COMPETITIVE FIXED-PRICE BID SOLICITATION REMEDIATION TO CLOSURE

SITE CLOSURE VIA STATEWIDE HEALTH STANDARDS (Residential, Used-Aquifer)

PINE RUN MARKET 101 PINE RUN ROAD FREEDOM, BEAVER COUNTY, PENNSYLVANIA 15042

PADEP FACILITY ID #04-14610 USTIF CLAIM #2010-0010(F)

August 29, 2012

This Request for Bid (RFB) has been issued by the Pennsylvania Underground Storage Tank Indemnification Fund (USTIF or "Fund") for USTIF Claim #2010-0010(F) on behalf of the Claimant, Mr. Charles Istik (Owner – Pine Run Market), who hereafter is referred to as the Solicitor. This RFB seeks competitive bids from qualified contractors (consultants) to perform cleanup activities for a fixed-price to attain site closure under The Pennsylvania Land Recycling and Environmental Remediation Standards Act of 1995 (Act 2) and securing an associated relief of liability from the Pennsylvania Department of Environmental Protection (PADEP). The work described in this RFB addresses an unleaded gasoline release, at the Pine Run Market site located at 101 Pine Run Road in Freedom, Pennsylvania (Site). The Solicitor seeks bids and written approaches to achieve the project goal in accordance with the work milestones presented in this RFB, which will be incorporated into an associated Fixed-Price Agreement (Attachment 1).

Although not a party to the agreement, USTIF will, subject to the claim limit cap, reimburse 100 percent of the reasonable, necessary, and appropriate costs associated with the Milestone Payment Schedule specified in Section 4 below and as incorporated into the associated Fixed-Price Agreement.

The RFB Milestones listed below shall be the basis of bid responses in order to maintain consistency among the bids for bid evaluation:

Task / Milestone A.	Limited Additional Site Characterization Activities, and Preparation, Submission, and PADEP Approval of Remedial Action Plan Addendum (Optional)
Task / Milestone B.	Implementation of Remedial Approach
Task / Milestone C.	Remediation System Operation & Maintenance (O&M) and Site Monitoring / Reporting
Task / Milestone D.	Quarterly Groundwater Monitoring, Sampling, & Reporting
Task / Milestone E.	Groundwater Attainment Demonstration
Task / Milestone F.	Vapor Intrusion Attainment Demonstration
Task / Milestone G.	Soil Attainment Demonstration
Task / Milestone H.	Preparation, Submission, and PADEP Approval of Remedial Action Completion Report (RACR)
Task / Milestone I.	Site Closure / Restoration Activities.

Please note that by submitting a bid in response to this RFB Solicitation Package, the bidder has accepted the contractual terms (Attachment 1) and Milestone requirements of this project, including schedule deadlines, unless explicitly stated to the contrary in the bid response.

To be considered for selection, one hard copy of the signed bid package and one electronic copy (one PDF file on a compact disk (CD) included with the hard copy) must be provided directly to the Fund's third party administrator, ICF International (ICF), to the attention of Deb Cassel, Contracts Administrator. She will be responsible for opening the bids and providing copies to the Technical Contact and the Solicitor. Bid responses will only be accepted from those firms who attended the mandatory pre-bid site meeting. The ground address for overnight/next-day deliveries is ICF International, 4000 Vine Street, Middletown, PA 17057, Attention: Deb Cassel. The outside of the shipping package containing the bid response must be clearly marked and labeled with "Bid – Claim #2010-0010F". Please note that the use of U.S. Mail, FedEx, UPS, or other delivery method does not guarantee delivery to this address by the due date and time listed below for submission. Firms mailing bid responses should allow adequate delivery time to ensure timely receipt of their bid package.

The bid response must be received by 3:00 PM, on <u>*Thursday, October 4, 2012*</u>. Bids will be opened immediately after the 3:00 PM deadline on the due date. Any bid packages received after this due date and time will be time-stamped and returned. If, due to inclement weather, natural disaster, or any other cause, the Fund's third party administrator, ICF's office is closed on the bid response due date, the deadline for submission will automatically be extended to the next business day on which the office is open. The Fund's third party administrator, ICF, may notify all firms who attended the mandatory site meeting of an extended due date. The hour for submission of bid responses shall remain the same. Submitted bid responses are subject to Pennsylvania Right-to-Know Law.

Each bid response will be considered individually and consistent with the evaluation process described in the USTIF Competitive Bidding Fact Sheet, which can be downloaded from the PAUSTIF web site (see <u>www.insurance.pa.gov</u>). While the Technical Contact will assist ICF, USTIF, and the Solicitor in evaluating the bid responses, the Solicitor will select his consultant from those bid responses deemed acceptable to USTIF 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.

ICF International	Solicitor	Technical Contact
Mr. Jerry Hawk Claim Investigator ICF International 4000 Vine Street Middletown, PA 17057	Mr. Charles Istik Pine Run Market, Inc. 101 Pine Run Road Freedom, PA 15042	Mr. Joseph Ozog, Jr., P.G. Excalibur Group, LLC 91 Park Avenue Windber, PA 15963 joeozog@excaliburgrpllc.com

1. ICF, SOLICITOR, AND TECHNICAL CONTACT INFORMATION

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 five (5) calendar days prior to the due date for the bid response. To help ensure that all bidders are basing their bids on the same information, bidders must neither contact nor discuss this RFB Solicitation with the Solicitors, USTIF, or ICF unless agreed to in writing by the Technical Contact. This RFB Solicitation may be discussed with subcontractors and vendors to the extent required for preparing the bid response. 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 recognizing that the PADEP is not under any obligation and 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. GENERAL SITE BACKGROUND AND DESCRIPTION

The Pine Run Market facility ("subject property" or "Site") is currently a deli, convenience store, and tanning salon located at 101 Pine Run Road in Cecil Township, north of the town of Canonsburg, Pennsylvania. The subject property is located on the west side of Pine Run Road and in an area that is predominately residential or vacant / undeveloped land (see figure titled "Figure 2, Site Location & Surrounding Area On Aerial Photograph"). An unnamed drainage tributary is located to the east, on the opposite side of Pine Run Road. Below-grade utilities on-site and in the area of the subject property consist of electric and storm sewer service, but the locations of these utilities are not known with certainty and will need to be evaluated by the successful bidder. The Site and surrounding properties obtain potable water via private water wells and sewage discharges are handled by individual private septic tanks.

The Site historically was used for the storage and dispensing/retail sales of unleaded gasoline, diesel fuel, and kerosene. The USTs and associated unleaded gasoline and diesel UST systems were originally installed in 1984, and the kerosene UST system was installed in 1987. These four UST systems (tanks, product piping, and dispensers) were closed via removal in January 2010. Location of the former UST systems is shown on the figure titled "Figure 5, UST Closure Site Plan".

