COMPETITIVE BID SOLICITATION FOR REMEDIAL ACTION PLAN FINAL DESIGN, IMPLEMENTATION, OPERATION AND MAINTENANCE, ATTAINMENT SAMPLING, AND SITE CLOSURE ACTIVITIES

SHEETZ, INC. STORE #159
315 WATER STREET
CONNEAUT LAKE, CRAWFORD COUNTY, PENNSYLVANIA

PADEP FACILITY ID #20-31866
PAUSTIF CLAIM #2008-131(M)

October 11, 2011

This Request for Bid (RFB) Solicitation has been issued by the Pennsylvania Underground Storage Tank Indemnification Fund (PAUSTIF or "Fund") on behalf of the Claimant, Sheetz, Inc., who hereafter is referred to as the Client or Solicitor. In general, this RFB references a scope of work (SOW) for implementing a Remedial Action Plan (RAP) to address contamination on the current retail gasoline sales facility located at 315 Water Street in Conneaut Lake, Pennsylvania ("Property") and the off-Property impacts (together, "Site"). The SOW includes installing a remedial system and operating the system over three years with the goal of cleaning up the contaminated media to meet the Pennsylvania Department of Environmental Protection (PADEP) Act 2 Statewide Health Standard (SHS) for a used aquifer in a residential setting.

The SOW Tasks (described below) will be embodied in both a Fixed Price Agreement (see Attachment 2) and in the Solicitor's standard Master Services Agreement (see Attachment 2). In other words, **the selected bidder will need to execute both contract documents** with the Solicitor. Although it is not a party to either agreement, the Fund will reimburse 100 percent of the reasonable, necessary, and appropriate costs incurred consistent with the Payment Schedule specified in Section 4 below and as incorporated into the signed Fixed Price Agreement.

Work elements (tasks) of this solicitation are listed below. Subsequent paragraphs of this Solicitation present the more detailed and defined SOW along with a request for a written approach, schedule, and **firm fixed-price and performance-incentivized unit price** bid to complete the SOW as follows:

Task 1 – Remediation System Final Design and Equipment Purchase

Task 2 – Site Installation Work

Task 3 – Final Connections and Start-up / Trouble-shoot Remediation

Task 4 – Groundwater Monitoring / Reporting

Task 5 – Remediation System Operation & Maintenance

Optional Task 6 – Remediation System / Operational Enhancements

Task 7 – Soil Attainment Sampling

Task 8 – Groundwater Attainment Monitoring

Task 9 – Prepare and Issue the Remedial Action Completion Report

Task 10 – Site Closure / Restoration Activities

This RFB contains both fixed-price and performance-incentivized unit price elements. The Solicitor and PAUSTIF are using this hybrid RFB / contracting approach to financially encourage the successful bidder to **maximize the efficiency and remedial effectiveness of the system to be installed and operated at the Site**. To achieve this end, the successful bidder will be reimbursed on a fixed-price basis for final design, installation, start-up, quarterly groundwater monitoring and reporting, attainment sampling, and Site closure activities. Costs for operating and maintaining (O&M) the remediation system (Task 5) will be reimbursed based on progress achieved in remediating on-Property and off-Property groundwater. This bid solicitation is intended to promote creativity and innovation by the successful bidder who would be financially incentivized to identify better and more effective ways of continually optimizing the remedial system to provide the most efficient treatment for groundwater contamination over the contract O&M period (3 full years of O&M). **This approach provides financial encouragement to bidders implementing capital and operational improvements upfront and throughout the contract as a means of maximizing groundwater cleanup progress.** This RFB invites bidders to propose complementary remedial technologies and/or O&M enhancements (Optional Task 6) to augment the remediation system / approach described in the RAP in order to maintain maximum cleanup progress through the contract period. Such augmentations could prove useful, for example, in addressing groundwater impacts near MW-13 which is located off-Property and is currently exhibiting the lowest rate of groundwater contaminant decline.

Bidders are expected to carefully evaluate the information provided in and with this RFB to formulate a proposed cost-effective approach to maximize use of the RAP–approved groundwater remediation system and to determine what, if any, enhancements the bidders propose to provide the most cost effective cleanup. Some bidders may see this objective as best achieved by concentrating on improved / more effective system operation & maintenance (O&M) and making few enhancements or augmentations to the RAP designed remedial technology/ approach. Other bidders may choose to enhance or augment the RAP prescribed remedial approach while also concentrating on improvements to system O&M. Whatever the approach, the Solicitor and PAUSTIF will reimburse these capital and O&M costs on a performance-incentivized basis consistent with the selected bidder's bid and as further described in Section 4.

Please note that a bidder's response to this RFB Solicitation Package means it has accepted all the contractual terms and SOW requirements (for example, but not limited to, any report submittal deadlines) unless explicitly stated to the contrary in the bid response. However, bidders are still expected to describe their approach to completing the SOW in full and in detail.

Should your company elect to respond to this RFB Solicitation, one copy of the signed bid package must be provided directly to the Funds' third-party administrator, ICF International (ICF), at the address and to the attention of the person identified in Section 1 below. In addition to this one hard copy submittal, the complete bid response must be submitted to ICF electronically (one electronic file in Adobe PDF format) on a compact disk (CD) to be included with the hard copy bid response. ***The outside of the bid response package must be clearly marked and labeled with "Bid – Claim #2008-131 (M)***."

Please note that **the bid response (hard copy and digital version) is to be sent only to ICF** who will be responsible for opening the bids and providing copies to the Technical Contact and the Solicitor. No bid responses will be opened for review until the due date and time elapses.

The signed bid package (hard copy and electronic copy) sent to ICF must arrive no later than close of business (5 p.m.) on November 4, 2011. Please note that if your bid response is not received by ICF by this due date and time, it will not be considered, i.e., only those bid responses received by the specified due date and time from those bidders who also attended the mandatory pre-bid Site visit (see Section 6) will be considered.

Each bid response will be considered individually and consistent with the evaluation process described in the PAUSTIF Competitive Bidding Fact Sheet, which can be downloaded from the PAUSTIF web site (see http://www.insurance.pa.gov/. Key considerations for the bid evaluation are expected to include, but are not necessarily limited to, the following:

- Fixed price cost for remedial system final design, installation and startup, groundwater monitoring / reporting, soil and groundwater attainment demonstration, remedial action completion report, and Site closure activities.
- Total O&M costs to achieve SHS based on bid unit rates.
- Total O&M costs over the 3-year contract period based on bid unit rates.
- Whether or not RAP remedial approach enhancement / augmentations are proposed and the rationale for what is or is not proposed.
- Demonstrating in the bid response that the bidder has conducted a thorough review of the prior Site documentation.
- Demonstrating a well-supported understanding of Site hydrogeologic properties, current contaminant concentration trends, and those modifications deemed necessary to accelerate Site closure in the most cost-effective manner.
- Addressing all requirements of the RFB Tasks, including well-explained responses to the key elements of each task.

While the Technical Contact will assist ICF, PAUSTIF, and the Solicitor in evaluating the bid responses, it is up to the Solicitor to select the bidder from those bid responses deemed acceptable to PAUSTIF as reasonable, necessary, and appropriate. The Technical Contact will assist the Solicitor in communicating its choice of the successful bidder, which is anticipated to occur within six (6) weeks after receiving the bid responses.

NOTE: Submitted bid responses are subject to Pennsylvania's Right-to-Know Law.

1. SOLICITOR AND TECHNICAL CONTACT INFORMATION

ICF International	Solicitor	Technical Contact
Mr. Jerry Hawk	Sheetz, Inc.	Frank Markert, PE / PG
ICF International	Environmental Compliance Dept.	Excalibur Group, LLC
4000 Vine Street	5700 Sixth Avenue	120 Wesport Drive
Middletown, PA 17057	Altoona, PA 16602	Pittsburgh, PA 15238
		fmarkert@excaliburgrpllc.com

Please note that there is a single point of contact regarding this RFB Solicitation. All questions regarding this RFB Solicitation and the Site conditions must be directed **in written form only** to the Technical Contact and must be received no later than seven (7) calendar days prior to the due date for the bid response. Bidders must neither contact nor discuss this RFB Solicitation with the Solicitors, PAUSTIF, or ICF unless approved by the Technical Contact. This RFB Solicitation may be discussed with subcontractors and vendors to the extent required for preparing the bid response. Bidders must also not contact or discuss this RFB Solicitation with the PADEP. If a bidder has specific questions it wishes to discuss with the PADEP, these questions should be provided to the Technical Contact who will forward them to the PADEP, but the PADEP may elect not to reply to any questions it receives.

