

**COMPETITIVE BID SOLICITATION FOR  
FIXED-PRICE COMPLETION OF ADDITIONAL SITE  
CHARACTERIZATION  
AND EVALUATION OF REMEDIAL ALTERNATIVES**

**FORMER VANDERMARK CITGO**

**932 MAIN STREET, BENTLEYVILLE, WASHINGTON COUNTY, PENNSYLVANIA**

**PADEP FACILITY ID #63-82402 -- PAUSTIF CLAIM # 2004-0073(S)**

**June 14, 2012**

The Pennsylvania Underground Storage Tank Indemnification Fund (PaUSTIF) on behalf of the claimant for the above-referenced claim, is providing this Request for Bid (RFB) to prepare and submit a **Fixed-Price** proposal to conduct additional investigations necessary to complete the characterization of soil and groundwater impacts from a release of petroleum at the Former Vandermark Citgo Property (Site); complete detailed evaluations of remedial alternatives, including pilot testing of selected remedial alternatives; preparation and submittal of a Site Characterization Report which shall include sufficiently detailed reporting of remedial technology evaluations for the Pennsylvania Department of Environmental Protection's (PaDEP) review and approval those technologies which are determined to be appropriate and capable of remediating the site to the selected standard; and, continued quarterly groundwater sampling and interim remedial action activities.

In 2004, following the closure by excavation and removal of the underground storage tank (UST) system, petroleum contaminated soils and groundwater were discovered at the subject property. A Site Characterization Report (SCR) was prepared and submitted along with a Remedial Action Plan (RAP). The RAP was disapproved by PaDEP and additional site characterization was determined to be necessary to adequately characterize the site. Therefore, additional site investigations and remedial technology evaluations appropriate to this site are being sought in order to complete the site characterize and to evaluate appropriate technologies capable of remediating the release to the selected standard and obtaining a release of liability for the identified contamination.

The Solicitor (Mr. Joseph Vandermark) has an open claim (Claim # 2004-0073(S)) with the PaUSTIF and the work outlined in this RFB will be completed under this aforementioned claim. Reimbursement of Solicitor-approved reasonable, necessary and appropriate costs up to claim limits for the work described in this RFB will be provided by PaUSTIF.

The work to be completed under this RFB will generally include the following components (additional details are provided later within this solicitation):

1. Review of available records and documents relating to the release and site characterizations conducted to date;

2. Additional site characterization investigations including installing and sampling monitoring wells and soil borings, surveying, aquifer testing, vapor intrusion testing, completion of pilot tests and evaluation of site appropriate remedial alternatives;
3. Preparation of a Site Characterization Addendum Report which fully details the extent of soil and groundwater contamination, identifies impacted and potentially impacted properties and identifies remedial alternatives capable of attaining the selected standard for the affected media shall be prepared for review and approval by the Solicitor prior to submittal to PaDEP; and,
4. Continued quarterly groundwater sampling and interim remedial free product recovery until the remediation of the site is competitively bid.

For clarity, **THIS RFB DOES NOT INCLUDE THE PREPARATION OR IMPLEMENTATION OF A REMEDIAL ACTION PLAN (RAP).** However, the successful bidder is required to thoroughly evaluate viable remedial alternatives and identify remedial technologies capable achieving the selected remedial standard for the Site.

**Fixed Price** costs for individual tasks proposed by the bidder shall be based on the scope of work provided in the RFB. Expenses for individual tasks in excess of the quoted price for the individual tasks shall be the bidder's responsibility. The scope and budget for any identified out of scope activities must be pre-approved to be eligible for payment. Any costs associated with deviations from the scope that did not receive prior approval by PaUSTIF or its representatives will not be reimbursed.

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 # 2004-0073(S).** 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 Friday, August 3, 2012.** 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.

On behalf PaUSTIF, the Technical Contact will assist the Solicitor in evaluating the bids; however, it is the Solicitor who will ultimately select the consultant with whom he will negotiate a mutually agreeable contract. The bid evaluation will consider, among other factors, total bid cost, unit costs, schedule, discussion of technical approach, qualifications and contract terms and conditions. As a **Fixed Price** Solicitation, cost will be the most heavily-weighted criteria in the bid evaluations; however, it will not be the sole criteria for determination of the successful bidder. The bidders will be informed of the Solicitor’s selection via e-mail.