Prior to the removal of the UST systems in January 2010, there were two reported releases at the Site. The first reportable release occurred on April 6, 2001 when a hole was discovered in the diesel product line and reported to PADEP by the certified UST contractor United Environmental Group (UEG).¹ During the repairs, product-soaked backfill was removed for off-site disposal.² A second release at the Site regarding the diesel product line was again reported to PADEP by UEG on October 30, 2002 when a leak detector alarm had been tripped for the diesel UST system, and during inspection discovered corroded piping with pin holes.³ It is reported that that ~1.82 tons of product-stained soil were removed from site for disposal following product line repairs.⁴

PADEP issued additional NOV's between 2002 and 2007, before permanent closure was requested in a Consent Order, and an Amended Consent Order and Agreement were issued in August and September 2007. Fuel sales were discontinued on November 14, 2007 and the USTs were registered as temporarily out of service. Flynn Environmental, Inc. (Flynn) was contracted by URS Corporation (URS) to remove the UST systems in January 2010.

The release of unleaded gasoline that is subject to this claim was discovered during UST system closures performed in January 2010. The closure activities included the removal of one 8,000-gallon tank and one 6,000-gallon tank that contained unleaded gasoline; one 4,000-gallon tank that contained diesel fuel; one 1,000-gallon tank that contained kerosene; product piping; and associated dispensers. The unleaded gasoline and diesel fuel USTs were located in the same tank pit, while the kerosene UST was located in a separate location. Evidence of a release included field observations which included product staining and petroleum odors of the tank backfill and a thin layer of free product on the groundwater within the tank cavity for the unleaded gasoline and diesel fuel USTs, along with staining and odors of fill material and soils within product line trench and beneath the dispensers associated with the unleaded gas and diesel fuel USTs.⁵

Potential sources of the unleaded gasoline release are a leak in the product line near the dispenser island and at the fittings on the tank top turbine pump head. Eight confirmation soil samples were collected

¹ Notification of Reportable Release Form, dated April 6, 2001.

² Details surrounding what prompted this release discovery and the amount of impacted material removed is not available.

³ Notification of Reportable Release Form, dated October 30, 2002.

⁴ PADEP did issue a Notice of Violation (NOV) for the second release at the Site, as well as recommendations for environmental sampling, although no further actions were documented.

⁵ UST System Closure Report Form, prepared by URS Corporation, dated April 6, 2010.

during the UST closure activities with only one of the samples collected from within area of the former unleaded gasoline and diesel fuel cavity having concentrations of 1,3,5-Trimethylbenzene (1,3,5-TMB) above PADEP SHS. The water sample collected from the same tank cavity contained concentrations of benzene, toluene, ethylbenzene, naphthalene, 1,2,4-Trimethlybenzne (1,2,4-TMB), and 1,3,5-TMB exceeding SHS. During closure activities, approximately 12,000-gallons of groundwater along with ~181 tons of impacted soils were removed from the excavations for off-site disposal.

Site characterization activities following the discovery of the unleaded gasoline release in January 2010 were initiated by URS in April 2010 with the installation and sampling of three groundwater monitoring wells MW-1, MW-2, and MW-3. Flynn continued site characterization, interim remedial activities, and evaluation of remedial alternatives from November 2010 to December 2011, which included advancement and sampling of soil borings (SB-1 through SB-26); installation of additional groundwater monitoring wells (MW-2B, MW-3B, MW-4, MW-5, MW-5B, and MW-6 through MW-9); replacement of well MW-3 with MW-3R; groundwater monitoring / sampling; potable water well sampling; installation of recovery well (EW-1); routine free product removal / disposal; and performing dual phase high vacuum extraction (DPE) feasibility testing. Free product removal was performed at wells MW-2 and EW-1 and included routine bailing and the use of a pneumatic skimmer system. Total product recovered from both wells at totaled ~7 gallon. Free product thickness has ranged from 0.01 to 0.52 foot in MW-2 and 0.01 to 0.09 foot in EW-1. Free product recovery is still on-going by Flynn via routine bailing. Soil boring and well locations are provided on the figure titled "Figure 8, Site Plan and Sample Locations".

Flynn evaluated remedial options and performed a DPE pilot test to evaluate the feasibility of this remedial approach. In February 2012, Flynn provided PADEP with a combined Site Characterization Report and Remedial Action Plan (SCR/RAP) presenting the use of a Vacuum Enhanced Groundwater Extraction (VEGE) remedial approach. PADEP subsequently provided approval of the February 2012 in August 2012. The closure standards for the site were identified as SHS for both soil and groundwater.

Contaminants of Concern (COCs)

The COC for soils, groundwater, and vapors are the post-March 2008 short list for unleaded gasoline, which consist of benzene, toluene, ethylbenzene, xylenes (BTEX); cumene, naphthalene, 1,2,4-TMB, and 1,3,5-TMB. Only benzene, 1,2,4-TMB and 1,3,5-TMB were detected at concentrations above SHS in the soil samples collected from the Site. Concentrations of benzene, ethylbenzene, naphthalene, MTBE, 1,2,4-TMB, and 1,3,5-TMB have exceeded SHS in Site groundwater. Measureable free product has also historically been present on groundwater at only wells MW-2 and EW-1. Closure requires that this free product be recovered to the "maximum extent practicable".

During site characterization, contamination was found at levels above SHS in soil samples collected above the zone of permanent saturation. Flynn (the consultant) subsequently statistically evaluated the soil sampling results obtained during site characterization activities using PADEP's 75%/10x rule. On the basis of this evaluation, Flynn reportedly has concluded that a successful demonstration of attainment of the SHS has been made for soils. As of the writing of this RFB, the Technical Contact is unaware of any written document from PADEP that concurs that the soil has attained SHS without remediation. Therefore, this RFB assumes a demonstration of soil SHS attainment will still be necessary upon completion of site remediation. As such, bidders must respond to Task / Milestone G by providing an approach and costs to conduct soil sampling to demonstrate attainment for soils. If PADEP ultimately accepts Flynn's pre-remediation statistical evaluation of the soil data and Flynn's conclusion that soil attainment has been achieved, then the selected bidder will not complete nor will the selected bidder be compensated for Task G.

Subsurface Conditions

The unconsolidated overburden material, outside the perimeter of the UST pit and any below grade utilities, and below the asphalt or gravel surface consists of a natural clayey sand, sandy clay, clay, and sand that has thickness of generally ~0.5 to 5 feet. Underlying the native soil at a depth of ~1 to 6 feet is a weathered

sandstone that becomes competent bedrock at depths of 3 to 10 feet.

Groundwater was either encountered at the soil/weather rock interface or within the weathered/competent bedrock. Groundwater levels within shallow wells (MW-1, MW-2, MW-3R, and MW-4 through MW-9) vary between ~0.5 to 11 feet with a flow that is typically multi-directional due to elevated groundwater levels within the former UST field. Outside the former UST field, groundwater flow direction is generally to the east/southeast. Groundwater levels within the wells screened deeper within the sandstone bedrock (MW-2B, MW-3B, and MW-5B) vary between ~7 to 10.5 feet with a flow direction to the southeast.

Measurable free product has historically and continues to be observed in site wells MW-2 and EW-1 located near the former dispenser island. Free product thickness in these wells has ranged from 0.01 to 0.52 foot in MW-2 and 0.01 to 0.09 foot in EW-1.