Please note that unless a question can be successfully demonstrated to be proprietary in nature, all submitted questions and responses submitted during and after the pre-bid Site visit will be shared with all bidders on a non-attributable basis. A bidder shall specify any questions it regards as proprietary upon submitting these questions to the Technical Contact. If said question(s) is (are) determined to be non-proprietary by the Solicitor and the Technical Contact, the bidder will be given the option of withdrawing its question(s) before it is answered and a response distributed.

2. SITE LOCATION & BACKGROUND

Site and background information have been excerpted, paraphrased or inferred (without any independent interpretation, evaluation or analysis) from various Site reports and presented below for convenience.

The Site layout consists of a retail automobile fueling facility, convenience store, and car wash located at the southwest corner of the intersection of Water Street (PA State Route 322) and South Third Street (PA State Route 285) in Conneaut Lake Borough, Crawford County, Pennsylvania. The facility comprises approximately 1.25 acres with adjacent properties including a fast food restaurant and First National Bank to the north; Dillanger's automotive service facility to the northeast; a pharmacy to the east; Strawberry Alley and a residential neighborhood to the south; and a vacant lot to the west. Several of the surrounding properties have reportedly been underground storage tank (UST) facilities in the past, including Matt's Gulf (adjacent to the west), the First National Bank (across Water Street to the north), and the Rite Aid Pharmacy (formerly a Sinclair station) to the east across South 3rd Street.

Historically, three (3) gasoline, one (1) kerosene and one (1) diesel UST were located on-Site and removed as part of a UST system upgrade conducted in the summer and early fall of 2008. The upgrade took place during store demolition and rebuild activities. A copy of the UST closure report was included in an Initial Site Characterization Report (ISCR) dated March 2009. Following the UST system upgrade, a new convenience store, car wash, and dispenser islands were constructed. Four new USTs were installed, which are still present at the site – one (1) 20,000-gallon regular unleaded, one (1) split 20,000-gallon UST containing both mid-grade and premium unleaded gasoline, one (1) 12,000-gallon auto diesel UST, and one (1) 8,000-gallon kerosene UST.

Interim remediation conducted as part of the station upgrade in 2009 included the excavation and off-site disposal of over 3,400 tons of impacted soil. Soil confirmation samples taken during UST tank removals in the immediate vicinity of the USTs revealed no soils above SHS criteria, but contaminated groundwater was encountered. Based on the groundwater results, a soil boring program was instituted at the site to identify any residual source areas. PID responses and soil analytical data from subsequent soil boring investigations indicated that remaining soil hydrocarbon impacts are relatively limited in extent. A total of 14 soil samples from 11 locations were obtained during site characterization activities and analyzed. Of these 14 samples, 3 samples detected unleaded gasoline constituents (BTEX, napthalene, and TMBs) above soil to groundwater SHS criteria. The impacted soils were located in borings for monitoring wells MW-2 and MW-6 / 6D and were obtained 7 to 9 feet BGS.

The Property is currently an auto fueling facility, convenience store and carwash that is located in a mixed commercial/residential area of Conneaut Lake. The Property is surfaced primarily of concrete, with the exception of landscaped green spaces located on the perimeter of the Property and along the convenience store and car wash perimeter. The Property slopes gently to the north toward Conneaut Lake.

Public utilities servicing the Property include water, natural gas, electric, telephone, cable TV, and sanitary and storm sewer lines. Public water supply is provided by Conneaut Lake Borough from a municipal water supply well located 700 feet to the northwest of the facility along the southern shore of Conneaut Lake. A search of the Pennsylvania Groundwater Information System indicated that there are 17 potable wells located within 0.5 miles of the Property (results and a graphical depiction of well locations is included in the SCR). An underground storm sewer retention basin was constructed in the northwestern corner of the facility during the UST system upgrade.

The Site is located within Watershed A (Shenango River) of the Ohio River basin, subbasin number 20, which encompasses 781 square miles. Surface water drainage in the area of the Site is generally dendritic in pattern. Groundwater in the Conewango Group is generally a poor aquifer with about 1/5 of recorded wells with yields less than 3 GPM and only about 1/20 with yields above 25 GPM. Water is generally hard but satisfactory to depths of 50 feet, where it becomes increasingly salty. The closest surface water to the Site is Conneaut Lake, located approximately 800 feet to the northeast.

The subsurface lithology consists of compacted clay, shale, and sandstone fill that ranges from approximately 2 to 16 feet BGS over the eastern portion of the Site. The native subsurface material in this area was excavated during the UST system upgrade activities and as part of

interim remedial activities performed at the Property. Lithology for the remainder of the Site consists of glacial till, which is comprised of varying amounts of sand, silt, sandy clay, clay, and poorly sorted gravel. Bedrock was not encountered during drilling. A complete description of the materials encountered during drilling is included on the soil boring logs presented in the SCR.

Groundwater flow is apparently to the northeast with an average gradient of 0.022 feet/foot as determined in the SCR. Demolition and excavation activities on the former Matt's Gulf property to the west of the Property may be responsible for the groundwater flow direction variability (split to the west) during the February and April 2010 groundwater monitoring and sampling events. Groundwater elevation readings reported in the SCR show that potentiometric surface elevations in the deeper wells appear consistent with those in the shallow wells. The layer of clay on-Property and the silt on- and off-Property act as semi permeable confining layers. COC concentrations in the deep wells on-Property indicate a more confining layer than the concentrations in off-Property at MW-11D. Based on results of rising head "slug" tests conducted on monitoring wells as part of the SCR, hydraulic conductivities ranged from 0.04556 ft./day in MW-11D to 1.872 ft./day in MW-2 with the geometric mean hydraulic conductivity at 0.533 ft./day. A review of estimated ranges of hydraulic conductivity values in literature indicates that the calculated range of values is characteristic of silty clay. Groundwater velocity calculated using this geometric mean from the slug tests is 11 feet per year.

As part of the Site evaluation and SCR / RAP investigations, feasibility testing of monitored natural attenuation (MNA) and dual-phase extraction (DPE) was conducted at the Property. The results of these tests are detailed in the RAP, and also were incorporated into a remedial alternatives analysis which evaluated MNA and DPE along with in-situ air sparging / soil vapor extraction and groundwater pump and treat technologies. Based upon Site characterization data and the results of the feasibility testing, DPE was selected by Solicitor as the remedial approach for the Site.

It should be noted that the RAP states that the feasibility testing results suggest that airflow pathways were inconsistent with regards to distance and direction, and an effective vapor extraction radius of influence could not be calculated. However, the RAP stated that the lack of a defined pneumatic radius of influence was not detrimental to the DPE system design, installation and operation because the vacuum extraction portion of the DPE system will be used primarily as a means of increasing liquid recovery rates by inducing a pressure gradient around the extraction wells.

The extraction well layout for the DPE system is reportedly designed taking into account the RAP-estimated hydraulic radius of influence of approximately 115 feet and the locations of the demonstrated on- Property and off- Property dissolved-phase COC impacts. The extraction well network is described in the RAP on Figure 32. It consists of three (3) DPE wells located in the northeast corner of the Property. To be conservative and account for variations in flow distribution, the proposed well locations were spaced so that the radii of influence overlap. Additional DPE remediation wells were not specified by the RAP, but may be beneficial in reducing remedial action cleanup time and increasing remedial action effectiveness, particularly off-Property. RAP specified remediation wells were placed as close as possible to the northern and eastern Property boundaries to influence off- Property areas exhibiting dissolved phase COC concentrations above applicable SHS MSCs, and to inhibit further off- Property migration of COCs. Monitoring wells MW-2 and MW-6, which historically contained LNAPL, have

proposed extraction wells in their immediate vicinity for optimal hydrocarbon mass recovery. Where feasible for the final installation, based on current Property infrastructure, one RAP-specified remediation extraction well is located in the area of the former gasoline UST storage and distribution system, the suspected source area.

The RAP created by Kleinfelder specifies the extraction wells to be a minimum of four inches in diameter, with a screen interval starting no shallower than 3.5 feet BGS and no deeper than 5 feet BGS. According to the RAP, starting the screen at least 3.5 feet BGS will reduce potential short-circuiting with the remedial system piping trench and various other utility and piping conduits in the area of the USTs and dispensers. Once drawdown is achieved through liquid extraction, the RAP states the screen interval starting between 5 to 7 feet BGS will also help to focus the vapor extraction airflow to the 7 to 9-foot BGS interval within which the adsorbed-phase COC impacts and highest PID readings have been observed. According to the RAP, the final DPE system design and equipment specification shall achieve extraction through the use separate liquid and vapor recovery pumps, with the liquid extraction portion of the DPE system achieved via submersible pumps and the vapor extraction portion achieved via an above-ground vacuum pump or blower. Based on the RAP design, each DPE well is expected to yield from 0.3 to 4.6 gallons per minute (gpm) based on the pilot well results, based on a single vacuum extraction pump removing liquids and vapor. The DPE wells are also expected to yield average vapor extraction flow rates ranging from 26.6 to 65.6 SCFM from an applied vacuum source of approximately 43 inches water column based on the pilot extraction well results. According to the RAP, the shallow depth to water at the Site allows the use of a single vacuum source to extract both liquids and vapors from each well through a drop tube. The RAP states that although this option may result in lower capital costs because of the reduced number of mechanical parts, it may be more difficult to operate efficiently at the Site. According to the RAP, dual-pump DPE systems are typically more flexible and easier to operate over a wider range of Site conditions as compared to single-pump DPE systems. The saturated zone soils at the Site, which will be affected by the system operation, have been shown to be heterogeneous and comprised of a mix of fill material and native soils with varying hydraulic and pneumatic permeability. For this reason, the RAP opines the dual-pump DPE system may be easier to fine tune and operate effectively at the Site. The RAP affords bidders the option of bidding either extraction approach, provided all other extraction targets are met.