## A. SOLICITOR AND TECHNICAL CONTACT INFORMATION

<u>Solicitor</u>	<u>ICF Representative</u>	<u>Technical Contact<sup>1</sup></u>
Mr. Joseph Vandermark 60 Kurtz Court Bentleyville, PA 15304	Ms. Tracy Aubel ICF International 4000 Vine Street Middletown, PA 17057-3565	Mr. Eric J. Slavin, MS, CPGS, RPG President/Senior Consultant Earth Resource Associates, Inc. 544 Hemlock Lane Lebanon, PA 17042-6094 Email: Eric.J.Slavin@gmail.com

All questions regarding this RFB Solicitation and the subject site conditions must be directed via email to the Technical Contact identified above with the understanding that all questions and answers will be provided to all bidders. The email subject line must be “Former Vandermark Citgo 2004-0073(S) – RFB QUESTION.”

**Bidders must neither contact nor discuss this RFB Solicitation with the Solicitor, PaUSTIF, PaDEP, or ICF unless approved in writing by the Technical Contact.**

This RFB Solicitation may be discussed with subcontractors/vendors only to the extent required for preparing the bid response.

**All questions must be received by close of business on Wednesday, July 25, 2012.** All questions will be answered by the Technical Contact by no later than Friday, July 27, 2012. **There will be no site visits allowed except as provided in Section G.**

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<sup>1</sup> Subcontractor to ICF.

## **B. ATTACHMENTS TO THIS RFB SOLICITATION**

Attachments 1a through 1d Previous Environmental Reports and Supporting Documents  
Attachment 2 Standard Fixed-Price Remediation Agreement  
Attachment 3 Standard Standardized Bid Cost Summary Spreadsheet

## **C. SITE LOCATION / BACKGROUND**

### **Site Name/Address:**

Former Vandermark Citgo  
932 Main Street  
Bentleyville, PA 15314

### **Municipality /County/ Latitude and Longitude:**

Bentleyville Borough  
Washington County

40° 07' 24.18" north latitude  
-80° 00' 17.45" west longitude

### **Site Use Description:**

The Site is currently unoccupied and was a former retail gasoline station/auto repair facility.

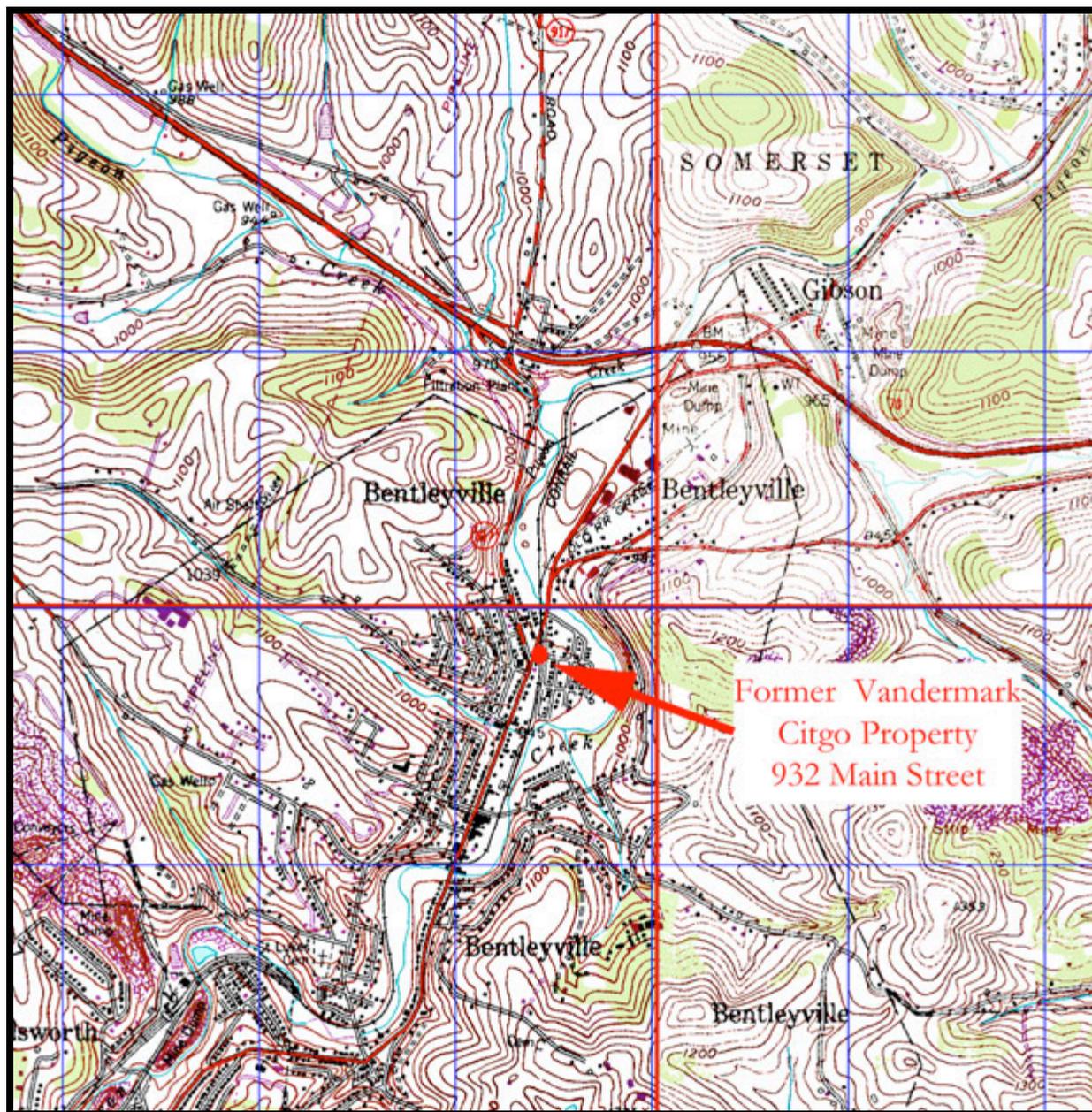
### **Current Petroleum Storage on Site:**