Bidders should refer to the accompanying electronic files for additional background information on this site (see Attachment 2 for a list of these documents).⁶ To the extent there is any discrepancy between the summary of site conditions provided above and the source documents, bidders shall rely on the source document information. <u>Bidders should carefully consider what information, analyses, and interpretations contained in Attachment 2 can be used in developing their scope of work (SOW) for their bid in response to this RFB.</u>

3. PROJECT MILESTONES AND OBJECTIVES

This solicitation requests a fixed price bid (a) for several specific tasks defined in this RFB and (b) for successfully attaining PADEP's SHS for soil and groundwater. Each bidder shall identify its proposed additional site characterization and site remediation to "close" the Pine Run Market site under Chapter 245 via PADEP Act 2 standards, and obtain an associated release of liability from PADEP. The successful bidder will be expected to demonstrate attainment of residential used-aquifer SHS for soils and groundwater. Because this RFB is a results-oriented remediation bid solicitation, bids must contain a higher level of project-specific details, which will allow the Solicitor and USTIF to accurately assess each bid and differentiate among them.

The Solicitor and USTIF recognize that each bidder may provide a unique path forward at the Pine Run Market site. Bids, therefore, **must be well reasoned, well organized, and detailed** as they describe how the interested bidder plans to address each of the nine (9) tasks / milestones, and move the Site from its existing conditions (both from a technical prospective and a regulatory prospective) to the conditions required by PADEP to close the Site under Act 2 and provide the Solicitor with an associated release of liability. Each bid shall describe the bidder's understanding of the conceptual site model and how that model relates to the bidder's proposed approach to executing each of the tasks / milestones. Also, 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 their response to this RFB. Nothing stated or implied within this RFB shall be construed as an endorsement by the Solicitor or by USTIF of a particular remedial technology or remedial solution.

Once the contract is signed, any modification to the selected consultant's SOW for Tasks A through I will require prior written approval by the Solicitor <u>and USTIF</u> through its third-party administrator, and may require PADEP pre-approval. Bidders should note that the SOW herein was provided to the PADEP Southwest Regional Office (SWRO) case manager whose input has been incorporated in the RFB Solicitation package.

The selected consultant's approach to completing the SOW shall be in accordance with generally accepted industry standards / practices and all applicable federal, state, and local rules, guidance, directives, and regulations, including (but not 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

⁶ The best scanned-in version of each document available to the Technical Contact has been provided.

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).

The project schedule must also specify no less than two (2) weeks for the Solicitor and USTIF to review and comment on a Remedial Action Plan Addendum (RAP Addendum)⁷ and RACR (Tasks A and H) before being finalized and submitted to the PADEP for its review and comment. The bids shall also include time to address any PADEP comments received on the RAP Addendum and RACR.

In addition to the tasks specified below, the selected consultant 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. Project management costs shall be included in the fixed-price quoted for all tasks.
- Be responsible for coordinating, managing and completing the proper management. characterization, handling, treatment, and/or disposal of all investigation derivative wastes (IDW), including soil/rock cuttings, purge water, development water and pumping test water generated during the implementation of this SOW in accordance with standard industry practices and applicable laws, regulations, guidance, and PADEP directives. All investigation derived wastes shall be handled and disposed of per PADEP's Southwest Regional Office (SWRO) guidance. IDW include personal protective equipment, disposable equipment, soil and drill cuttings and groundwater obtained through monitoring well development and purging, as well as equipment decontamination fluids. IDW must be containerized in DOT-approved drums and staged on-site in a pre-determined location, pending results of laboratory analyses and selection of final disposal method(s). Each container must be labeled to indicate contents, site location and date of generation. IT IS THE SUCCESSFUL BIDDER'S RESPONSIBILITY TO CONFORM WITH CURRENT PADEP SWRO GUIDANCE REQUIREMENTS. Waste characterization and disposal documentation (e.g., manifests) shall be maintained by the successful bidder. One (1) copy of the waste characterization and disposal documentation shall be provided to PADEP, one (1) copy shall be provided to the Solicitor, and one (1) copy of shall be provided to the ICF Representative. Waste disposal costs shall be included in the fixed-price quoted for all work tasks, as appropriate.
- Be responsible for providing the Solicitor with adequate advance notice prior to each visit to the property. The purpose of this notification is to coordinate with the Solicitor to ensure that appropriate areas of the property are accessible. <u>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 consultant's SOW or total project cost for any task.</u>
- Be responsible for keeping all Site monitoring wells in good condition, with each well properly sealed and locked in-between each monitoring/sampling event. The selected consultant is responsible for repairing any seals or locks that become defective during the period of this Fixed-Price Agreement 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

⁷ Only if bidder chooses to incorporate Optional Task / Milestone A into the bid.

basis.

Task / Milestone A – Limited Additional Site Characterization Activities and Preparation, Submission, and PADEP Approval of RAP Addendum (Optional). Following review of the Site-related documents incorporated into this RFB (i.e., Site-specific documents, posted with this RFB on the USTIF website) and participation in the mandatory pre-bid Site meeting, bidders shall propose and provide details on and associated fixed-price costs for additional site characterization and/or other pilot testing activities and such additional activities and their associated bid pricing shall be included under Milestones A1 (site characterization and / or A2 (pilot testing).

The additional site characterization activities and/or pilot testing (and the scope thereof) that may be conducted under this milestone will vary by bid according to each bidder's vision for remediation of the Site (Site Conceptual Model). Milestone A shall be used by bidders to verify previously collected data or to address any perceived gaps in the existing characterization data relevant to bidder's approach to completing the site remediation. The additional site characterization and/or pilot testing work proposed and conducted under this milestone (if any), as well as the fixed- or unit-price(s) associated therewith shall be formulated independently by each bidder at their sole discretion. The work breakdowns (if any) for all discretionary Milestone A work (Milestones A1-Site Characterization and A2-Pilot Testing) will vary by bid.

Should a bidder elect not to propose conducting any additional characterization activities, a fixed-price of \$0.00 shall be entered into the appropriate **A1** location of the Bid Cost Tabulation Spreadsheet (Attachment 3). Bidders that elect <u>not</u> to propose additional site characterization activities <u>must</u> provide the technical rationale (basis) for this decision within their bid, along with supporting examples (as appropriate). In addition, bidders that do not believe that discretionary site characterization activities are necessary to efficiently close the Site under Act 2 <u>must</u> explicitly state within their bid that they accept the inherent risk in relying almost entirely or exclusively on data collected by others.

Should a bidder elect not to propose conducting any additional pilot testing, a fixed-price of \$0.00 shall be entered into the appropriate **A2** location of the Bid Cost Tabulation Spreadsheet (Attachment 3). Bidders that elect <u>not</u> to propose additional pilot testing <u>must</u> provide the technical rationale (basis) for this decision within their bid, along with supporting examples (as appropriate). In addition, bidders that do not believe that discretionary pilot testing is necessary to efficiently close the Site under Act 2 <u>must</u> explicitly state within their bid that they accept the inherent risk in relying almost entirely or exclusively on data collected by others.

