSC collected samples from the water supply wells associated with the new development. MTBE was detected above the SHS MSC in several of the water supply wells sampled. Toluene was also detected, but below the SHS MSC. Williams Oil is currently providing bottled water to the buildings located on Robert Reeves' property that require potable water. The new hotel is connected to the Riverstone Inn's water supply well and is treated with the existing granular activated carbon system (GAC). According to Stiffler, McGraw, and Associates of Towanda, PA, public water will be available (from Towanda) to the Dandy Mini Mart #3 and surrounding properties in 2012.

As shown on Figure 14, based on the laboratory analytical results from the groundwater samples collected from the off-site water supply wells by GSC, it appears that the toluene plume may be from an up-gradient source not related to the Dandy Mini Mart #3. Figure 14 has been presented to the PADEP as part of the SOW review, and the PADEP agrees that the toluene concentrations in bedrock groundwater may not be related to the 2007 release from the Dandy Mini Mart #3 but would like to review the SCR prior to making a decision.

Separate Phase Liquid

Separate Phase Liquid (SPL) was discovered at a thickness of 3.98 feet by CEG in MW-9 in December 2009. Since the discovery of SPL in MW-9, SPL thickness has ranged from 3.98 feet to undetectable. SPL is currently being manually removed by CEG when detected and passively removed between bailing using petroleum absorbent socks.

D. OBJECTIVE / SCOPE OF WORK

This RFB Solicitation is a defined SOW type where a specific SOW is presented to the bidders who prepare their bids on the basis of that scope. In the case of this RFB solicitation, the defined SOW has been reviewed and accepted by the PADEP. For the purposes of this SOW, the “Site” is defined as the Dandy Mini Mart #3 and all properties affected by the release from the Dandy Mini Mart #3 property. The SOW is designed to delineate the groundwater plume vertically and horizontally to the south and west of the Site, delineate impacts to soil, complete a soil vapor assessment for the Site, and submit an SCR. Following the completion of these activities to the satisfaction of the PADEP, the remaining corrective action activities necessary for the Solicitor to obtain RfL for the site will either be competitively bid, or the Solicitor may choose to retain the selected bidder for this RFB to complete the activities necessary to obtain RfL, that is, to “close” the Site.

The SOW has been prepared using the guidelines of Pennsylvania Code Title 25, Chapter 245 (The Storage Tank and Spill Prevention Program) and Chapter 250 (The Land Recycling Program). There are several key elements that must be completed in order for the approach outlined in this RFB to be successful. The critical elements and general sequence of events for completion of the work specified in this RFB are:

- Obtain off-site access;
- Completion of site characterization activities (installation, development, and sampling of groundwater monitoring wells, drilling and sampling of soil borings, and a vapor intrusion evaluation); and,
- Preparation of an SCR.

The submitted bid shall follow the task format outlined herein. Bids shall include a detailed description of the anticipated costs for each task including labor rates, time requirements, and equipment costs. A Standard Bid Format, to be completed and attached to the bid, is included as **Attachment 2**. The fixed-price cost for each of the tasks detailed below shall include all costs for preparation of any pertinent project guidance documents in accordance with Chapter 245 (e.g., health and safety plan, field sampling/analysis plan and quality assurance/quality control plan, etc.), for utility clearance (both coordination of PA One-Call and conducting physical utility clearance using soft dig techniques if deemed necessary, and project management, scheduling and project coordination time deemed necessary to complete each task.

Milestone A: Obtain Off-Site Access

Milestones B1 - B6: Six Months of GAC System OM&M and SPL Gauging and Removal

Milestones C1 - C2: Monitoring Well Installation and Development and Single Well Aquifer Testing

Milestone C1: Install and develop monitoring wells

Milestone C2: Perform single well aquifer testing

Milestone D: Licensed Professional Land Survey and Base Map Preparation

Milestones E1 - E4: Four Consecutive Quarters of Comprehensive Groundwater Gauging, Sampling, and Reporting