Based on the characterization activities conducted at the Site to date, there are no reported petroleum storage tanks remaining at the Site.

### **Current and Historical Constituents of Concern:**

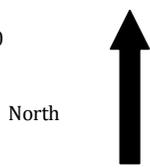
The constituents of concern (COCs) at this site are the substances on the “old” PaDEP short list for unleaded gasoline (benzene, cumene, ethylbenzene, MTBE, naphthalene, toluene, and total xylenes).

FIGURE 1  
SITE LOCATION MAP



Location Map Taken From USGS 7.5 Minute Topographic Series Ellsworth PA 7.5 Minute Quadrangle

Scale 1 : 24,000



North

FIGURE 2  
RECENT AERIAL PHOTOGRAPH OF SITE AREA



AERIAL PHOTOGRAPHY TAKEN FROM GOOGLE EARTH

### **Selected Remedial Standard:**

The selected remedial standard for the Site is the **Site Specific Standard (SSS)** for both soil and groundwater. Attainment of the SSS includes that free phase product be removed from throughout the plume to the maximum extent practicable, as determined by PaDEP.

### **Nature of Confirmed Release and Subsequent Activities:**

The following information is based on the documents provided in Attachments 1a through 1d. This information has not been independently verified by ICF or the Technical Contact.

- Spring 2004 - Four USTs and their associated piping and dispensers were removed from the site. Those USTs included one 6,000-gallon, one 4,000-gallon and one 8,000 gallon gasoline tank which were located in a cavity north of the existing on-site building and a 1,000-gallon waste oil tank which was located in a separate cavity north of the on-site building.
- August 19, 2004 - Interim Remedial Actions were initiated which included the excavation of approximately 421 tons of petroleum impacted soil and removal of approximately 7,250 gallons of petroleum impacted water. Soil excavation was limited by structures, roadways, utilities and steep banks. Following the interim Remedial Actions, confirmatory samples were collected which showed that contamination in excess of the Statewide Health Standard remained in both the soil and groundwater.
- October 28, 2004 - Site Characterization field activities were initiated, and continued through March of 2010, which resulted in thirty one soil borings being completed across the site, with twenty five of those borings being converted to monitoring wells. Periodic groundwater sampling was conducted.
- August 26, 2005 - Free phase product discovered in monitoring wells MW-6 and MW-9.
- March 19, 2008 - Well MW-9 determined to no longer be impacted by free phase product.
- June 19, 2009 - Site Characterization Update Report Issued.
- November 3-4, 2009 - Wells MW-3S, MW-17 and MW-19 installed. No evidence of free phase product noted in drill logs.
- November 6, 2009 - Free product discovered on wells MW-17 and MW-19.
- November 9, 2009 - Free phase product discovered in well MW-3S.

- December 17, 2009 - Automatic product recovery device installed on well MW-3S.
- July 2010 - Site Characterization and Interim Remedial Action Report issued.
- August 30, 2010 - Fifteen additional soil borings were advanced at both on- and off-site locations. Five of those borings were converted to piezometer wells.
- September 1, 2010 - An additional monitoring well (MW-24) was installed.
- September 21, 2010 - Site Characterization Report Review letter issued by PaDEP
- August 22, 2011 - Remedial Action Plan issued.
- October 19, 2011 - Remedial Action Plan disapproved by PaDEP
- January 23, 2012 - Remedial Action Progress Report issued.