Any and all Milestone A activities that are proposed with your firm's bid shall be accompanied by the following:

- The purpose and need for each Milestone A activity and an appropriate breakdown (Milestone A1 and A2).
- A detailed scope description of each activity, including the use of and incorporation of pre-existing Site data.
- The timing and schedule of each activity relative to the overall project schedule.
- A description of the anticipated results of each activity and how such results may impact your proposed conceptual remedial action plan.
- For activities involving the evaluation of a remedial technology, such as a feasibility study or pilot test, bids shall describe in detail the likelihood that of the resulting data will dictate a change in the conceptual remedial action plan proposed in your bid.
- Firm fixed-pricing and any appropriate unit pricing for each Milestone A activity within each bidder's completed Bid Cost Tabulation Spreadsheet (Attachment 3).

Bidders shall specify within their bids the critical criteria (if any) that will be used to evaluate data obtained during the Milestone A activities. These critical criteria shall be used by the successful bidder to assess whether or not their proposed conceptual remedial action plan is feasible. As such, and as applicable, bids shall list an upper and lower limit for each critical criterion that will define the range of acceptable results (i.e., feasibility study or pilot testing results). These criteria must be tightly controlled measurements or calculations that could be independently measured or verified by others during testing. Based on these criteria, Exhibit A of the Fixed-Price Agreement (Attachment 1) will contain a provision for cancellation of the agreement test results (i.e., the data obtained during the implementation of Milestone A) does not meet certain bidder-defined criteria bounds (ranges). Each bidder, therefore, shall explicitly specify any and all critical criteria and their associated acceptable ranges for key design elements on which their proposed remedy depends (i.e., the critical criteria and quantified ranges of values that will make the proposed conceptual remedial plan technically feasible, cost-effective, and timely).

For Example, and only if a bidder proposes to conduct activities under Milestone A, bids shall include language like, "For our proposed conceptual remedial action plan to be successful and the for technology(ies) used thereby to operate as planned and meet our proposed clean-up schedule, our proposed recovery well test must demonstrate the following:

- 1) The long-term, sustainable groundwater recovery rate must be assessed to be at least one gpm per recovery well,
- 2) Vapor recovery must be assessed to be at least 35 CFM,
- Recovery well capture zones at the minimum sustainable groundwater and vapor recovery rate will require no more three recovery wells to hydraulically and pneumatically manage the site contaminant plume, and
- 4) The dissolved iron concentration within groundwater collected during the pumping test will not exceed 5 milligrams per liter (mg/L)."

End of Example bid language. Actual bid language, if any, and their associated critical criteria will vary by bidder.

The critical criteria identified in each bid and their associated acceptable range of testing results will be evaluated by the bid evaluation committee as part of the technical review. Unrealistic criteria or criteria that are unreasonably narrow will reduce the favorability of the bid as viewed by the bid review committee. The selected bidder will prepare a Pilot Test Report and submit it to the Solicitor with a copy to USTIF (or their representative). The Pilot Test Report shall show that the pilot test was conducted according to their bid and shall constitute documentation for payments on Milestone A2 activities regardless of the result. If the results of the pilot testing show that the proposed remedial action is feasible based on the specified criteria and ranges, the selected consultant shall move forward on the project. However, if the results of the pilot testing show that the testing is outside of the pre-determined critical criteria range needed for timely achievement of remedial goals, the Fixed-Price Agreement may be canceled by either party (see paragraph 11.b.vii of the Template/Sample Fixed-Price Agreement provided as Attachment 1).

This stage of the project is referred to as the "Pilot Test Off-Ramp" and is intended to protect the selected consultant and the Solicitor from being obligated to move forward with a remedial action that is expected to be far from optimal or expected to fail. The selected bidder is under no obligation to cancel the Fixed-Price Agreement if the pilot test results are outside the criteria or range specified in the RFB Solicitation response, and may proceed with a system designed to remediate the Site using the criteria defined in the pilot test even if that system varies from that which was proposed in the RFB solicitation if the Solicitor agrees and elects not to cancel the Fixed-Price Agreement. If either party elects to cancel the Fixed-Price Agreement, USTIF will have complete discretion with regard to the use of the information in the Pilot Test Report. The USTIF may use it as the basis for rebidding the project or may provide it to one or more of the previously unsuccessful bidders and request revised RFB solicitations. However, it will be specified that any use that a third party makes of the Pilot Test Report will be at the sole risk of the Third Party.

If the additional site characterization and/or pilot testing results require that the successful bidder make significant modifications to the PADEP-approved remedial approach, then the scope, purpose, and results of additional site characterization and/or pilot testing activities that are conducted under Milestone A shall be documented in a RAP Addendum (Task A3) along with detailing any significant remedial system modifications. Each bidder will prepare a fixed-price cost to prepare a draft and final RAP Addendum following the completion of the additional site characterization and/or pilot testing activities. Each bid shall provide an outline of the RAP Addendum, which shall contain all information required under 25 PA Code 245.311 including being signed and sealed by a Professional Geologist and / or Professional Engineer registered in the Commonwealth of Pennsylvania (bidders shall refer to state licensing laws to determine which seals are required based on the work performed and documented in the addendum).

Any significant modification to the approved remedial design shall be detailed in the RAP Addendum, including modifications to, recovery / monitoring well details and locations, equipment specifications, the Process and Instrumentation Diagram (P&ID), trenching plans (cross-section and layout).

Each bidder's project schedule shall provide two weeks for Solicitor and USTIF review of the draft document. The final version of the RAP Addendum shall address any comments received from the Solicitor and USTIF on the draft report before it is submitted to PADEP. The fixed price for this milestone shall also include addressing any PADEP comments on the RAP Addendum.

Should a bidder elect not to propose conducting any significant design modifications, a fixed-price of \$0.00 shall be entered into the appropriate location (A3) of the Bid Cost Tabulation Spreadsheet (Attachment 3). Bidders that elect <u>not</u> to propose any significant design changes <u>must</u> provide the technical rationale (basis) for this decision within their bid, along with supporting examples (as appropriate). In addition, bidders that do not believe that discretionary remedial design modifications are necessary to efficiently close the Site under Act 2 <u>must</u> explicitly state within their bid that they fully understand the remedial design and have independently determined that the remedial design will achieve the cleanup objective within the bid timeframe.

<u>Milestone A activities (if any), shall be conducted as soon as possible</u>. The pricing for Milestone A (i.e., Milestones A1, A2, and A3, as applicable) on the Bid Cost Tabulation Spreadsheet (Attachment 3) shall incorporate all costs associated for performing this work.

Task / Milestone B – Implementation of the Remedial Approach. Under this milestone, bidders shall prepare a fixed-price cost to implement the VEGE remedial approach described in the RAP or an alternative that will be described by the successful bidder in a RAP addendum. Details regarding the installation of additional recovery wells, and the purchase and installation of the VEGE remedial system are provided in the following sections.

<u>Task B1.</u> Installation of Recovery Wells. Under this task, bidders shall provide a firm fixed-price cost for installing the two additional VEGE recovery wells described in the RAP or an alternative number of wells as described in the bid response. Proposed locations for the additional recovery wells (EW-1 and EW-2) are shown on the figure titled "Figure 25 – VEGE System and Trenching Location". Each bidder shall independently consider the final locations relative to utilities; bidder's own interpretation of groundwater flow variations; evaluation of remedial feasibility testing data; and configuration of the dissolved-phase plume. Each bidder in their bid response shall show the proposed locations for the recovery wells on a site drawing. If a bidder believes the remediation wells should be placed elsewhere or that more or fewer wells are needed, the bidder shall identify the alternative location(s) and provide rationale.