Bidders are directed to the documents on the USTIF web site where this RFB is posted for additional Site background information (see Attachment 1 for a list of these documents). **If there is any conflict between the information provided in the RFB and the source documents, the bidder should defer to the information presented in the source documents**. The bidder should review the accompanying historical information carefully; each bidder should base its bid upon its own evaluation of the information provided with this RFB. **For a bid response to be deemed responsive, the bidder must include and describe its conceptual site model as it pertains to its proposed SOW and the RFB objectives and requirements.**

3. OBJECTIVES / SCOPE OF WORK

The Solicitor seeks competitive, combined **fixed-price** and **performance-incentivized unit price** bids to complete the tasks outlined below. To be deemed responsive, bidders must respond in detail to each of the SOW tasks as well as describe and apply the bidder's

conceptual site model interpretation as it pertains to conduct of the proposed SOW. Any modification to the selected bidder's SOW for these tasks will require prior written approval by the Solicitor **and PAUSTIF** through its third-party administrator, and may also require PADEP pre-approval.

It is expected that the selected bidder's approach to completing the SOW will be in accordance with generally accepted industry standards / practices and all applicable federal, state, and local rules, guidance, directives, and regulations. This would include, but is not necessarily limited to satisfying the requirements of the Storage Tank and Spill Prevention Act (Act 32 of 1989, as amended), Pa. Code, Title 25, Chapter 245, and meeting and demonstrating attainment of the standards established under the Land Recycling and Environmental Remediation Standards Act (Act 2 of 1995) and Pa. Code, Chapter 250 (Administration of Land Recycling Program).

In addition to the SOW tasks specified below, the selected bidder shall also:

- Complete necessary, reasonable, and appropriate project planning and management activities until the SOW specified in the executed contract 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 (e.g., utility location, etc.). Project planning and management activities will also include preparing and implementing plans for Health and Safety, Waste Management, Field Sampling/Analysis, and/or other plans that may be required by regulations or that may be necessary and appropriate to complete the SOW, and shall also include activities related to establishing any necessary access agreements. Project management costs shall be included in the fixed-price quoted for all tasks, as appropriate.
- Be responsible for coordinating, managing and completing the proper management, characterization, handling, treatment, and/or disposal of all impacted soils, water, and derivative wastes generated during the implementation of this SOW in accordance with standard industry practices and applicable laws, regulations, guidance, and PADEP Northwest Region directives. Waste characterization and disposal documentation (e.g., manifests) shall be maintained and provided to the Solicitor upon request. Waste disposal costs shall be included in the fixed-price quoted for all tasks, as appropriate.
- Be responsible for providing the Solicitor and Property owner, with adequate advance notice prior to each visit to the Property. The purpose of this notification is to coordinate with the Solicitor and Property operator to ensure that appropriate areas of the Property are accessible. Return visits to the Site prompted by a failure to make the necessary logistical arrangements in advance will **not** constitute a change in the selected bidder's SOW or total project cost for any tasks.
- Be responsible for keeping all wells in good condition, with each well properly sealed and locked in-between each monitoring/sampling event. In particular, key Site monitoring wells MW-2, MW-6, and MW-13 should be evaluated monthly to ensure their integrity is maintained, they are properly labeled, and they are

properly secured and locked. These three wells are required to be used for determination of the performance-based reimbursements to be paid for remedial system O&M at the Site. The selected bidder is responsible for repairing any seals or locks that become defective during the period of this contract at its expense. Any request for Fund reimbursement of the reasonable costs to repair or replace a well will be considered on a case-by-case basis.

TASK 1 REMEDIATION SYSTEM FINAL DESIGN AND EQUIPMENT PURCHASE / ASSEMBLY

a. RAP Final Design:

The selected bidder shall further develop and finalize the RAP remedial system design (including consideration of any enhancements / augmentations identified under Task 6) to identify specific system components to be installed and monitored in fulfillment of the RAP. The design elements to be finalized include, but are not necessarily limited to, an equipment list (with equipment name, manufacturer, and model number), specifications, P&ID, and applicable permits. The selected bidder shall also be responsible for developing a checklist to be completed by field technicians during O&M visits that will provide key information deemed necessary to continually evaluate remediation performance, permit compliance, and system maintenance.

The RAP Final Design documentation (including O&M checklist) shall be submitted to *and approved* by the Solicitor *prior* to the purchase of equipment. Should substantial design changes be incorporated into the RAP Final Design, a revised RAP may also be required by the PADEP (see Optional Task 6).

b. Remediation System Equipment Purchase, Assembly, Pre-Shipment Testing, and Delivery / Setting in Place:

The remediation equipment[1] necessary to implement the RAP shall be purchased new and preferably pre-assembled and tested at the equipment vendor factory as a turn-key prefabricated system prior to Site deployment. Under this approach, the purchased equipment is to be fully integrated and tested electrically and mechanically inside a shed[2] (properly insulated with appropriate lighting, and

[1] All equipment purchased under this contract will become the property of the Solicitor. The selected bidder shall be responsible for operating and maintaining the equipment for three (3) years beginning from the date of successful remediation system startup.

[2] The Solicitor distinctly prefers that the remediation system equipment shall be pre-assembled, factory-tested (electrically and mechanically) as much as practical, and integrated within a suitable enclosure prior to drop-shipment to the site. However, if the bidder wishes to propose constructing the shed on-site and then installing and testing the remediation system equipment, the bidder may propose this approach as an alternative to the requested SOW and identify the cost differential. However, the bottom line for the Solicitor is that the remediation system equipment will be housed in a shed and not in a trailer.

heating & ventilation systems) before being shipped to the Site.[3] After delivery and setting in place, final connections shall be made to the electrical service and subsurface piping / conduits installed as part of the Site Preparation Work (see below). Clear and legible copies of all equipment manuals and warranties shall be provided to Solicitor.

c. Telemetry System:

The Solicitor requires that the system be fitted with a form of telemetry (e.g., Sensaphone 1400 or comparable). A copy of the telemetry software shall be provided to the Solicitor. The telemetry system shall have the capabilities of notifying system shut down via phone dialing, fax, or email.

TASK 2 SITE WORK

The selected bidder will need to complete all necessary system installation tasks to install the RAP-specified remediation system. These tasks are expected to include (but not necessarily be limited to):

a. Construction and Operation Permits:

The selected bidder shall obtain all necessary construction and operational permits and/ or permit exemptions and post same as required. Solicitor shall be provided copies of all permits / permit exemptions before field construction activities commence.

b. Utility Mark-Out and One-Call Notification:

The selected bidder shall complete mark-out of buried utilities in advance of any drilling or trenching activities. PA One Call notification shall be made and documented prior to drilling or trenching activities.

c. Remediation Well Installations:

The selected bidder shall complete the necessary remediation system well installations as specified in the RAP. Well construction diagrams shall be generated, included in the appropriate quarterly Remedial Action Progress Report, and provided to the Solicitor upon completing this task.

d. Telephone and Electrical Service Drop:

The selected bidder shall coordinate with the telephone service provider to bring and provide appropriate telephone service to the location of the remediation equipment. Payment of the telephone service installation shall be accounted for in the fixed-price

[3] The vapor-phase granular activated carbon vessels need not necessarily be contained within the enclosure.

bid for Site Work (Task 2). Ongoing fees for telephone service shall be accounted for in the unit cost for O&M (Task 5).