#### **Current Conditions:**

Quarterly groundwater sampling and interim free phase product recovery actions at the site are ongoing, with the most recent Remedial Action Progress Report (RAPR) included in Attachments 1a through 1d.

#### **D. OBJECTIVES AND SCOPE OF WORK**

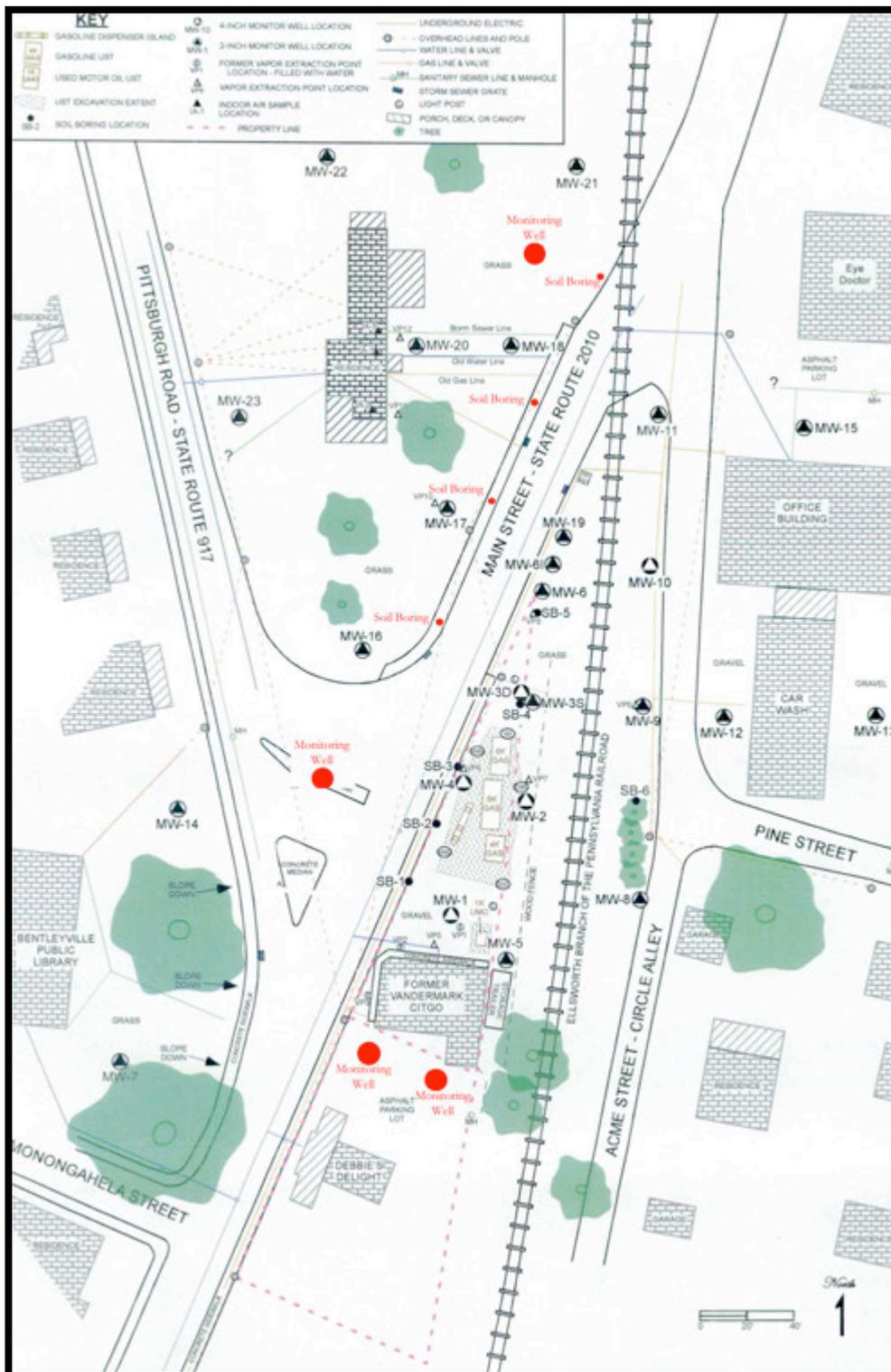
This RFB seeks competitive bids from qualified consultants to complete the assessment of the confirmed petroleum release at the Site and to complete sufficiently comprehensive evaluations of appropriate remedial technologies capable of being implemented and achieving a Release of Liability (ROL) under the SSS for the impacted soil and groundwater. **It is imperative that the evaluation of remedial technologies be sufficiently detailed to permit PaDEP's review and approval of those technologies determined to be viable, so that when the remediation of the site is competitively bid, bidders will have the opportunity to select from multiple PaDEP approved viable alternative technologies.** As a result, bidders are advised that some pilot testing will be necessary to evaluate and to assess the viability of remedial technologies. With these goals in mind, bidder's proposals shall, at a minimum, include the following work elements:

##### **Work Task 1.0 - Soil Borings and Monitoring Wells**

The successful bidder shall install four (4) additional soil borings and four (4) groundwater monitoring wells at the approximate locations shown on Figure 3.

Due to the proximity of the proposed soil borings and monitoring wells to an active public roadway, the successful bidder will need to complete a private mark-out to locate any underground utilities and/or obstructions in the area of the proposed boring locations. If necessary, due to utility locations, each boring/well location may need to be cleared by pre-

**FIGURE 3**  
**ADDITIONAL SOIL BORINGS AND MONITORING WELL LOCATIONS**



BASE MAP TAKEN FROM FLYNN ENVIRONMENTAL MAPPING

excavating the location either by hand or by mechanical means.

The successful bidder shall be responsible for acquiring any access agreements or permits from private property owners, the local municipality and or PennDOT for any work that will be completed on private properties and/or within the rights-of-way as well as any necessary traffic control during well and boring installations.

As a minimum, all soil borings and monitoring well installation work shall be directed and overseen by a geologist under the direct supervision of a Pennsylvania Registered Professional Geologist, in order to assure complete and accurate identification of the subsurface materials encountered and to assure proper construction of the monitoring wells;

The overseeing geologist shall conduct continuous geological characterization and screening of soil (boring logs) from borings using a calibrated photoionization ionization detector (PID). Continuous geological logs shall be prepared by a Pennsylvania Registered Professional Geologist for each boring using standard and consistent classification system procedures (e.g., Modified Burmister or USCS).

The overseeing geologist shall collect discrete one soil sample from each soil boring and monitoring well at a depth coincident with the top of the water table or the soil bedrock interface, whichever is first encountered. Additional samples shall also be collected at any depth interval with a PID response significantly greater than the typical reading for that boring and that is greater than 50 parts per million (ppm), or as determined to be environmentally significant based on field conditions observed and documented by the overseeing geologist. **Bidders shall assume, for the purpose of this RFB, that 2 soil samples will be collected in total from each soil boring and monitoring well installation.**

Soil samples will be collected in laboratory-provided methanol preserved containers in accordance with EPA Method 5035, packed on ice and transported to an independent NELAC or PA Act 252 certified testing laboratory for analysis of the COCs via EPA Method 8260B;

All soil borings shall be completed using Direct Push techniques with continuous sampling of the subsurface materials encountered. All soil boring are to be completed to a depth of 20 feet below grade, top of the water table or refusal, whichever is less. **Bidders are instructed to assume 20 foot completion depths for the purposes of this bid.**

Upon completion, each soil boring shall be backfilled with bentonite chips, which are then to be hydrated to effectively seal the boring. Blacktop (cold patch) or concrete shall be used to repair the ground surface at each boring location.

Monitoring wells shall be installed using a combination of Direct Push techniques with continuous sampling until refusal is encountered, followed by air rotary drilling to the well completion depths. Monitoring Well shall be constructed of minimum 2-inch internal diameter threaded PVC well screens (appropriately sized for the underlying formation materials) and riser pipe.

All monitoring wells shall be installed to a depth of 20-feet below grade.

All wells shall be completed with a minimum of 15-feet of screen.

Each monitoring well riser pipe shall be fitted with a pad locked compression cap, and shall be completed at the surface with a water tight securable manhole, set in concrete flush with the ground surface.

**All wells shall be completed following industry standard techniques and in a manner consistent with the criteria established by the Pennsylvania Department of Environmental Protection's Groundwater Monitoring Guidance Manual dated December 1, 2001 (Document # 383-3000-001).**

The newly installed monitoring wells shall be properly developed to promote adequate hydraulic connection between the aquifer and the well. Well development shall be completed via a combination of mechanical surging and pumping, and shall be continued until such time as the well is reasonably free of sediment. **For the purpose of this RFB it should be assumed that a minimum of 12 well volumes shall be removed in order to develop each well.**

**All investigation derived waste and well development waste shall be disposed of per PaDEP's Southwest Regional Office guidance. It is the successful bidder's responsibility to conform with current PaDEP Southwest Regional Office requirements.**

Subsequent to installing the groundwater monitoring wells they shall be surveyed by a Pennsylvania licensed land surveyor.