The borings for the remediation wells shall be advanced to intersect the shallow water-bearing zone intercepted by nearby on-property monitoring wells. This interval is expected to be present at depths between ~2 to 10 feet below grade based on the existing water level data. Bidders shall assume examining and described drilling cuttings / soil cores for lithology, groundwater occurrence, and potential staining / odor indicative of hydrocarbon contamination. No soil samples will be collected from the well borehole for laboratory analysis.

The remediation wells shall be constructed in general accordance with the PADEP Groundwater Monitoring Guidance Manual. Each bidder in the bid response shall indicate the drilling methods used to advance boreholes, total depth for each well, and well construction details (i.e. well casing diameter, screened interval, sand pack, etc.). Final construction must ensure that the screened interval intersects the water table surface and accounts for seasonal groundwater fluctuations.

Each bidder's fixed-price cost shall account for: (i) identifying subsurface utilities and other buried features of concern including, but not necessarily limited to, contacting PA One Call and clearing the borehole location to a minimum depth of 5 feet using vacuum excavation; (ii) well development activities; (iii) management of IDW; and (iv) professional surveying of the new well locations and top-of-casing elevations. Well drilling / installation and development along with supporting documentation (e.g., waste manifests, boring logs and construction details, etc.) shall be documented in a quarterly report (Task D). Bidders shall manage groundwater generated by the well development activities, and other IDW in accordance with PADEP-SWRO guidance.

<u>Task B2 – Remedial System Final Design, Equipment Purchase, and Assembly.</u> Any equipment⁸ necessary to implement the RAP (or RAP Addendum) shall be purchased new and preferably pre-assembled and tested as much as possible 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 an enclosure (properly insulated with appropriate lighting, and heating & ventilation systems) before being shipped to the site. 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.

The PADEP approved RAP does not include any equipment to filter recovered groundwater to address potential iron fouling of the remedial system. However, bidders are required to review the iron, manganese, and total hardness data obtained by the current consultant and determine if additional equipment is necessary, and if a bidder does believe that an iron filtration unit is needed, the bidder shall provide the rationale, and the fixed price costs for the purchase, installation, and O&M of this filtration unit. Bidders that elect to <u>not</u> propose any additional equipment to address the inorganics <u>must</u> provide the technical rationale (basis) for this decision within their bid, and <u>must</u> explicitly state within their bid that they understand and have accounted for iron fouling potential in their operational estimates.

Please note that the proposed remedial system shall be equipped with some form of telemetry as indicated in the approved RAP. The selected consultant shall coordinate with the telephone, cable or internet service provider to bring and provide appropriate service to the location of the remediation equipment to allow remote communications. Payment of the service connection shall be the responsibility of the selected consultant and shall be accounted for in the quoted fixed-price bid.

<u>Task B3. Site Preparation Work</u>. The selected consultant 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. On-site mark-out of buried utilities shall be completed in advance of any drilling or trenching activities. PA One Call notification shall be made and documented prior to drilling or trenching activities.

The selected consultant 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 selected consultant and accounted for in the fixed-price bid.

⁸ All equipment purchased under this contract will become the property of the Solicitor. The selected consultant shall be responsible for operating and maintaining the equipment for the specified number of years included within their bid beginning from the date of successful remediation system startup.

<u>Task B4 – Equipment Pad, Trenching, Subsurface Piping, Mechanical, and Electrical</u>. The selected consultant shall prepare the area where the remediation equipment will be located as specified in the RAP (or RAP Addendum) or as otherwise directed by the Solicitor, including, if necessary, construction of a concrete pad. 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. Buried piping shall be installed with tracer wire to facilitate locating the subsurface lines after the trenches have been backfilled. Buried piping shall be tested for integrity and documented before trench backfilling. 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. Surface restoration from all trenching and well head completions shall be similar to current conditions.

<u>Task B5 – Final Connections and Startup / Trouble-Shooting of the Remediation System</u>. The selected consultant 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).

The selected consultant 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 successful 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 successful bidder shall repair these problems and repeat the proper system operation demonstration.

Also as part of this task, the selected consultant shall prepare an O&M Plan, and as part of the O&M Plan, the selected consultant shall also be responsible for developing a checklist to be completed by field technicians during subsequent O&M visits that will provide key information deemed necessary to evaluate remediation performance, permit compliance, and system maintenance on a continuing basis. Each bid response shall include an appropriate example of an O&M checklist that identifies typical minimum data requirements to be recorded during each O&M site visit.

The selected consultant will provide the Solicitor with a copy of the O&M Plan prior to remediation system startup, and a hard copy of as-built drawings for the remediation system upon completion of the successful system startup.

The Solicitor and the Fund shall have the opportunity to inspect and confirm that the system has been installed as described in the fixed-price agreement and in the remedial system final design and is in daily operation as described in the remedial system final design.

Task / Milestone C – Remediation System O&M and Site Monitoring / Reporting. For this task / milestone, bidders shall provide the Solicitor and USTIF with quarterly O&M unit costs, the minimum number of site visits included in the bid, and the bid length of time (i.e., number of quarters) that the remedial approach will need to be implemented in order to achieve the project goal of reducing soil and groundwater contaminant concentrations to below residential SHS and removing free product to the "maximum extent practicable", enabling initiation of groundwater and soil attainment demonstration.⁹¹⁰ Bidders shall assume that the remediation will need to continue until the contaminant concentrations in all of

⁹ During the specified timeframe of site operations, maintenance, and monitoring subsequent to remediation system startup, the selected consultant, at its own expense including **all** associated labor, shall be responsible for repairing or replacing equipment purchased for the RAP implementation that becomes damaged, destroyed, or defective.

¹⁰ If the groundwater data allows for discontinuing remedial activities prior to reaching the bidders specified timeframe for remedial system operation, the selected consultant will only be reimbursed for O&M events that have been completed.

the POC wells (as defined in Task E) and interior/source well MW-2 are either below the PADEP SHS or "non-detect" for at least two consecutive quarterly monitoring and sampling events. Each bid shall explicitly state bidder's understanding of the project goal and shall provide the bidder's interpretation and definition of "maximum extent practicable" for free product removal.

O&M tasks will be primarily focused on data collection and evaluations to: (1) determine, demonstrate, and document remediation performance; (2) properly maintain the system equipment; and (3) demonstrate compliance with permits and other applicable regulatory requirements.

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 consultant shall report quarterly concerning its evaluations of system performance and system optimizations performed.

The February 2012 SCR/RAP indicates that soil vapor monitoring/sampling would be performed during operation of the remedial system to evaluate how the remedial activities are affecting soil vapor concentrations. However, under this RFB, bidders are only asked to include the costs to perform soil vapor monitoring/sampling to demonstrate attainment (Task / Milestone F).¹¹

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. Operational time shall be logged by system instrumentation and reported quarterly to the Solicitor. The selected consultant is expected to maintain at least an 85% uptime on the system during each quarter. Failure to meet this minimum expectation over two consecutive quarters will constitute, at the Solicitor's sole discretion, a breach of contract and the Solicitor may chose to terminate the contract.