The selected bidder shall coordinate with the electrical service provider to bring and provide appropriate electrical service to the location of the remediation equipment. Payment of the electrical service connection shall be the responsibility of the bidder and accounted for in the fixed-price bid for Task 2.

e. Equipment Pad, Trenching, Subsurface Piping, Mechanical, and Electrical:

The selected bidder shall prepare the area where the remediation equipment will be located as specified in the RAP or as otherwise directed by the Solicitor. Currently, the Solicitor anticipates the remedial equipment will be situated to the east of the service station, in the southeastern corner of the site. Required and appropriately-sized piping and electrical conduit / wiring shall be trenched and buried below the frost line extending between the remediation equipment location and the recovery wells and discharge location. If concrete or asphalt is to be disturbed during trenching operations, they shall be saw cut prior to excavation. Additionally, trenches located around pre-existing electrical or other utility lines must be soft-dug in the area of the lines. Buried piping shall be installed with tracer wire to facilitate locating the subsurface lines after the trenches have been backfilled. Only clean, sorted, and graded backfill shall be utilized. Buried piping shall be tested for integrity and documented before trench backfilling. Wellhead modifications, backfilling, and surface completion shall be as specified in the RAP. Storm sewer tap and connections shall be made in accordance with local authority requirements. Buried piping and conduit stub-ups shall be terminated and secured in the remediation equipment area to facilitate final connections to remediation equipment and winterization of the stub-ups.

f. Waste Management and Disposal:

The selected bidder shall be responsible for the proper disposal of all impacted soils generated by trenching and well drilling activities, as well as waters and derivative wastes generated during the implementation of this work. Transport and disposal fees for all wastes shall be the responsibility of the selected bidder and accounted for in the fixed-price bid. If possible, clean soils may be reused on-Property in accordance with the Clean Fill Policy. A Wastewater Discharge to the local POTW shall be obtained for the discharge of waters from the remediation system. The selected bidder shall be responsible for segregating and containerizing wastes in a manner consistent with PADEP and Solicitor requirements and sampling and analyzing these wastes to characterize and determine appropriate means of disposal. Waste characterization and disposal documentation (e.g., manifests) shall be maintained and provided to Solicitor.

g. Determination of Baseline Concentrations:

As part of the performance-incentivized contracting, which is described in Section 4, the initial baseline comparison point shall be determined by obtaining two rounds of groundwater samples from these three key wells (MW-2, MW-6, and MW-13) for these three compounds (benzene, 1,2,4-TMB, and 1,3,5 TMB) no more than 60 days and no less than 15 days before remedial system startup, with rounds separated by approximately 30 days. Results from these two rounds shall be averaged together to determine the baseline average groundwater concentrations prior to remedial system startup. The selected bidder shall collect and analyze groundwater samples in order to calculate the baseline concentrations and it is expected that one of these rounds shall overlap with a quarterly groundwater event (Task 4a).

TASK 3 FINAL CONNECTIONS AND STARTUP/TROUBLE-SHOOT REMEDIATION SYSTEM

a. Final Connections:

The selected bidder shall make the final connections between piping / conduit stub ups and power drop / meter and the manifold(s) / conduits on the interior of the pre-assembled and tested treatment system. Any sections of above-grade piping located outside of the equipment enclosure will need to be freeze-protected (e.g., by insulation and heat tracing).

b. Startup / Trouble-shooting of the Remediation System:

The selected bidder shall start up and demonstrate proper operation of the remediation system equipment. At a minimum, such demonstration shall include documentation that: (a) all below- and above-grade equipment is operational; (b) the design parameters are achievable at the treatment system and at the well heads; (c) all safety and control switches function properly; and (d) the system can operate automatically (without manual intervention). The selected bidder shall provide the Solicitor with startup documentation demonstrating proper operation of the system. To the extent problems are identified during the Site Work Preparation and/or remediation system installation and start-up phases, the selected bidder shall repair these problems and repeat the proper system operation demonstration. The selected bidder shall also verify that the system is operating as designed in the RAP, and if not, shall suggest required modifications to ensure satisfactory operation. USTIF / ICF or their agents may conduct an installation inspection to verify construction and operation consistent with the RAP and the contract. If so, payment for this milestone will be contingent on successful demonstration of operations and sign-offs.

c. As-Built Drawings:

The selected bidder will provide the Solicitor with as-built drawings for the remediation system in hard copy form upon completion of the successful startup.

TASK 4 QUARTERLY GROUNDWATER MONITORING / REPORTING

a. Quarterly Groundwater Monitoring Well Sampling and Analysis:

Groundwater sampling and analysis for constituents of concern shall be performed as specified in the PADEP-approved RAP. These data shall be used in conjunction with the remedial system O&M data (see Task 5) to evaluate the performance and effectiveness of the remediation program and system. A fixed price shall be bid for quarterly groundwater monitoring, sampling, and reporting during the contract period (12 events). Based on the SCR / RAP, groundwater sampling and analysis is currently being performed utilizing the following eighteen (18) Site wells: MW-1, MW-2, MW-3, MW-3D, MW-4, MW-5, MW-6, MW-6D, MW-7, MW-8, MW-9, MW-10, MW-11, MW-11D, MW-12, MW-13, MW-14, and MW-15.

During each quarterly sampling event, the depth to groundwater and any potential separate phase hydrocarbons (SPH) shall be gauged prior to purging any of the wells for sampling. Groundwater level measurements obtained from the monitoring wells during each event shall be converted to groundwater elevations for assessing groundwater flow direction and hydraulic gradient.

Each of the wells designated for sample collection shall be purged and sampled in accordance with the PADEP Groundwater Monitoring Guidance Manual and standard industry practices. Although the presence of SPH is not expected based on historical Site information, any well exhibiting more than a sheen of SPH shall not be purged and sampled. Investigation derived waste and purge water shall be handled and disposed of as per the PADEP requirements of the Northwest Regional Office.

Groundwater samples shall be analyzed for the March 2008 short-list of unleaded gasoline UST parameters (i.e., including trimethylbenzenes) by a PADEP-accredited laboratory using appropriate analytical methods and detection levels. Appropriate QA/QC sampling and analyses shall also be performed consistent with the PADEP-approved RAP. These data shall be used in conjunction with the remedial system O&M data to evaluate the performance and effectiveness of the remediation program and system. A groundwater database shall be maintained (in Excel format) that summarizes the historical groundwater monitoring and analytical data associated with each well. Pre- and post-remediation contaminant trends shall be evaluated for each well. The successful consultant shall provide the Solicitor with a copy of the groundwater database upon request.

b. PADEP Reporting:

The selected bidder shall prepare quarterly Remedial Action Progress Reports (RAPRs) to meet the requirements of and to be submitted to the PADEP. Quarterly RAPRs are due to the PADEP on January 30, April 30, July 30 and October 30 of each year. Each

RAPR shall provide the data generated during the reporting period and shall show progress to date toward attainment of the remediation standard(s) indicated in the PADEP-approved RAP. Each report shall be complete and concisely organized and shall contain the following elements:

- A summary of Site operations and remedial progress made during the reporting period, including contaminant mass recovery estimates in groundwater and soil vapor, and that addresses whether or not the degree of remedial progress is reasonably "on track" to achieve a timely and cost-effective Site closure.
- Tabulated data collected from the monitored wells documenting the depth to groundwater and thickness of any free product encountered.
- At least one groundwater elevation contour map depicting groundwater flow direction.
- Tabulated historical quantitative groundwater analytical results, including results from the current quarter.
- Current quarter laboratory analytical report(s).
- One Site isoconcentration contour map for each compound detected in any one well above the SHS during the quarter.[4]
- For each well that has exhibited an SHS exceedance during the reporting period, a graphical depiction of historical key contaminant concentrations and groundwater elevations to provide an assessment of correlations between fluctuating water levels / precipitation events and contaminant concentrations. This assessment should specifically address whether or not observed dissolved-phase constituent concentration fluctuations may be related to changing hydrogeologic conditions or whether these fluctuations may be potentially indicative of changed conditions requiring further investigation and/or a possible change in the Site closure strategy.
- For each well exceeding SHS, a graphical depiction of recent key contaminant concentration trends. Each quarter, contaminant concentration trendlines shall be calculated using the previous two-years of analytical data (or data collected after the active remediation has been initiated) to be plotted on an x-y scatter plot with a semi-logarithmic scale. The exponential trendlines shall be projected forward in time to assess the pace of remediation towards attainment of the selected remediation standard(s).
- Discussion of the data to offer an updated assessment whether these data are consistent with a stable, shrinking, or expanding plume and, therefore, whether or not the plume appears to be

[4] All figures included in each RAPR (e.g., site plan, groundwater elevation maps, dissolved plume maps, etc.) shall be available in electronic format to the Solicitor upon request.

responding to the remedial action in a manner suggestive of a timely and cost-effective Site closure.

- Evaluation of system performance including contaminant mass recovery quantification and system optimizations performed.
- Operational time shall be logged by system instrumentation and reported in the RAPRs.
- Treatment and disposal documentation for waste generated during the reporting period.
- The O&M Site visit checklists as specified above.
- Demonstration that required Federal, State, and local permits and approvals are being complied with.
- RAPRs shall be signed and sealed by a Professional Engineer registered in the Commonwealth of Pennsylvania.