## **Task 2.0 - Groundwater Sampling and Free Phase Product Recovery**

**Work Task 2.1 – Quarterly Sampling** -The successful bidder shall complete regular quarterly groundwater monitoring of all on-site and off-site monitoring wells until such time as continued sampling is ordered terminated by PaDEP or the solicitor. **For bidding purposes, bidders are instructed to assume 8 quarters of groundwater sampling.**

Prior to the collection of **any** quarterly groundwater samples, the successful bidder shall collect and record static water levels and free phase product thicknesses from **all** monitoring wells wells. Water level probes and interface meters used to collect measurements shall be decontaminated between wells.

Following the collection of static water levels from **all** wells, the successful bidder shall then initiate purging and sampling of the wells for the COCs (i.e. - benzene, cumene, ethylbenzene, MTBE, naphthalene, toluene, and total xylenes).

During each sampling event, one (1) trip blank (provided by laboratory), one (1) field blank and one (1) laboratory blind duplicate QA/QC groundwater sample shall be collected and

analyzed for the COCs.

Low-flow groundwater purging/sampling techniques consistent with EPA's April 1996 Low-Flow (Minimal Drawdown) Ground - Water Sampling Procedures (EPA/540/S-95/504) shall be used to purge and collect groundwater samples from the monitoring wells unless this method is not viable for documented technical reasons. Records of temperature, specific conductance, dissolved oxygen, pH and ORP measurements used to establish stabilization prior to collection of groundwater samples shall be maintained for each sampling event.

**All investigation derived waste and purge water shall be handled and disposed of per PaDEP's Southwest Regional Office guidance. It is the successful bidder's responsibility to conform with current PaDEP Southwest Regional Office requirements.**

All groundwater samples shall be placed in new laboratory pre-cleaned 40 milliliter (ml) glass VOC vials, acid preserved with hydrochloric acid and packed on ice and transported to an independent NELAC or PA Act 252 certified testing laboratory for analysis of the COCs via EPA Method 8260B.

Full chain-of-custody records shall be completed and maintained for each sampling event.

If separate-phase liquids are encountered during the groundwater sampling, a sample of the separate-phase liquid shall be collected and properly containerized / stored and the Technical Contact shall be notified. PaUSTIF may request (under a separate work scope) that the separate-phase liquid sample be analyzed for forensic properties.

**Work Task 2.2 Quarterly Sampling Reporting** - Upon completion of each quarterly sampling event, the successful bidder shall review and analyze the results of the static water level measurements and the reports of the laboratory testings and shall compile and submit a Quarterly Sampling Report (QSR). Each QSR shall meet the all the requirements of 25 PA Code 245.312 and shall include copies of the static water level elevations collected from each well, a contour map of the static water levels, copies of the laboratory reports of the sample analyses, a summary table of analytic results, including all prior sampling results, isocon mapping of COCs found above the RSHS and copies of the purging records (including records of temperature, specific conductance, dissolved oxygen, pH and ORP measurements used to establish stabilization prior to collection of groundwater samples) and field notes of each sampling event. One (1) copy of each QSR shall be provided to PaDEP, one (1) copy of each QSR shall be provided to the Solicitor and one (1) additional copy of each QSR shall be provided to the ICFI Representative. QSRs shall be submitted to the parties identified above within 30-days of the successful bidder's receipt of the laboratory results of the sampling event; and, in no case more than 30-days of the end of the quarter.

**Work Task 2.3 Free Phase Product Recovery** – The successful bidder shall continue free product recovery actions for the affected wells, with the first recovery action to take place within one (1) of the award of execution of the Remedial Contract associated with this RFB. Free product recovery actions shall include wells MW-3S, MW-6, MW-17, MW-19 and MW-24; shall be conducted monthly and shall be achieved through a combination of the

placement of sorbent socks into the affected wells and manual bailing of product from the wells. **For bidding purposes, bidders are instructed to assume 24 monthly free product recovery actions.**

### **Work Task 3.0 Fate and Transport Modeling**

Fate and Transport evaluations shall be completed as appropriate and consistent with Act 2 guidance documents in order to assess the potential for contaminant migration. This evaluation should take into consideration both the groundwater and soil exceedances at the Site. Bidders should evaluate the data and site specific information provided and determine the most applicable model or models needed to complete appropriate fate and transport modeling for the Site.