Milestone F: Soil Boring Installation and Sampling

Milestone G: Preparation and Submittal of Site Characterization Report

MILESTONE A: OBTAIN OFF-SITE ACCESS

Prior to installing the monitoring wells beyond the Dandy Mini Mart #3, the selected bidder shall obtain formal off-site access to the following properties where the off-site wells shall be installed:

- Riverstone Inn and New Hotel (Figure 3) – Owners are Robert and Lawrence Fulmer.
- Commercial Property containing Buildings 7, 8, 9, 10, 11, and 12 (Figure 3) – Owner is Robert Reeves
- Former Chaffee Residence (Figure 3) – Owner is Scott Middendorf

The Technical Contact has discussed the site characterization activities proposed in this RFB with the above-referenced property owners. The property owners have verbally agreed in principle to allow access to their properties for the execution of this SOW. Therefore, bidders should assume that off-site access to conduct the necessary site characterization activities will be granted without extended negotiation.

The selected bidder shall contact the above-referenced property owners to discuss the details and schedule of the activities to be conducted on each of the owner's properties and to prepare and execute written access agreements with these property owners as required at a fixed price.

MILESTONE B1 - B6: SIX MONTHS OF GAC SYSTEM OM&M AND SPL GAUGING AND REMOVAL

Following the execution of the above mentioned access agreements the selected bidder shall begin semi-monthly (twice per month) operation, maintenance, and monitoring (OM&M) on the GAC system located inside the Riverstone Inn that treats the water supplied to the Riverstone Inn and the New Hotel. The selected bidder shall schedule the OM&M events so that they occur at least 10 days apart and coordinate the events with the owner of the Riverstone Inn and the New Hotel so that the OM&M does not disrupt their business. For the purposes of this RFB, please assume that each OM&M event shall include a basic visual inspection of the treatment system and the collection of pre-, mid-, and post-carbon treatment samples from the GAC system, occur for a period of six months, and will not require carbon change-outs. All samples collected as part of Tasks B1-B6 shall be analyzed for the substances described in Section C by EPA Method 524.2 (drinking water method). In the event that the Riverstone Inn and the New Hotel are connected to public water during the aforementioned Task time period, all OM&M activities associated with Tasks B1-B6 shall cease.

Monitoring well MW-9 has recently contained measureable amounts of separate phase liquid (SPL). The successful bidder shall perform monthly gauging of SPL thickness (and removal if necessary) in MW-9. Prior to each SPL measurement, the bidder shall remove the petroleum absorbent sock installed in MW-9. The used petroleum absorbent

sock(s) shall be stored in a 55-gallon drum (SPL solids drum) to be located by the successful bidder on the Dandy Mini Mart #3 property in a location acceptable to the property owner for later disposal. In the event that greater than 0.25 feet of SPL is measured in MW-9 following the removal of the petroleum absorbent sock, the bidder shall remove the SPL using a peristaltic pump and associated tubing in a manner that minimizes the removal of groundwater. The SPL shall be stored in a separate 55-gallon drum (SPL drum) to be located by the successful bidder on the Dandy Mini Mart #3 property in a location acceptable to the property owner for later disposal. The tubing used to remove the SPL shall be disposed of in the SPL solids drum. Following the SPL measurement (and removal if necessary), the bidder shall install a new petroleum absorbent sock in the well. For the purposes of this RFB, please assume that the activities described in this Task shall occur for a period of six months.

MILESTONES C1 - C2: MONITORING WELL INSTALLATION AND DEVELOPMENT AND SINGLE WELL AQUIFER TESTING

Milestone C1: Install and Develop Monitoring Wells

This Task includes the installation and development of five shallow soil monitoring wells, eight deep soil monitoring wells, and one bedrock monitoring well. The locations of the proposed monitoring wells are shown on Figure 2.

The proposed shallow soil monitoring wells will replace the shallow soil monitoring wells that were destroyed during the construction of the New Hotel on the Fulmer property. The shallow soil monitoring wells shall be constructed in a manner similar to the original shallow monitoring wells. Five of the eight proposed deep soil monitoring wells will replace the deep soil monitoring wells that were destroyed during the construction of the New Hotel on the Fulmer property and three of the eight deep soil monitoring wells will be installed on the Reeves property to delineate the deep soil groundwater plumes. The deep soil monitoring wells shall be constructed in a manner similar to the original monitoring wells. The proposed bedrock monitoring well will serve as a bedrock groundwater delineation well. The PADEP has agreed in principle to allow the area water supply wells to be used as bedrock monitoring wells.