TASK 5 REMEDIATION SYSTEM OPERATION & MAINTENANCE

Task 5 shall be reimbursed based on performance-incentivized unit price elements. Refer to Section 4 for details on developing the performance-incentivized bid. The selected bidder shall perform the requisite O&M on the remediation system for a period of three (3) years from the date of successful system startup. O&M tasks shall be focused on: (1) remediation performance; (2) properly maintain the system equipment; and (3) complying with permits and other applicable regulatory requirements. This task shall include all items necessary to ensure continuous operation of the remediation system (including power, consumables, labor, materials, and equipment) over the three (3) year O&M period. The selected bidder shall submit an O&M Plan to the Solicitor and obtain the Solicitor's approval of this Plan prior to remediation system startup.

Performance monitoring shall include data collection and evaluations geared toward evaluating how well the remedial strategy is working and making necessary adjustments to the system operational configuration to optimize system performance. Performance monitoring activities are to include, but not necessarily be limited to, measurements that allow contaminant mass recovery quantification. The selected bidder shall report quarterly concerning its evaluations of system performance and system optimizations performed (see Task 4). Prior to determining remedial system shut-down criteria have been met, the selected bidder will notify Solicitor and PADEP of their intent in order to receive approval of remedial system shutdown prior to implementing compliance monitoring.

System maintenance & monitoring shall include monitoring and routine maintenance as specified by the equipment manufacturer(s) to ensure warranties are not voided and the equipment is kept in good working order.[5] Operational time shall be logged by system instrumentation and reported quarterly to the Solicitor (see Task 4 above). **The selected bidder is expected to maintain at least an 85% uptime on the system during each**

[5] During the three (3) years of site operations, maintenance, and monitoring subsequent to remediation system startup, the selected bidder, at their own expense including all associated labor, shall be responsible for repairing or replacing equipment that was purchased for the RAP implementation which becomes damaged, destroyed, or defective.

quarter. Repeated failure (two consecutive quarters) to meet this minimum expectation would, at Solicitor's sole discretion, constitute a breach of contract and the Solicitor could chose to terminate the contract.

Compliance monitoring shall include system sampling needed to demonstrate compliance with permits and other applicable regulatory requirements. Documentation of compliance shall be provided to the Solicitor in quarterly reports and in any reports required by permitting agencies (see Task 4).

OPTIONAL TASK 6 REMEDIATION SYSTEM / PROGRAM ENHANCEMENTS AND / OR AUGMENTATIONS

Bidders shall fully describe any enhancements or augmentations to the RAP remedial program as part of their bids with the objective of optimizing the cleanup over the 3-year contract window. Improvements shall be inclusive of design, permitting, reporting (e.g., revised RAP, if necessary), component purchase, installation, start-up & O&M.

Bidders are invited to propose any system enhancements which they believe would improve the performance and remedial effectiveness of the RAP-proposed system. These enhancements might entail changes to the below-grade infrastructure (e.g., more extraction wells), to the above-grade infrastructure (e.g., replacing or enhancing equipment), or changes which add additional remedial technology components (e.g., chemical oxidation or bioremediation enhancements like oxygen releasing compounds). For example, a bidder might include a remedial enhancement or “polishing” measure to address any persistent localized impacts. Appropriate enhancements or augmentations would be those that reduce total O&M costs for the complete Site cleanup (i.e., savings from a shortened cleanup may make up for the increased capital & operating costs of the enhancements or augmentations).

Bidders shall not change the basic approach of the approved RAP. Enhancements added to the remediation system or O&M components shall be designed to complement the RAP system / approach, not replace it. Should the enhancements or augmentations of the system necessitate PADEP review of a Revised RAP (RRAP), the bidder must include in his bid preparing a RRAP of sufficient quality and content to reasonably expect PADEP approval. The bidder’s project schedule for this subtask shall provide two (2) weeks for Solicitor and PAUSTIF review of the draft RRAP in advance submission to PADEP. The final RRAP shall address comments received from the Solicitor and PAUSTIF on the draft report before it is submitted to the PADEP for its review.

With its bid response, bidders shall reveal the estimated cost of the bid enhancement / augmentations. However, this will not represent a fixed fee for which the successful bidder will be directly reimbursed. Rather, the capital and operating costs for any and all such RAP enhancements / augmentations shall be integrated with and contained in the unit cost schedule for O&M (Task 5).

TASK 7 SOIL ATTAINMENT SAMPLING

Under this task, bidders shall develop and implement a soil boring program for systematic random soil sampling to demonstrate attainment of the soil SHS following the completion of Task 5 and at the approval of Solicitor. Historical Site characterization data indicate there have been SHS exceedances in soil in the northeast portion of the Property above the zone of permanent saturation (~11 feet). In particular, as shown on Table 2 of the SCR / RAP, the 2010 soil investigations revealed soil contamination in soil borings SB-2 and SB-6 above SHS goals. Both of these wells are within the treatment zone of the RAP remediation system. The goal of this task is to determine if the soil in these areas has statistically attained SHS following Site remediation. Soil confirmation samples taken during UST tank removals in 2008 revealed no soils above SHS criteria, and thus this portion of the site does not require further evaluation.

Each bid shall describe in detail their approach for addressing soil attainment and shall assume advancing a total of twelve (12) soil borings for the area per PADEP's guidance of 250.703(c)(d). The intent is to collect soil samples at randomly selected locations / depths within the previously impacted area (northeast corner of the Property), as can be accomplished safely and without risking damage to any below grade utilities in these areas.

Soil samples from each boring shall be collected from the unsaturated and periodically saturated soils. Soils exceeding SHS have not been identified in Site surface horizon (i.e., within 2 feet of grade); therefore, bidders shall assume the systematic random sampling grids would begin at four (4) feet below grade and extend to a depth of eleven (11) feet, where permanent saturation begins. Bidders shall assume some borings may need to be completed to 11 feet but others will be much shallower depending on the randomly selected locations on the grids.

In addition to contacting PA One Call, bidders shall assume clearing and sampling each boring location to a depth of three feet using a hand auger. Once cleared, each soil boring shall be advanced using direct-push drilling and sampling methods.

The location / depth of the soil samples shall be determined using PADEP's systematic random sampling procedures, assuming one soil sample per boring shall be submitted for laboratory analysis (12 total). Soil samples shall be analyzed for the March 2008 PADEP short list of unleaded gasoline parameters (including 1,2,4- and 1,3,5-trimethylbenzenes). The soil sampling results shall be evaluated using PADEP's 75%/10x Ad Hoc Rule, which shall be documented in detail in the Remedial Action Completion Report (RACR) (Task 9).

Activities under this task shall also include: (i) contacting the PA One Call System, Inc.; (ii) professional surveying of the soil boring locations and elevations for inclusion on the site plan; (iii) sealing each boring with bentonite and an asphalt or concrete surface patch after completion; and (iv) managing the drilling and personal protective equipment wastes in accordance with applicable regulations, guidance, and directives. The soil boring program methods and results shall be detailed in the RACR to be prepared under Task 9.

TASK 8 GROUNDWATER ATTAINMENT MONITORING

Under this task, bidders shall provide a firm fixed-price to complete eight quarters of groundwater attainment monitoring and sampling events following the completion of Task 5 and at the approval of Solicitor.[6] The conduct and results of each event shall be documented in quarterly Groundwater Attainment Monitoring Reports. Following remedial system shutdown, the following point of compliance (POC) wells will be sampled quarterly for attainment: six (6) on-Property POCs: MW-1, MW-2, MW-3, MW-3D, MW-6 and MW-6D and six (6) off-Property POCs: MW-9, MW-10, MW-11, MW-11D, MW-13, and MW-14.

During each quarterly sampling event, the depth to groundwater and any potential separate phase hydrocarbons (SPH) shall be gauged prior to purging any of the wells for sampling. Groundwater level measurements obtained from the monitoring wells during each event shall be converted to groundwater elevations for assessing groundwater flow direction and hydraulic gradient.

Each of the wells designated for sample collection shall be purged and sampled in accordance with the PADEP Groundwater Monitoring Guidance Manual and standard industry practices. Although the presence of SPH is not expected based on historical Site information, any well exhibiting more than a sheen of SPH shall not be purged and sampled. Investigation derived waste and purge water shall be handled and disposed of as per the PADEP requirements of the Northwest Regional Office.

Groundwater samples shall be analyzed for the March 2008 short-list of unleaded gasoline UST parameters (i.e., including trimethylbenzenes) by a PADEP-accredited laboratory using appropriate analytical methods and detection levels. Appropriate QA/QC sampling and analyses shall also be performed consistent with the PADEP-approved RAP (or RRAP). These data shall be used in conjunction with the remedial system O&M data to evaluate the performance and effectiveness of the remediation program and system. A groundwater database shall be maintained (in Excel format) that summarizes the historical groundwater monitoring and analytical data associated with each well. Pre- and post-remediation contaminant trends shall be evaluated for each well. The successful consultant shall provide the Solicitor with a copy of the groundwater database upon request.