**Bidders shall specify which modeling software will be used to predict fate and transport of the constituents of concern exceeding the PADEP statewide health standards in groundwater at the release location and its applicability to the Site.**

### **Work Task 4.0 – Waste Management and Disposal**

The successful bidder shall be responsible for coordinating, managing and completing the proper management, characterization, handling, treatment, and/or disposal of all investigation derivative wastes, including soil/rock cuttings, purge water, development water and pumping test water generated during the implementation of this Scope of Work 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 guidance. Investigation derived wastes 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. Investigation derived wastes 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 SOUTHWEST REGIONAL OFFICE 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 ICFI Representative. Waste disposal costs shall be included in the fixed-price quoted for all work tasks, as appropriate.

Bidders will be responsible for including costs in their bid response to cover the disposal of all potential waste related to the tasks included in this Scope of Work.

In an effort to eliminate or minimize the need for change orders on a fixed price contract, all bidders shall include costs to dispose of all anticipated volumes of waste in their bid response. ICF and PaUSTIF will not entertain any assumptions on the contract with regards to a volume of waste (i.e. Project costs assume that no more than one (1) ton of soil cuttings will require disposal after the installation of the additional monitoring wells). Bidders will be responsible for including costs in their bid response to cover the disposal of all potential waste related to the tasks included in the Scope of Work. Bidders shall estimate, and clearly identify in their bids, the volume of waste using your professional opinion, experience, and the data provided. Invoices submitted to cover additional costs on waste generated as part of activities included under the Fixed Price contract for the subject site will not be paid.

### **Work Task 5.0 - Plume Stability and Extent of Free Product Assessment**

Following the installation of the additional soil borings and monitoring wells associated with this RFB, and prior to conducting the aquifer pumping tests. The successful bidder shall conduct a complete round of groundwater sampling from all monitoring wells. The protocols for collection of static water levels, product thicknesses, low flow purging stabilization parameters and groundwater samples to be followed shall be consistent with that detailed in Work Task 2.1 of this RFB.

In addition to the collection and analysis of groundwater samples for the COCs, the following parameters shall be analyzed for this initial sampling event:

Dissolved and Total Iron, Ferrous Iron, Dissolved and Total Manganese, Nitrate, Nitrite, Nitrogen (ammonia), Sulfate, Sulfite, Total Organic Carbon and Chlorides.

Upon receipt of the analytic results of the analytical results of the initial groundwater sampling event, the successful bidder shall prepare isocon maps of the COCs and the additional parameters listed above, as well as contour maps of the static water level elevations and product thicknesses measures. These maps shall be compared to prior sampling events completed and an assessment made as to whether the dissolved plume and the free product plume appear to expanding, contracting or stable.

Additionally, the successful bidder shall complete appropriate statistical tests of the available groundwater sampling data to assess plume stability. The non-parametric Mann-Kendall trend test (discussed on Page IV-60 in the PaDEP's Technical Guidance Manual) and an appropriate statistical software program such as WQ Stat Plus (Version 1.56) shall be used to complete the assessment. The successful bidder shall prepare output data from the software program that consists of time-series graphs for each data set with the Mann-Kendall test statistic and a table listing the critical test statistic and the trend for each of four confidence levels (i.e., 80%, 90%, 95% and 99%), as well as the Sen's slope estimator on the data which yields the slope of each trend line.

## **Work Task 6.0 - Risk Assessment and Feasible Remedial Alternatives Analysis**

**Task 6.1 Site Specific Risk Assessment**– The successful bidder shall complete a detailed site specific risk assessment consistent with the guidelines provided in the Act 2 Guidance Manual (applicable portions of Sections II.C.4 IV.G and IV.H). These sections provide general information on risk assessment; developing site appropriate standards; discuss potential for pathway elimination; and, provide guidance on site-specific human health assessment procedures. Results of the risk assessment shall be used by the successful bidder to develop site specific standards for each of the individual COCs as well as in evaluating remedial alternatives considered to be capable of attaining a SSS for the Site\

**Task 6.2 – Remedial Alternatives Evaluation** – The successful bidder shall complete a Remedial Alternatives Analysis for the Site to compare cleanup alternatives and to evaluate which remedial actions would be capable of achieving a ROL for the identified contamination associated with the Site, under the SSS for soil and groundwater. **Bidders are advised that in order for a Remedial Alternative to be considered able to demonstrate attainment of the SSS, it must include the removal of free phase product from throughout the plume to the maximum extent practicable, as determined by PaDEP.**

The evaluation should specifically focus on eight (8) key considerations including cost-effectiveness, proven performance, public and environment protectiveness, regulatory compliance, reliability, practical implementation, health & safety and effects on public health and the environment.