The successful bidder shall conduct continuous geological characterization (boring logs) and screening of soil from well borings using a photoionization detector (PID) (using headspace measurements). Continuous geological logs should be prepared by a Professional Geologist licensed in the Commonwealth for each boring using standard and consistent classification system procedures (i.e. Modified Burmister or USCS).

All monitoring wells shall be completed at the surface with a securable manhole, set in concrete flush with the ground surface. A locking, pressure fit, watertight cap shall be used to prevent the infiltration of surface runoff and rainwater and to restrict access by unauthorized individuals.

The proposed monitoring wells shall be completed in the following manner:

Shallow soil monitoring wells:

Proposed Shallow Monitoring Well	Total Depth (feet below grade)	Screen Interval (feet below grade)
MW-3SR	23	8 - 23
MW-16SR	23	8 - 23
MW-18SR	23	8 - 23
MW-19SR	25	10 - 25
MW-20SR	25	10 - 25

Deep Soil monitoring wells:

Proposed Deep Monitoring Well	Total Depth (feet below grade)	Screen Interval (feet below grade)
MW-3DR	40	25 - 40
MW-16DR	40	25 - 40
MW-18DR	40	25 - 40
MW-19DR	42	27 - 42
MW-20DR	42	27 - 42
MW-24D	40	25 – 40
MW-25D	40	25 – 40
MW-26D	40	25 - 40

Bedrock monitoring well:

Proposed Bedrock Monitoring Well	Total Depth (feet below grade)	Casing Depth (feet below grade)
MW-101B	Approximately 150	Approximately 110

Following the installation of the above-referenced wells, the selected bidder shall develop the newly installed wells in accordance with generally accepted practices as outlined in the PaDEP's Groundwater Monitoring Guidance Manual, dated December 1, 2001 (Document # 383-3000-001).

Upon completion of the above-referenced monitoring well installation and development, three groundwater monitoring well networks will exist at the Site. The three groundwater monitoring well networks are:

- Shallow Groundwater Monitoring Well Network: MW-1SR, MW-3SR, MW-5, MW-6, MW-7, MW-9, MW-11, MW-14S, MW-15S, MW-16SR, MW-18SR, MW-19SR, MW-20SR, MW-21S, and MW-22S.

- Deep Groundwater Monitoring Well Network: MW-1DR, MW-2, MW-3DR, MW-4, MW-8, MW-12, MW-13, MW-14D, MW-15D, MW-16DR, MW-18DR, MW-19DR, MW-20DR, MW-21D, MW-22D, MW-24D, MW-25D, and MW-26D.
- Bedrock Groundwater Monitoring Well Network: New Chaffee Supply Well, Dandy Mini Mart #3 Water Supply Well, Reeves 7, Reeves 9, Reeves 10, Reeves 12, and MW-101B, and Riverstone Inn Supply Well, Old Well and Rear Well.

Milestone C2: Perform Single Well Aquifer Testing

Following the installation and development of the above-mentioned monitoring wells the successful bidder shall conduct single well hydraulic conductivity testing (“slug tests”) Both rising head and falling head tests should be performed in accordance with standard industry practices and applicable guidance on monitoring wells MW-3SR, MW-20SR, MW-18DR, and MW-19DR. The aquifer test data should be analyzed by a Professional Geologist licensed in the Commonwealth using standard industry practices and applicable guidance.

MILESTONE D: Licensed Professional Land Survey and Base Map Preparation

The successful bidder shall conduct a professional survey of the site by a Pennsylvania-licensed land surveyor. The survey should include all principal site features (e.g., buildings, property boundaries, dispensers, paved areas, gravel and or concrete areas, conveyance lines (if known), soil borings, and groundwater monitoring wells, etc). The base map shall show uses of adjoining properties and include the locations and elevations of soil borings and the tops of casing of the monitoring wells. Please note that Butler Land Surveying, LLC of Little Meadows, PA has recently conducted a survey of the area as part of the planning for the New Hotel.