The Groundwater Attainment Monitoring Reports describing the sampling methods and results will be provided to the PADEP on a quarterly basis and within 30 days of the receipt of analytical results for each quarter. At a minimum, each Groundwater Attainment Monitoring Report shall contain the following: a) a narrative description of the sampling procedures and results; b) tabulated data from current quarterly and all historical data; c) maps depicting groundwater flow directions and groundwater analytical data; d) discussion of the data to offer an updated assessment as to whether these data are consistent with a stable, shrinking, or expanding plume; and e) shall be sealed by a Professional Geologist or Professional Engineer registered in the Commonwealth of Pennsylvania.

[6] Bidders shall include language in the bid that if groundwater data in the POC wells has been either non-detect or below SHS (or the calculated risk-based SSS) for four consecutive quarters, the PADEP will be petitioned to approve a reduction in the number of groundwater attainment sampling events.

TASK 9 PREPARE AND ISSUE THE REMEDIAL ACTION COMPLETION REPORT

Each bidder shall provide a fixed-price bid for preparing / issuing the RACR . The RACR shall document and discuss the results of RAP implementation, discuss the selected closure criteria for the Site, provide proof of soil and groundwater attainment demonstration, and request an Act 2 release of liability. The draft RACR shall be developed in accordance with the requirements of Chapter 245 Sections 245.311 and 245.312, and the draft RACR's quality and content shall be sufficient to reasonably expect PADEP approval of the document. The draft RACR shall be issued to the Solicitor and PAUSTIF (through its third-party administrator) for its review and comment before it is submitted in final form to the PADEP. The proposed project schedule shall allow for two (2) weeks of review by the Solicitor and PAUSTIF. The Final RACR shall then be submitted to the PADEP for their review and comment. If necessary, PADEP comments will be addressed and a revised RACR produced for submittal to the PADEP. Once the RACR is approved by PADEP, Site restoration work shall commence.

TASK 10 SITE CLOSURE / RESTORATION ACTIVITIES

The bidder shall describe and provide a fixed-price bid for properly closing the Site, including: removal of the above-grade elements of the remediation system; in-place abandonment of monitoring/recovery wells and below-grade remediation system elements consistent with PADEP guidelines; well head removals; any Site re-grading that may be needed due to conduct of past corrective action activities; and re-vegetation / asphalt repairs, as necessary. All the groundwater monitoring wells at the Site shall be properly abandoned in a manner consistent with the Department's 2001 Groundwater Monitoring Guidance Manual. Copies of the completed Groundwater Monitoring Abandonment Forms shall be forwarded to PADEP so PADEP may close its files on this facility. The selected bidder shall determine whether the Solicitor wishes to maintain any components of the remedial system (e.g., the shed) before removing it from the Property. This task shall also include photo–documenting the Site restoration work and completion of the well abandonment forms. Copies of these photographs and forms shall be provided for the Solicitor's files.

4. TYPE OF CONTRACT / PRICING

The Solicitor wishes to execute a mutually agreeable, firm, fixed-price, not-to-exceed contract for the SOW addressed by Tasks 1 through 4 and for Tasks 7 through 10. Depending on the progress achieved over the 3-year O&M period, Tasks 7 through 10 may or may be completed under the contract. The successful bidder will only be reimbursed for tasks actually completed under the contract. The performance-incentivized unit price elements (Table 1) will be used under the contract to reimburse for Tasks 5 and 6. A sample Fixed-Price Agreement[7] is included as Attachment 2 and, although the Fund will not be a party to this Agreement, the Fund will facilitate the process of getting the Fixed-Price Agreement in place.

[7] The selected bidder will be provided an electronic copy of the sample contract in Word format to allow contract-specific information to be added.

As noted earlier, **a bidder's response to this RFB Solicitation Package means it has accepted all the contractual terms unless explicitly stated to the contrary in its bid response.** Therefore, any requested changes to the Agreement must be specified in the bid response. Please note that these changes will need to be reviewed and agreed upon by both the Solicitor and the PAUSTIF.

Each bid is to identify unit cost rates for labor, other direct costs, and equipment, as well as proposed mark-ups on other direct costs and subcontracted services for all SOW Tasks. The by-task and by-subtask quotes are to be entered into the Cost Tabulation Spreadsheet / Standardized Bid Format included in Attachment 3 to this RFB. Please note that the total fixed-price and unit cost bids for each task must include all costs, including those cost items that the bidder may regard as "variable" i.e., these variable cost items will not be handled outside of the Total Fixed Price quoted for the SOW. Finally, please also note that referencing extremely narrow or unreasonable assumptions, special conditions, and exemptions may make the bid response too difficult to evaluate and may result in the bid response being deemed "unresponsive."

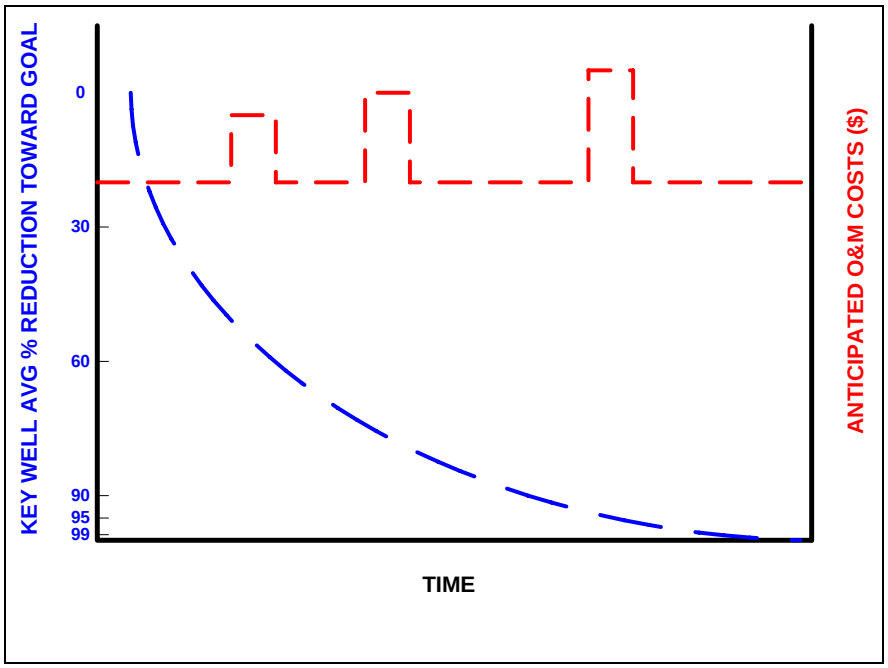
Performance-incentivized Unit Pricing – Bid & Payment

Once the remediation system improvements have been completed and are operational, the 36-month O&M period will commence. The bidder's quoted performance-incentivized unit price shall capture ***all*** system O&M-related costs including all labor, utility (i.e., power) and telephone costs, carbon change-out and other waste management costs, all system operation-related analytical costs, other direct costs (including travel), subcontractor costs plus equipment repair and replacement activities. The assumed frequency of O&M Site visits should meet permit and other regulatory requirements, but is otherwise at the discretion of the bidder with the understanding that maximizing the effect of the remediation system is the primary objective. The selected bidder can expect there will be periodic spot visits to the remedial system by USTIF and the Client (or their representatives) to verify compliance with the RFB and contract provisions.

The "Dollar per percent incremental groundwater cleanup" schedule of bid unit prices shall be provided in the RFB response for Task 5 will be inclusive of all remedial system operation and maintenance costs for the contract period, and any system enhancement or augmentation capital and O&M costs (Optional Task 6). In order to derive its unit price bid, it is assumed the bidders will need to estimate (a) their quarterly O&M costs over the 3–year O&M period plus any system enhancement / augmentation costs (Optional Task 6); and (b) the anticipated cleanup rate / progress in achieving groundwater contaminant reductions in the three key Site monitoring wells (MW-2, MW-6, and MW-13). Furthermore, it is assumed the dollar per percent incremental cleanup bid price will be generally based on the bidder's ratio of the anticipated cost over time and the anticipated percentage reduction of groundwater contaminant concentrations in the three key wells for the three key contaminants (benzene, 1,2,4-TMB, and 1,3,5-TMB). As remediation progresses, each incremental reduction in groundwater contamination concentrations may require more time, effort and expense to achieve; therefore, the bid response will allow unit cost bids to change incrementally through the life of the cleanup. It is assumed that unit bid prices will need to be based on bidders' assessment of the anticipated

time (and cost) required to achieve the incremental goal (see Figure 1). As a result, it is anticipated each interval will have different reimbursement rates.