Compliance monitoring shall include system and site sampling needed to demonstrate compliance with permits and other applicable regulatory requirements. Documentation of compliance shall be provided to the Solicitor in quarterly reports (Task D) and in any other reporting required by permitting agencies (i.e. NPDES monthly reporting).

To provide added incentive to the successful bidder for completing the remedial O&M to achieve closure as expeditiously and cost effectively as possible, <u>10% of each quarterly payment for this task will be</u> withheld and accumulated pending successful completion of this task and initiation of groundwater attainment activities (Task E). When this condition has been met, the accumulation of 10% holdback payments will be reimbursed in one lump sum to the successful bidder.¹²

Task / Milestone D – Quarterly Groundwater Monitoring, Sampling, & Reporting. Under this task, bidders shall provide a firm fixed-price to complete a specified number of quarterly groundwater monitoring and sampling events during the bid remedial system operation period. However, when the contaminant concentrations in all of the POC wells (as defined in Task E) and interior/source well MW-2 are either below the PADEP SHS or "non-detect" for at least two consecutive quarterly monitoring and sampling events, the remedial system shall be shut down and attainment sampling shall be initiated.¹³ Each bidder shall include the rationale for discontinuing remedial activities in their bid.

The groundwater monitoring and sampling events will include all nine (9) existing on-property monitoring wells (MW-1, MW-2, MW-3R, MW-3B, MW-5, MW-5B, and MW-6 thru MW-9), the three extraction wells

¹¹ If it is required by PADEP in writing to perform the soil vapor monitoring/sampling during system operation, this would be considered a Changed Condition under the fixed price agreement subject to contract cost modification.

¹² Lump sum payment will be made prior to the on-set of initiating Milestone E.

¹³ The selected bidder will only be reimbursed for quarterly groundwater monitoring / sampling events completed under this task.

(EW-1, EW-2, and EW-3), surface water sampling at the unnamed creek tributary, and the on- and off-site potable water wells¹⁴. If a RAP Addendum is proposed which includes fewer or more remediation wells, this should be explicitly stated in the Milestone D response and accounted for in the bidder's Milestone D quarterly and total cost. During each event, the depth to groundwater and any potential separate-phase hydrocarbons (SPH) shall be gauged in all available monitoring wells prior to purging any of the wells for sampling. Groundwater level measurements obtained from the monitoring wells shall be converted to groundwater elevations for assessing groundwater flow direction and hydraulic gradient. The conduct and results of each event shall be documented in quarterly "Remedial Action Progress Reports" (RAPRs).

The purged groundwater and other derived IDW shall be disposed of per the DEP SWRO guidance; check with the SWRO for current requirements. Any well exhibiting more than a sheen of SPH shall not be purged and sampled.¹⁵

Groundwater samples shall be analyzed for the **post**-March 2008 PADEP short-list of unleaded gasoline parameters (BTEX, cumene, naphthalene, 1,2,4-TMB, and 1,3,5-TMB) by a PADEP-accredited laboratory using appropriate analytical methods and detection levels. Appropriate QA/QC samples shall also be collected during each event and analyzed for the same parameters.¹⁶ In addition, each event shall include field measurements for these water quality parameters: pH, temperature, specific conductance, dissolved oxygen (measured in-situ), and oxidation/reduction potential.

The RAPRs 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 RAPR shall contain the following:

- A summary of site operations and remedial progress made during the reporting period, including contaminant mass recovery estimates in groundwater;
- Narrative description of the sampling procedures and results;
- Tabulated data collected from the monitored wells documenting the depth to groundwater and thickness of any free product encountered;
- Groundwater elevation contour maps depicting groundwater flow direction;
- Tabulated historical quantitative groundwater analytical results including results from the current quarter;
- Current quarter laboratory analytical report(s);
- One site-wide iso-concentration contour map for each compound detected in any one well above the SHS during the quarter;¹⁷
- For each well exceeding SHS, 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;
- For each well exceeding SHS, a graphical depiction of recent key contaminant concentration trends;
- Discussion of the data to offer an updated assessment whether these data are consistent with a stable, shrinking, or expanding plume;
- 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; and

¹⁴ Currently, only the on-site potable water well and four surrounding off-site potable water wells are sampled.

¹⁵ SPH has historically been observed in wells MW-2 and EW-1.

¹⁶ Each bidder's approach to implementing Task D shall clearly identify the number of sampling events, number of wells / samples per event, well purging and sampling method(s), QA/QC measures, analytes, purge water management methods, and other key assumptions affecting the bid price.

¹⁷ 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.

• Demonstration of compliance with the required Federal, State, and local permits and approvals.

USTIF will only reimburse for only necessary quarterly groundwater sampling / reporting events actually completed under this milestone (e.g., this milestone shall be considered completed with the initiation of Task E).¹⁸ Each quarterly RAPR shall be signed and sealed by a Professional Geologist and / or Professional Engineer registered in the Commonwealth of Pennsylvania (bidders shall refer to state licensing laws to determine which seals are required based on the work performed for and documented in the RAPR).

Task / Milestone E – Groundwater Attainment Demonstration. Under this task, bidders shall provide a firm fixed-price to complete up to eight quarters of groundwater monitoring and sampling events.¹⁹ Each groundwater monitoring and sampling event shall include on-property POC wells MW-1, MW-3R, MW-3B, MW-5, MW-5B, MW-6, MW-7, and MW-9, and interior source well MW-2. The conduct and results of each event shall be documented in quarterly RAPRs.

During each quarterly groundwater monitoring and sampling event, the depth to groundwater shall be gauged in all existing available monitoring wells and prior to purging any of the wells for sampling. Groundwater level measurements obtained from the monitoring wells shall be converted to groundwater elevations for assessing groundwater flow direction and hydraulic gradient.

Each of the monitoring wells designated for sample collection shall be purged and sampled in accordance with the PADEP Groundwater Monitoring Guidance Manual and standard industry practices. Any well exhibiting a measurable thickness of SPH shall not be purged and sampled. Bidders shall manage purged groundwater and other derived IDW generated by the well purging and sampling activities in accordance with the DEP SWRO guidance; check with the SWRO for current requirements.

Groundwater samples shall be analyzed for the **post**-March 2008 PADEP short-list of unleaded gasoline parameters (BTEX, cumene, naphthalene, 1,2,4-TMB, and 1,3,5-TMB) by a PADEP-accredited laboratory using appropriate analytical methods and detection levels. Appropriate QA/QC samples shall also be collected during each event and analyzed for the same parameters.²⁰ In addition, each event shall include field measurements for the following parameters: pH, temperature, specific conductance, dissolved oxygen (measured in-situ), and oxidation/reduction potential.