MILESTONES E1 - E4: Four Consecutive Quarters of Comprehensive Groundwater Gauging, Sampling, and Reporting

The successful bidder shall conduct four consecutive comprehensive quarters of groundwater elevation gauging and sampling following the installation and development of the monitoring wells described in Task C1.

Prior to sample collection, the selected bidder shall gauge all the wells in the three well networks (described below). Depth-to-water measurements shall be completed using a probe capable of distinguishing water and/or the presence or absence of SPL to the nearest 0.01 feet. The depth to water shall be recorded and then used to determine the water level elevations within each well. The groundwater elevations in wells that contain SPL shall be corrected for product thickness.

Each of the four sampling events described in this Milestone shall include:

- Shallow Groundwater Monitoring Well Network: MW-1SR, MW-3SR, MW-5, MW-6, MW-7, MW-9, MW-11, MW-14S, MW-15S, MW-16SR, MW-18SR, MW-19SR, MW-20SR, MW-21S, and MW-22S.

- Deep Groundwater Monitoring Well Network: MW-1DR, MW-2, MW-3DR, MW-4, MW-8, MW-12, MW-13, MW-14D, MW-15D, MW-16DR, MW-18DR, MW-19DR, MW-20DR, MW-21D, MW-22D, MW-24D, MW-25D, and MW-26D.
- Bedrock Groundwater Monitoring Well Network: New Chaffee Supply Well, Dandy Mini Mart #3 Water Supply Well, Reeves 7, Reeves 9, Reeves 10, Reeves 12, and MW-101B, and Riverstone Inn Supply Well (and GAC system), Old Well and Rear Well,.

Samples collected from the monitoring wells with the prefix “MW-“ shall be analyzed for the substances described in Section C (Current and Historical Constituents of Concern) by EPA Method 8260B by a PADEP-certified laboratory. These wells are:

- MW-1SR, MW-3SR, MW-5, MW-6, MW-7, MW-9, MW-11, MW-14S, MW-15S, MW-16SR, MW-18SR, MW-19SR, MW-20SR, MW-21S, MW-22S, MW-1DR, MW-2, MW-3DR, MW-4, MW-8, MW-12, MW-13, MW-14D, MW-15D, MW-16DR, MW-18DR, MW-19DR, MW-20DR, MW-21D, MW-22D, MW-24D, MW-25D, MW-26D, and MW-101B

Samples collected from the wells without the prefix “MW-“ (i.e., water supply wells) shall be analyzed for the substances described in Section C (Current and Historical Constituents of Concern) by EPA Method 524.2 by a PADEP-certified laboratory. These wells are:

- New Chaffee Supply Well, Dandy Mini Mart #3 Water Supply Well, Reeves 7, Reeves 9, Reeves 10, and Reeves 12, and Riverstone Inn Supply Well (and GAC system), Old Well and Rear Well,.

Groundwater elevation gauging, purging, sampling, and analysis shall be conducted in accordance with generally accepted practices as outlined in the PaDEP’s Groundwater Monitoring Guidance Manual, dated December 1, 2001 (Document # 383-3000-001).

Following each of the comprehensive quarterly sampling events, the successful bidder shall prepare quarterly Site Characterization Progress Reports for submission to the PADEP. Each quarterly Site Characterization Progress Report shall include a description of the tasks performed and observations made during the site visit(s), a groundwater elevation data table, a groundwater chemistry data table, and figures showing groundwater elevations and potentiometric surface maps for each of the three well sets and dissolved-phase MTBE plume maps for each well set. The first Site Characterization Progress Report shall include well logs for the newly installed groundwater monitoring wells and the professional survey described in Milestone D. ICF and the Technical Contact shall be copied on each of the quarterly Site Characterization Progress Reports.