Figure 1 – Hypothetical Projected O&M Costs[8] & Contaminant Reduction Rates



Bidders are to provide a bid unit cost for each of 8 separate phases or periods of remediation as summarized in Table 1. The breakdown of the O&M into these separate periods seeks to account for the increased effort that is often required to achieve further contaminant reductions as site concentrations approach SHS. As more O&M time and / or system optimization / augmentation may be required as groundwater concentrations approach SHS, bidders would be expected to bid the unit prices accordingly.

[8] Inclusive of all costs to implement enhancements and /or augmentations to RAP approach.

Table 1 – Schedule of O&M Unit Bid[9]

Target Reduction	**Reduction Range Interval (from Baseline)**	**Bid per % Reduction by Interval**
First 30% of goal	0% to 30%	$_____ / %
Next 30% of goal	>30% to 60%	$_____ / %
Next 30% of goal	>60% to 90%	$_____ / %
Next 5% of goal	>90% to 95%	$_____ / %
Next 4% of goal	>95% to 99%	$_____ / %
Next 0.5% of goal	>99% to 99.5%	$_____ / %
Next 0.25% of goal	>99.5% to 99.75%	$_____ / %
Final goal met	>99.75% to SHS	$_____ / %

Determination of Baseline Concentrations:
The initial baseline comparison point shall be determined by obtaining two rounds of groundwater samples from these three key wells (MW-2, MW-6, and MW-13) for these three compounds (benzene, 1,2,4-TMB, and 1,3,5 TMB) no more than 60 days and no less than 15 days before remedial system startup, with rounds separated by approximately 30 days. Results from these two rounds shall be averaged together to determine the baseline average groundwater concentrations prior to remedial system startup.

The successful bidder will be reimbursed for O&M (and associated enhancements / augmentations) using the appropriate bid unit rate. Table 2 is an example of quarterly O&M payments made throughout the site cleanup based on hypothetical groundwater contaminant reductions and hypothetical bid unit rates. Note that for certain quarters in this example where remedial progress was NOT achieved (quarters 4 and 6); there was no payment for O&M that quarter. The successful bidder will only be paid for percentage reduction achieved above and beyond what had already been achieved in any prior quarter.

[9] Inclusive of all costs to implement enhancements and /or augmentations to RAP approach.

Table 2 – Hypothetical Quarterly Reductions and Payments

Hypothetical Reductions and Quarterly Payments Calculations										
Quarter	% Progress to Goal	$ per % Bid Rate for Progress Range								Total Qtr Payment Due
		0-30%	>30% to 60%	>60% to 90%	>90% to 95%	>95% to 99%	>99% to 99.5%	>99.5% to 99.75%	>99.75 to Final Goal	
		$85	$176	$444	$1,045	$3,306	$10,341	$21,103	$35,468	
1	29.88	$2,549.76	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$2,549.76
2	51.00	$9.93	$3,696.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$3,705.93
3	65.70	$0.00	$1,584.00	$2,530.80	$0.00	$0.00	$0.00	$0.00	$0.00	$4,114.80
4	50.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
5	83.19	$0.00	$0.00	$7,766.89	$0.00	$0.00	$0.00	$0.00	$0.00	$7,766.89
6	74.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
7	91.76	$0.00	$0.00	$3,022.31	$1,843.98	$0.00	$0.00	$0.00	$0.00	$4,866.28
8	94.24	$0.00	$0.00	$0.00	$2,581.81	$0.00	$0.00	$0.00	$0.00	$2,581.81
9	95.96	$0.00	$0.00	$0.00	$799.22	$3,189.10	$0.00	$0.00	$0.00	$3,988.31
10	97.18	$0.00	$0.00	$0.00	$0.00	$4,002.27	$0.00	$0.00	$0.00	$4,002.27
11	98.02	$0.00	$0.00	$0.00	$0.00	$2,801.59	$0.00	$0.00	$0.00	$2,801.59
12	98.62	$0.00	$0.00	$0.00	$0.00	$1,961.11	$0.00	$0.00	$0.00	$1,961.11
13	99.03	$0.00	$0.00	$0.00	$0.00	$1,269.93	$321.71	$0.00	$0.00	$1,591.64
14	99.32	$0.00	$0.00	$0.00	$0.00	$0.00	$3,005.79	$0.00	$0.00	$3,005.79
15	99.53	$0.00	$0.00	$0.00	$0.00	$0.00	$1,843.00	$532.72	$0.00	$2,375.73
16	99.67	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$3,005.63	$0.00	$3,005.63
17	99.77	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$1,737.40	$616.06	$2,353.46
18	99.84	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$2,475.28	$2,475.28

The average percentage reduction will be determined based on three contaminants in three key wells. As illustrated in Table 3, the current quarter average reduction from baseline will first be calculated. This average percentage reduction ("X") will be compared to the previous maximum average percentage reduction achieved since remediation started ("Y"). If X is greater than Y, then the successful bidder will be reimbursed for the quarterly O&M at the appropriate unit rate(s) for the percentage drop between Y and X. If X is less than Y, then there will be no O&M payment for that quarter.

Table 3 – Hypothetical Quarterly Reductions and Payments

	Baseline Groundwater Concentrations (ppb) *(Entered after initial baseline sampling events)*				Current Quarter Concentrations (ppb) *(Entered after each quarterly sampling event)*						
	MW-2	MW-6	MW-13	Sum	MW-2	MW-6	MW-13	Sum	SHS Goal (ppb)	% Reduction	% Reduction to goal
Benzene	2550	2160	3750	8460.0	8.1	653	3180	3841.1	5	54.60%	54.7%
1,2,4-TMB	161	396	184	741.0	51.6	394	362	807.6	15	-9.57%	-9.6%
1,3,5-TMB	72.6	190	52	314.6	10.2	125	60.9	196.1	13	43.00%	43.0%

Average % Reduction to Goal (Current Quarter) =	29.4%
Previous Maximum Reduction =	0.00%
Average % Reduction to Goal (Current Quarter) =	29.4%
Progress (Previous Max minus Current Quarter) =	29.4%
Performance Payment this Quarter =	$4,993.58

To help determine and document each quarter's average concentration and payment amount, a payment form / spreadsheet will be made available to the selected bidder. This form / spreadsheet will use as inputs the results of the present quarter's groundwater monitoring results for benzene, 1,2,4-TMB, and 1,3,5 TMB from the three key Site wells. This form / spreadsheet will calculate the average compound concentration for each well, the overall average reduction for the quarter, and the progress made towards the SHS goal. The average reduction for each compound is determined by summing the concentration for each compound and determining the percent decrease from its baseline concentration value, after taking into account the SHS goal that must be reached. Assuming payment is due, the form / spreadsheet

will document the calculation of the payment due based on both the percent reduction achieved that quarter and the selected bidders' cost per percent reduction bid. In the example above (Table 3), the only values that will need to be entered into the spreadsheet each quarter are highlighted in red font. This completed form / spreadsheet shall be transmitted to ICF / USTIF, along with the quarterly RAPR to provide invoice backup.

Payment Milestones: Table 4 below illustrates the approximate timing expected for completion of respective milestone tasks and milestone payouts assuming SHS standards are met for the Site. Implementation of Tasks 7-10 will be at the discretion of the Solicitor, following the 3 year O&M period. Actual milestone payments will occur only after successful and documented completion of the work defined for each milestone. Payment milestones under the Fixed-Price Agreement shall be broken out as follows:

Milestone A - Task 1 – Remediation System Final Design and Equipment Purchase

Milestone B - Task 2 – Site Installation Work

Milestone C - Task 3 – Final Connections and Start-up / Trouble-shoot Remediation

Milestones D1 to D12 - Task 4 – Groundwater Monitoring / Reporting

Milestones E1 to E12 – Combined Task 5 and Optional Task 6 – O&M and RAP Enhancements / Augmentations

Milestone F – Task 7 – Soil Attainment Demonstration

Milestone G1 to G8 – Task 8 – Groundwater Attainment Demonstration

Milestone H – Task 9 – Remedial Action Completion Report

Milestone I – Task 10 – Site Restoration

TABLE 4 – SAMPLE MILESTONE COMPLETION / PAYMENT SCHEDULE FOR SHS CLOSURE

Estimated Milestone Timing Month After Contract Award	Base SOW Activities Anticipated / Completed for that Month	Milestone[10]
1	Remediation System Final Design and Equipment Purchase	A

[10] Each bidder should modify this sample Milestone Completion / Payment Schedule to reflect its proposed task schedule.