The groundwater attainment demonstration 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 attainment demonstration report shall contain the following:

- A summary of site operations and remedial progress made during the reporting period;
- Narrative description of the sampling procedures and results;
- Tabulated data collected from the monitored wells documenting the depth to groundwater and thickness of any free product encountered;
- Groundwater elevation contour maps depicting groundwater flow direction;
- Tabulated historical quantitative groundwater analytical results including results from the current quarter;

¹⁸ If the O&M (Task C) of the remedial approach would need to continue beyond the bidder's specified time frame, additional work will be considered an out-of-scope task under the Fixed-Price Agreement, which will require Solicitor and USTIF approval of a work plan and cost estimate before beginning the work.

¹⁹ Bidders shall include language in their bid that if groundwater data in the POC wells has been either non-detect or below SHS for four consecutive quarters, the PADEP will be petitioned to approve a reduction in the number of groundwater attainment sampling events.

²⁰ Each bidder's approach to implementing this task shall clearly identify the number of sampling events, number of wells / samples per event, well purging and sampling method(s), QA/QC measures, analytes, purge water management methods, and other key assumptions affecting the bid price.

- Current quarter laboratory analytical report(s);
- One site-wide iso-concentration contour map for each compound detected in any one well above the SHS during the quarter;²¹
- For each well exceeding SHS, 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;
- For each well exceeding SHS, a graphical depiction of recent key contaminant concentration trends and results of the statistical analysis;
- Discussion of the data to offer an updated assessment whether these data are consistent with a stable, shrinking, or expanding plume;
- Treatment and disposal documentation for waste generated during the reporting period; and
- Demonstration of compliance with the required Federal, State, and local permits and approvals.

Each groundwater attainment demonstration report shall be sealed by a Professional Geologist and / or Professional Engineer registered in the Commonwealth of Pennsylvania (bidders shall refer to state licensing laws to determine which seals are required based on the work performed for and documented in the groundwater attainment demonstration report).

Task / Milestone F - Vapor Intrusion Attainment Demonstration. Bidders shall provide a firm fixed-price and SOW to conduct an assessment of the indoor air exposure pathway, which shall be consistent with the requirements, guidance, and decision matrices in the *Land Recycling Program Technical Guidance Manual – Section IV.A.4, Vapor Intrusion into Buildings from Soil and Groundwater.* Each bid shall include the sampling of the three existing soil vapor sampling points (VP-1, VP-2, and VP-3), and each bid shall describe the approach at purging and sampling of the soil vapor sampling points, and sample analysis.²²

Task / Milestone G – Soil Attainment Demonstration. Under this task, bidders shall develop and implement a soil boring program for systematic random soil sampling to demonstrate attainment of the soil SHS in the area of the former dispenser island and UST cavity where previous site characterization activities have identified soil exceedences of the SHS (see figure titled "Figure 9 – Soil Analytical Results"). Three dimensional attainment sampling shall be completed in these two areas and each bid shall describe in detail their approach at addressing soil attainment, and include the depth interval and a drawing showing the locations where the sampling grid would be applied to demonstrate soil attainment.

The location / depth of the soil samples shall be determined using PADEP's systematic random sampling (SRSS) procedures, assuming one soil sample per boring shall be submitted for laboratory analysis. Alternate SRSS points shall be selected for any primary SRSS sample locations positioned within the clean backfill of the former UST cavity and any existing below grade utilities (i.e. public water and natural gas). Soil samples shall be analyzed for the **post**-March 2008 PADEP short list for unleaded gasoline parameters (BTEX, cumene, naphthalene, 1,2,4-TMB, and 1,3,5-TMB). Appropriate quality assurance/quality control (QA/QC) samples shall also be obtained for laboratory analysis. The soil sampling results shall be analyzed using PADEP's 75%/10x Ad Hoc Rule, which shall be documented in detail in the RACR (Task / Milestone H)²³.

²¹ 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.

²² Each bidder's approach to implementing Milestone F shall clearly identify the number of sampling events, number of sampling points / samples per event, purging and sampling method(s), QA/QC measures, analytes, analytical method, and other key assumptions affecting the bid price.

²³ If the sampling data does not allow for attainment of the selected standard, additional work will be considered an out-of-scope task under the Fixed-Price Agreement, which will require Solicitor and USTIF approval of a work plan and cost estimate before beginning the work.

Task / Milestone H – Preparation, Submission, and PADEP Approval of RACR. Under this task, the bidder will prepare a fixed-price cost to prepare a draft and final RACR following the completion of Tasks E, F, and G. The RACR shall be prepared in accordance with Section 245.313. At a minimum, the RACR shall provide the details for Tasks A through I. The RACR shall also discuss the selected closure criteria for the site, provide proof of soil and groundwater attainment, and request permanent closure for the site for the current release under an Act 2 Relief of Liability (ROL). The project schedule should allow two (2) weeks for Solicitor and USTIF review of the draft RACR before a final version is submitted to the PADEP. The selected consultant shall then prepare and submit the final RACR to the PADEP in accordance with Section 245.313, and be sealed by a Professional Geologist and / or Professional Engineer registered in the Commonwealth of Pennsylvania (bidders shall refer to state licensing laws to determine which seals are required based on the work performed for and documented in the RACR). The fixed-price cost shall also include addressing any PADEP comments on the RACR.

Task / Milestone I – Site Closure / Restoration Activities. Under this task, the bidder shall describe and provide a fixed-price bid for properly closing the site, including: removal of the remedial system and proper disposal of any remaining wastes; in-place abandonment of remedial system below grade piping; in-place abandonment of monitoring & recovery wells and vapor monitoring points consistent with PADEP guidelines; well head removals; and re-vegetation, concrete / asphalt repairs, as necessary, for areas that have been disturbed by site characterization or remedial action activities. This task shall also include photo–documenting the site restoration work and completion / submittal of the well abandonment forms. Copies of these photographs and forms shall be provided for the Solicitor's files.

Each bid shall specify the number of days for initiating Milestone I following approval of the RACR by PADEP, and shall be conducted in accordance with standard industry practices and applicable laws, regulations, guidance, and PADEP directives. Well, vapor monitoring point abandonment, remedial system removal, and restoration activities will be coordinated with the Solicitor.

The selected consultant shall determine whether the Solicitor wishes to maintain any components of the remedial system (e.g. treatment building), as applicable, before removing it from the Site.

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 / Milestones A through I. A Template/Sample Fixed-Price Agreement is included as Attachment 1.²⁴ The Fund will facilitate negotiations between the Solicitor and the selected consultant towards executing this Fixed-Price Agreement.

As noted earlier, <u>a bidder's response to this RFB Solicitation Package means it has accepted all the</u> <u>contractual terms unless explicitly stated to the contrary in the bid response</u>. Therefore, any requested changes to the Fixed-Price Agreement should 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 USTIF.

Each bid is to clearly 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 addressing Tasks / Milestones A through I. The by-task and by-subtask quotes are to be entered into the Bid Cost Tabulation Spreadsheet included as Table 1 in Attachment 3 to this RFB. Please note that <u>the total fixed-price bid must include all costs</u>, 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. Any bid response that disregards this requirement will be considered non-responsive to the bid requirements and; as a result, will be rejected and will not be evaluated. Finally, please note that referencing extremely narrow or unreasonable assumptions, special conditions, and exemptions may make the bid response too difficult to evaluate and

²⁴ The selected consultant will be provided an electronic copy of the sample contract in Word format to allow contract-specific information to be added.

may result in the bid response being deemed "unresponsive." Bid costs will be evaluated based solely on the cost information as provided on Table 1 in Attachment 3.