MILESTONE F: Soil Boring Installation and Sampling

Soil boring installation and soil sampling shall be conducted to delineate the impacts to soil on the Dandy Mini Mart #3 property and the property immediately south of the

Dandy Mini Mart #3 that is owned by Randy and Nancy Williams (the owners of the Dandy Mini Mart #3 property). Soil samples collected from historical soil borings contained concentrations of substances listed on the PADEP unleaded gasoline short list above the SHS MSCs (SB-5, SB-7, SB-8, SB-11, SB-16, SB-17, SB-18, SB-19, SB-24, SB-26, SB-27, and SB-28; Figure 15).

For the purposes of this RFB, please assume that eight soil borings (SB-101 through SB-108, Figure 15) shall be advanced. The borings should be advanced to approximately 24 feet below grade (fbg) and continuous geological logs should be prepared by a Professional Geologist licensed in the Commonwealth for each boring using the same standard and consistent classification system procedure (i.e., Modified Burmister or USCS) used during the installation of the monitoring wells described in Task C. Soil samples should be screened at two-foot intervals with a PID (using headspace measurements).

For each soil boring, a minimum of two discrete soil samples should be collected. Based on historical sampling data (included in **Attachment 1**), it is anticipated that the soil samples will be collected from between 16 fbg and 20 fbg. Each sample should be collected from:

- A depth interval with a PID response significantly greater than the typical reading for that boring and that has a PID response greater than 100 ppm (if present), and/or
- A depth coincident with the water table

Assume for the purpose of this RFB, that sixteen soil samples will be collected (2 soil samples from each of the 8 soil borings). Soil samples will be collected in laboratory-provided containers in accordance with EPA Method 5035 and analyzed for the substances described in Section C (Current and Historical Constituents of Concern) by EPA Method SW846 8260 by a PADEP-certified laboratory.

In addition to the petroleum analytical samples, representative discrete soil samples should be collected and conveyed to a laboratory for grain size analysis including quantification of silt and clay content and fraction organic carbon. Assume for the purpose of this RFB, that four soil samples will be collected and analyzed based on the stratigraphy and soil types observed during the soil sampling.

MILESTONE G: PREPARATION AND SUBMITTAL OF SITE CHARACTERIZATION REPORT

The selected bidder shall prepare a SCR in accordance with 25 Pa Code §245.310. The SCR must be a stand alone document with comprehensive data tables and figures. All files used in the preparation of this RFB, including CAD files, will be available to the successful bidder. The bidder may include by reference previous SCRs and other original data in the bidder-prepared SCR. The selected bidder shall prepare the SCR in draft form for review and comment by the Solicitor and the USTIF. The bidders' schedules shall provide two weeks for this review. The selected bidder shall address all of the comments received by the Solicitor and the USTIF before submission to the PADEP.

The selected bidder shall prepare a SCR that documents and discusses the data obtained and the conclusions drawn from the completion of the work contained within this RFB. Tables, figures, and other attachments that support the text shall include but not be limited to the following:

- Updated comprehensive historical groundwater elevation data;
- Updated comprehensive historical groundwater analytical data;
- Site map (showing site boundaries and pertinent site features);
- Monitoring well and soil boring location maps (showing existing and new locations);
- Soil and bedrock groundwater head potential contour maps for each comprehensive sampling round for all three well sets;
- Separate shallow soil, deep soil, and/or bedrock groundwater isoconcentration contour (plume) maps for each constituent found to be above the SHS MSC (for each comprehensive sampling round);
- Laboratory analytical reports for groundwater and soil with chains of custody and field sampling documentation;
- Soil boring logs for new soil borings and well construction logs for new groundwater monitoring wells; and
- Evaluate vapor intrusion for all affected properties. Although the potential for vapor intrusion on the Dandy Mini Mart #3 property and around the Riverstone Inn has been evaluated by CEG, a vapor intrusion assessment must be conducted to determine whether the potential for a complete exposure pathway for vapor intrusion exists for any other occupied building (e.g., former Chaffee Residence, New Hotel, etc.) by comparing the soil and groundwater data collected as part of the SOW to the PADEP's Vapor Intrusion Guidance; and
- Conduct a receptor survey for potential future remedial actions. The successful bidder shall perform the following tasks:
 1. Review the PA Groundwater Information System (PAGWIS) records available from the PA Topographic and Geologic Survey website. This task shall include plotting all recorded wells within a ½-mile radius of the Site on a map and including a copy of the database records for that search distance in an appendix to the SCR, and
 2. Perform a Pennsylvania Natural Diversity Inventory (PNDI) environmental review to evaluate for the presence of special concern species and resources. This review can be performed over the internet at <http://www.gis.dcnr.pa.gov.us/hqis-er/Login.aspx>.