Estimated Milestone Timing Month After Contract Award	**Base SOW Activities Anticipated / Completed for that Month**	**Milestone[10]**
2	Site Installation Work	B
4	Final Connections and Start-up / Trouble-shoot Remediation	C
4	Remediation System O & M (unit $) and Groundwater Monitoring / Reporting	D1, E1
7	Remediation System O & M (unit $) and Groundwater Monitoring / Reporting	D2, E2
10	Remediation System O & M (unit $) and Groundwater Monitoring / Reporting	D3, E3
13	Remediation System O & M (unit $) and Groundwater Monitoring / Reporting	D4, E4
16	Remediation System O & M (unit $) and Groundwater Monitoring / Reporting	D5, E5
19	Remediation System O & M (unit $) and Groundwater Monitoring / Reporting	D6, E6
22	Remediation System O & M (unit $) and Groundwater Monitoring / Reporting	D7, E7
25	Remediation System O & M (unit $) and Groundwater Monitoring / Reporting	D8, E8
28	Remediation System O & M (unit $) and Groundwater Monitoring / Reporting	D9, E9
31	Remediation System O & M (unit $) and Groundwater Monitoring / Reporting	D10, E10
34	Remediation System O & M (unit $) and Groundwater Monitoring / Reporting	D11, E11
37	Remediation System O & M (unit $) and Groundwater Monitoring / Reporting	D12, E12
38	Soil Attainment Demonstration, Groundwater Attainment Demonstration	F, G1
41	Groundwater Attainment Demonstration	G2
44	Groundwater Attainment Demonstration	G3
47	Groundwater Attainment Demonstration	G4
50	Groundwater Attainment Demonstration	G5
53	Groundwater Attainment Demonstration	G6
56	Groundwater Attainment Demonstration	G7
59	Groundwater Attainment Demonstration	G8
60	Remedial Action Completion Report	H
63	Site Restoration	I

Please note that the selected bidder's work may be subject to ongoing review by the PAUSTIF or its representatives. In order to facilitate review and reimbursement of submitted invoices by PAUSTIF, project costs shall be invoiced following the task structure specified in the selected bidder's bid response. Tracking incremental and cumulative costs by task will also be required to facilitate invoice review.

Unless otherwise noted by the bidder, each bid response received is required to be good for a period of up to 120 days after its receipt. The unit costs quoted in the bid will be assumed to be good for the duration of the period of performance cited in the Fixed-Price Agreement.

5. ADDITIONAL BID PACKAGE REQUIREMENTS

Each submitted bid response must include the following:

- A reasonable demonstration that the bidder: (i) understands the objectives of the project, (ii) offers a reasonable approach for achieving those objectives efficiently, and (iii) has reviewed the existing Site information provided in or attached to this RFB Solicitation Package.
- Provide an answer to the following questions regarding the bidder's qualifications and experience:
  - How many Chapter 245/250 sites has your company closed (i.e., obtained a Release of Liability under Act 2) in Pennsylvania?
  - How many Chapter 245/250 sites has your company or the proposed PA-licensed Professional Geologist (P.G.) and Professional Engineer (P.E.) closed (i.e., obtained a Release of Liability from the PADEP) under either the SHS and/or the Site Specific Standard? [*NOTE: The Solicitor requires the work described herein to be completed under the responsible care and directly supervised by a P.G. and P.E. consistent with applicable regulations and licensing standards.*]
  - Whether there were or were not circumstances consistent with the cancellation provision of a signed contractual agreement, and has your firm ever terminated work under a fixed-price or pay-for-performance contract before attaining all of the project objectives and milestones? If yes, please list and explain the circumstances of each such occurrence.
- A complete firm fixed-price cost bid for Tasks 1 through 4 and 7 though 10 by completing the bid cost tabulation spreadsheet provided in Attachment 3 (included among the accompanying electronic files) following the SOW task structure specified herein.
- A complete performance-incentivized unit cost schedule (Attachment 4) for Tasks 5 (O&M) and Optional Task 6 (remedial enhancements / augmentations), combined.
- A description and discussion of all level-of-effort and costing assumptions.

- Indicate whether the bidder accepts the proposed contract / terms and conditions (see Attachment 2) or has provided a list of requested changes to the Fixed-Price Agreement.
- Provide a statement of applicable / pertinent qualifications, including the qualifications of any proposed subcontractors (relevant project descriptions are encouraged).
- Identify the proposed project team and provide resumes for the key project staff, including the proposed Professional Geologist and Professional Engineer of Record who will be responsible for endorsing work products prepared for PADEP review and approval.
- Provide a task-by-task description of the proposed technical approach. **If this task-by-task description fails to address a specific requirement of this RFB, it will be assumed that the bidder has accepted all the requirements specified herein by task.**
- Identify and sufficiently describe subcontractor involvement by task (if any).
- Provide a detailed schedule complete with specific by-month dates for completing the proposed SOW, inclusive of reasonable assumptions regarding the timing and duration of client, PAUSTIF, and PADEP reviews needed to complete the SOW. Details on such items as proposed meetings and work product submittals shall also be reflected in the schedule of activities.
- Describe your approach to working with the PADEP from project inception to site closure. Describe how the PADEP would be involved proactively in the resolution of technical issues and how the PADEP case team will be kept informed as to project status.
- Describe how the Solicitor and ICF / PAUSTIF will be kept informed as to project progress and developments and how the Solicitor will be informed of, and participate in, evaluating potential alternatives / tradeoffs with regard to the SOW addressed by Tasks 1 through 10.

6. MANDATORY PRE-BID SITE VISIT

On **October 19, 2011**, the Technical Contact will conduct a ***mandatory pre-bid Site tour*** for a limited number of participants per firm at this Property starting at 10:00 AM. Please inform the Technical Contact at least three (3) business days in advance of this date as to the number of participants attending from your firm. Again, **any firm that does not attend this mandatory pre-bid Site tour will not be eligible to submit a bid response.**

Questions will be entertained as part of the pre-bid Site tour and every attempt will be made to answer questions at that time. However, all questions and the responses provided during the Site visit will also be distributed in writing to the attendees after the tour, as will the answers to any non-proprietary questions submitted in writing after the pre-bid Site tour has been concluded. Consequently, bidders are strongly encouraged to ask clarifying questions sufficient

to minimize the number of assumptions, special conditions, and exemptions referenced in the submitted bid response.[11] Questions will be accepted up to 7 days before the bid response due date. Again, please note that referencing extremely narrow or unreasonable assumptions, special conditions, and exemptions in a bid response may make the bid response too difficult to evaluate and may result in the bid response being deemed "unresponsive."

[11] The list of assumptions, special conditions, or exemptions will be discussed with the Solicitor. As part of that discussion, the PAUSTIF may advise the Solicitor that some or all of the assumptions, special conditions, or exemptions that are likely to generate change orders may be the financial responsibility of the Solicitor.

ATTACHMENT 1

Historical Project Documents

Filename: (PDF format)	**Document:**
159_30 Day UST Closure Notification	UST Closure Notification Form, dated July 2008
159_ISCR_0309	Initial Site Characterization Report, dated March 2009
159_ISCR_0909	Initial Site Characterization Report, dated September 2009
159_Phase I ESA	Phase I Environmental Site Assessment, dated November 2007
159_RAPR_1Q11	Remedial Action Progress Report, dated April 2011
159_RAPR_2Q11	Remedial Action Progress Report, dated July 2011
159_Rebuild Amended Registration	Storage Tank Registration / Permitting Form, dated December 2006
159_SCR_RAP_0610	Site Characterization Report / Remedial Action Plan, dated June 2010

ATTACHMENT 2

Fixed-Price Agreement and Sheetz, Inc. MSA Agreement

(These agreements have been provided in electronic form that does not permit modifying the agreement because only the selected bidder will need to complete the agreements. An electronic version of the agreement that will allow for tracking modifications to the agreement will be provided to the selected bidder at the appropriate time.)

ATTACHMENT 3

Standardized Bid Format (MS Excel Format)

ATTACHMENT 4

Performance-Incentivized Unit Price Bid Cost Sheet for Tasks 5 & 6, Combined (MS Word format)

BID COST SHEET FOR REMEDIAL O&M PAYMENT SCHEDULE BASED ON INCREMENTAL GROUNDWATER REDUCTIONS TOWARDS SHS CLOSURE (to be used for Task 5 and Optional Task 6, Combined)

Target Reduction	**Reduction Range Interval (from Baseline)**	**Bid per % Reduction in Interval**
First 30% of goal	0% to 30%	$_____ / %
Next 30% of goal	31% to 60%	$_____ / %
Next 30% of goal	61% to 90%	$_____ / %
Next 5% of goal	91% to 95%	$_____ / %
Next 4% of goal	96% to 99%	$_____ / %
Next 0.5% of goal	99.1% to 99.5%	$_____ / %
Next 0.25% of goal	99.51% to 99.75%	$_____ / %
Final goal met	99.76% to SHS	$_____ / %

ATTACHMENT 5

Performance Based Bid Payment Sheet for Tasks 5/6 (MS Excel Format)