Payment Milestones: Table 2 below illustrates a hypothetical sequencing and timing for completion of the respective milestone tasks and payouts. 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 Limited Additional Site Characterization Activities, and Preparation, • Submission, and PADEP Approval of RAP Addendum (Optional)
- Milestone B Implementation of Remedial Approach •
- Milestone C – Remediation System O&M and Site Monitoring / Reporting.
- Milestone D Quarterly Groundwater Monitoring, Sampling, & Reporting. •
- •
- $\frac{\text{Milestone } D}{\text{Milestone } F} = \text{Groundwater Attainment Demonstration.}$ $\frac{\text{Milestone } F}{\text{Milestone } G} = \text{Vapor Intrusion Attainment Demonstration.}$ $\frac{\text{Milestone } G}{\text{Milestone } G} = \text{Soil Attainment Demonstration.}$ •
- •
- Milestone H Preparation, Submission, and PADEP Approval of a RACR •
- Milestone I Site Closure / Restoration Activities. •

Estimated Milestone Timing Month After Contract Award	SOW Activities Anticipated / Completed for that Month	Milestone ²⁵
3	Limited Additional Site Characterization Activities, and Preparation, Submission, and PADEP Approval of RAP Addendum (Optional)	A1, A2, A3
6	Implementation of Remedial Approach	В
8	Remediation System O&M and Site Monitoring / Reporting; Quarterly Groundwater Monitoring, Sampling, & Reporting	C1, D1
11	Remediation System O&M and Site Monitoring / Reporting; Quarterly Groundwater Monitoring, Sampling, & Reporting	C2, D2
14	Remediation System O&M and Site Monitoring / Reporting; Quarterly Groundwater Monitoring, Sampling, & Reporting	C3, D3
17	Remediation System O&M and Site Monitoring / Reporting; Quarterly Groundwater Monitoring, Sampling, & Reporting	C4, D4
20	Remediation System O&M and Site Monitoring / Reporting; Quarterly Groundwater Monitoring, Sampling, & Reporting	C5, D5
23	Remediation System O&M and Site Monitoring / Reporting; Quarterly Groundwater Monitoring, Sampling, & Reporting During	C6, D6
26	Remediation System O&M and Site Monitoring / Reporting; Quarterly Groundwater Monitoring, Sampling, & Reporting	C7, D7
29	Remediation System O&M and Site Monitoring / Reporting; Quarterly Groundwater Monitoring, Sampling, & Reporting	C8, D8
32	Groundwater Attainment Monitoring, Vapor Intrusion Attainment Demonstration, Soil Attainment Demonstration	E1, F1, G
35	Groundwater Attainment Monitoring, Vapor Intrusion Attainment Demonstration	E2, F2
38	Groundwater Attainment Monitoring	E3
41	Groundwater Attainment Monitoring	E4
44	Groundwater Attainment Monitoring	E5
47	Groundwater Attainment Monitoring	E6
50	Groundwater Attainment Monitoring	E7
53	Groundwater Attainment Monitoring	E8
57	Preparation, Submission, and PADEP Approval of RACR	Н
60	Site Closure / Restoration Activities	I

TABLE 2 - SAMPLE MILESTONE COMPLETION / PAYMENT SCHEDULE

Please note that the selected consultant's work may be subject to ongoing review by the USTIF or its representatives to assess whether the proposed and completed work and the associated costs are reasonable, necessary, and appropriate. In order to facilitate review and reimbursement of submitted invoices by USTIF, 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.

²⁵ Each bidder should modify this sample Milestone Completion / Payment Schedule for Milestones A through I to reflect its proposed task schedule, as long as the proposed schedule meets the deliverable deadlines specified in Section 3 of this RFB.

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 250/245 sites has your company closed (i.e., obtained a Release of Liability under Act 2) in Pennsylvania (do <u>not</u> include UST removals / closures)?
 - How many Chapter 250/245 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? (do <u>not</u> include UST removals / closures) [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 A through I by completing the bid cost tabulation spreadsheet provided in Attachment 3 (included among the accompanying electronic files) following the task structure specified herein.
- 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 1) 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. <u>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.</u>
- Identify and sufficiently describe subcontractor involvement by task (if any).
- Provide a <u>detailed schedule</u> complete with specific by-month dates for completing the proposed SOW (<u>Tasks A through I</u>), inclusive of reasonable assumptions regarding the timing and duration of client, USTIF, 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 / USTIF will be kept informed as to project progress and developments and how the Solicitors will be informed of, and participate in, evaluating potential alternatives / tradeoffs with regard to the SOW addressed by Tasks A through I.

6. MANDATORY PRE-BID SITE VISIT

On <u>Wednesday, September 19, 2012</u>, the Technical Contact will conduct a <u>mandatory pre-bid site</u> <u>meeting</u> for a limited number of participants per firm at this property starting at 1 PM. The Technical Contact will be present at the site between 1 PM and 2 PM to answer general questions and conduct a site tour. 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 <u>not</u> 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 will also be distributed in writing to the attendees after the tour, as will the answers to any non-proprietary questions submitted in writing <u>after</u> the pre-bid site tour has been concluded. 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." 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.²⁶

²⁶ The list of assumptions, special conditions, or exemptions will be discussed with the Solicitor. As part of that discussion, the USTIF may advise the Solicitor that certain assumptions, special conditions, or exemptions that are likely to generate change orders may be the financial responsibility of the Solicitor if the change order involves non-reimbursable activities.

ATTACHMENT 1

Template/Standard Fixed-Price Agreement

(This agreement has been provided in an electronic form that does <u>not</u> permit the use to modify the agreement because only the selected consultant will need to complete the agreement. An electronic version of the agreement that will allow for tracking modifications to the agreement will be provided to the selected consultant at the appropriate time.)

ATTACHMENT 2

Historical / Background Documents

Filename:	Document:
PRM_2010-0010F_RFB_Figures.pdf	Figure 2, Site Location & Surrounding Area On Aerial Photograph Figure 5, UST Closure Site Plan Figure 8, Site Plan and Sample Locations Figure 9, Soil Analytical Results Figure 25 – VEGE System and Trenching Location
PRM_2010-0010F_1 st Qtr 2012 RAPR	1 st Quarter 2012 RAPR, dated May 8, 2012
PRM_2-24-12 SCR-RAP Part 1.pdf PRM_2-24-12 SCR-RAP Part 2.pdf PRM_2-24-12 SCR-RAP Part 3.pdf	SCR/RAP, dated February 21, 2012
PRM_UST Closure Rpt_100406.pdf	UST Closure Report, dated April 6, 2010
PRM_InorganicGWsampleResults.pdf	Inorganic Groundwater Sample Results
PRM_2010-0010F_PADEP Files	Miscellaneous PADEP Files

ATTACHMENT 3

Bid Cost Tabulation Spreadsheet