ADDITIONAL INFORMATION

In addition to the specific tasks listed above, the selected consultant shall also:

- Complete necessary, reasonable, and appropriate project planning and management activities until the SOW specified in the executed Remediation Agreement has been completed. Such activities would be expected to include client communications/updates, meetings, record keeping, subcontracting, personnel and subcontractor management, quality assurance/quality control, scheduling, and other activities. Project planning and management activities will also include preparing and implementing any plans required by regulations or

that may be necessary and appropriate to complete the SOW. This may include health and safety plans, waste management plans, field sampling and analysis plans, and/or access agreements. Project management costs shall be included in the fixed prices quoted for Milestones A through G, as appropriate.

- Be responsible for coordinating, managing, and completing the proper management, characterization, handling, treatment, and/or disposal of all investigation-derived wastes in accordance with standard industry practices and applicable laws, regulations, guidance and PADEP directives. Include these costs in Milestones B1 - B6, C1, E1 - E4, and F as appropriate. Waste handling documentation shall be maintained and provided to the Solicitor upon request and shall be included as an appendix to the SCR.
- Be responsible for providing the Solicitor and adjacent property owners with adequate advance notice prior to each visit to the property. The purpose of this notification is to coordinate appropriate access to the areas of the Site necessary to complete the SOW.

All work shall be conducted in accordance with standard industry practices, and be consistent with the applicable PADEP laws, regulations, and guidelines.

Each bidder should carefully review the existing site information provided in the attachments to this RFB and seek out other appropriate sources of information to develop a cost estimate and schedule for the SOW. There is no prequalification process for bidding. Therefore, bids that demonstrate an understanding of existing site information and standard industry practices will be regarded as responsive to this solicitation.

E. TYPE OF CONTRACT/PRICING

The Solicitor wishes to execute a mutually agreeable Fixed-Price Defined SOW contract (Remediation Agreement). A Standard Remediation Agreement is included as **Attachment 3** to this RFB Solicitation. This standard agreement has been previously employed by other Solicitors on other USTIF-funded claims. The bidder must identify in the bid response and document any modifications that they wish to propose to the Remediation Agreement language in **Attachment 3** other than obvious modifications to fit this RFB (e.g., names and dates). The number and scope of any modifications to the standard agreement will be one of the criteria used to evaluate the bid. **Any bid response that does not clearly and unambiguously state whether the bidder accepts the Remediation Agreement language in Attachment 3 "as is", or that does not provide a cross-referenced list of requested changes to this agreement, will be considered non-responsive.** This statement should be made in a Section entitled "Remediation Agreement". Any proposed changes to the agreement should be specified in the bid response, however, these changes will need to be reviewed and agreed upon by both the Solicitor and the USTIF.

The Remediation Agreement fixed costs shall be based on unit prices for labor, equipment, materials, subcontractors/vendors and other direct costs. The total cost quoted by the selected bidder will be the maximum amount to be paid by the Solicitor unless a change in scope is authorized and determined to be reasonable and necessary. There may be deviations from and modifications to this SOW during the project. The Remediation Agreement states that any significant changes to the SOW will require approval by the Solicitor, USTIF, and PADEP.

The bidder shall provide its bid using the Standard Bid Format included as **Attachment 2** with descriptions for each task provided in the body of the bid document. In addition to **Attachment 2**, the bidder shall provide a unit rate schedule that will be used for any out-of-scope work on this project.

The selected bidder's work under the USTIF claim will be subject to ongoing review by the Solicitor and USTIF or its representatives to assess whether the work has been completed and the associated incurred costs are reasonable and necessary.

In order to facilitate USTIF's review and reimbursement of invoices submitted under this claim, the Solicitor requires that project costs be invoiced by the milestone tasks identified in the bid. The standard practice of tracking total cumulative costs by bid task will also be required to facilitate invoice review.

Each bid package received will be assumed to be valid for a period of up to 120 days after receipt unless otherwise noted. The costs quoted in the bid and the rate schedule will be assumed to be valid for the contract.

F. BID RESPONSE DOCUMENT

Each bid response document must include at least the following:

1. Demonstration of the bidder's understanding of the site information provided in this RFB, standard industry practices, and objectives of the project.
2. Fixed price bid pricing using the standardized format in **Attachment 2** and a unit rate schedule for any out-of-scope work. The following information relating to the bid pricing should be included as additional sheets in **Attachment 2** or discussed in the body of the bid document:
 - a. The bidder's proposed unit cost rates for each expected labor category, subcontractors, other direct costs, and equipment;
 - b. The bidder's proposed markup on other direct costs and subcontractors (if any);
 - c. The bidder's estimated total cost by task consistent with the proposed SOW identifying all level-of-effort and costing assumptions.
3. Documentation of the bidder's level of insurance consistent with the levels listed in **Attachment 3**³.
4. The names and brief resumes of the proposed project team for the key project staff, including the proposed Professional Geologist of Record who will be responsible for overseeing the work and applying a professional seal to the project deliverables.
5. Responses to the following specific questions:

³ The selected bidder agrees and shall submit evidence to the Solicitor before beginning work that bidder has procured and will maintain Workers Compensation; commercial general and contractual liability; commercial automobile liability; and professional liability insurance commensurate with the level stated in the Remediation Agreement and commensurate with industry standards for the work to be performed.

- a. Does your company employ a Pennsylvania-licensed Professional Geologist that is designated as the proposed project manager? How many years of experience does this person have?
 - b. How many Chapter 245 projects is your company currently consultant for in the PADEP Northcentral Region of Pennsylvania? Please list up to five projects.
 - c. How many Chapter 245 Corrective Action projects involving an approved SCR, RAP and RACR in the State has your company and/or the Pennsylvania-licensed Professional Geologist closed (i.e., obtained RfL from the PaDEP) using any standard?
 - d. Has your firm ever been a party to a terminated USTIF-funded Fixed-Price (FP) or Pay-for-Performance (PFP) contract without attaining all of the Milestones? If so, please explain, including whether the conditions of the FP or PFP contract were met.
6. Sufficient description of subcontractor involvement by task.
 7. Detailed schedule of activities for completing the proposed SOW.
 8. Description of how the Solicitor, ICF and the USTIF will be kept informed as to project progress and developments, and how the Solicitor (or designee) will be informed of and participate in evaluating technical issues that may arise during this project.
 9. Key assumptions made in formulating the proposed cost estimate. The use of overly narrow assumptions will negatively impact the bid.
 10. Exceptions or special conditions applicable to the proposed SOW.
 11. Quotations from major subcontractors.

G. MANDATORY SITE VISIT

THERE WILL BE A MANDATORY SITE MEETING ON OCTOBER 25, 2011. The Solicitor, the Technical Contact, or their designee will be at the site between 11:00 AM and 1:00 PM to answer questions and conduct a site tour for one participant per firm. This meeting is mandatory for all bidders – no exceptions. This meeting will allow each bidding firm to inspect the site and evaluate site conditions. Any firm that does not attend this mandatory pre-bid site meeting will not be eligible to submit a bid response. **A CONFIRMATION OF YOUR INTENT TO ATTEND THIS MEETING IS REQUESTED TO BE PROVIDED TO THE TECHNICAL CONTACT VIA E-MAIL BY OCTOBER 21, 2011 WITH THE SUBJECT “DANDY MINI MART 2007-019(S) – SITE MEETING ATTENDANCE CONFIRMATION”.** The name and contact information of the company participant should be included in the body of the e-mail.