As a minimum, the successful bidder shall evaluate the following remedial alternatives with respect to their appropriateness and ability to an SSS closure for the Site:

- 1) Soil Removal
- 2) Vapor Extraction and Bioventing
- 3) Pump and Treat
- 4) In Situ Air Sparging
- 5) In Situ Bioremediation
- 6) Chemical Oxidation
- 7) Vacuum-Enhanced Recovery
- 8) Hydraulic and Pneumatic Fracturing
- 9) Natural Attenuation
- 10) Active Free Product Recovery
- 11) Pathway Elimination and Engineering and Institutional Controls

**The successful bidder shall conduct limited pilot scale testing of remedial alternatives considered to be reasonable and appropriate for attaining the SSS for the site. Details of which remedial alternatives will be pilot tested by the successful bidder shall be provided in the bid response along with the bidder’s rationale for selecting the alternatives proposed to be pilot tested. Details of the proposed pilot tests to be completed shall also be included in the bid response.**

### **Work Task 7.0 – Site Characterization Report:**

Reporting of the results of the additional site characterization and risk assessment and feasible remedial alternatives analysis shall be in the form of a Site Characterization Report which shall provide a summary of the historic site characterizations, results of the additional site characterization efforts conducted in association with this RFB and shall include sufficiently detailed presentation of remedial technology evaluations to permit PaDEP's review and approval of those technologies which are determined to be viable to remediate the identified contamination at the subject site and obtain a ROL under the SSS for soil and groundwater. The format and content of the report shall be generally consistent with 25 PA Code §245.309, .310 and .314 except that a substantially more rigorous evaluation of the remedial alternatives shall be included. The Site Characterization Report shall be sealed by a Professional Geologist registered in the Commonwealth of Pennsylvania. A draft of the Site Characterization Addendum Report shall be submitted electronically (in Adobe PDF format) to the Technical Contact and a hard copy shall be submitted to both the Solicitor and Technical Contact for review/comment prior to finalizing the Site Characterization Report. Once the successful bidder has addressed comments on the draft, the successful bidder shall finalize and issue the Site Characterization Report to PaDEP.

All AutoCAD maps/plans included in the report (e.g., site plan/base map, groundwater elevation maps, dissolved plume maps, soil contaminant distribution maps, etc.) shall also be submitted electronically on CD to the Technical Contact.<sup>2</sup>

### **Additional Considerations:**

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

- Complete necessary, reasonable, and appropriate project planning and management activities until the SOW specified in the executed remediation agreement has been completed. Such activities would be expected to include client communications / updates, meetings, record keeping, subcontracting, personnel and subcontractor management, quality assurance/quality control, scheduling, utility clearance (PA One Call), and other activities. Project planning and management activities will also include preparing and implementing any plans required by regulations or that may be necessary and appropriate to complete the scope of work. This may include health and safety plans, waste management plans, field sampling and analysis plans, and/or access agreements. Project management costs shall be included in the fixed prices quoted for Work Tasks 1 through 7, as appropriate.
- Be responsible for coordinating, managing and completing the proper management, characterization, handling, treatment, and/or disposal of all investigation derived wastes in accordance with standard industry practices and applicable laws, regulations, guidance and PaDEP Southwest Regional Office guidance and directives. Waste characterization and disposal documentation shall be maintained and provided to the

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<sup>2</sup> Figures and AutoCAD drawings are to be prepared on no larger than Ledger Sized (11" x 17") paper.

Solicitor upon request and shall be included as an appendix to the Site Characterization Report. Waste disposal costs shall be included in the fixed prices quoted for Work Tasks 1 through 7, 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 facilitate appropriate access to the areas of the site necessary to complete the SOW. 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 quoted cost for Tasks 1 through 7.

All work shall be conducted in accordance with industry standards / practices, and be consistent with the applicable laws, regulations, and guidance (e.g., PADEP Groundwater Monitoring Guidance Manual, Document No. 383-3000-001 dated December 1, 2001).

Each bidder should carefully review the existing site information provided in Attachments 1a through 1d to this RFB and seek out other appropriate sources of information to develop a cost estimate and schedule to close the site. There is no prequalification process for bidding. Therefore, bids that demonstrate an understanding of existing site information and standard industry practices will be regarded as responsive to this solicitation.

**ONLY BIDS THAT DEMONSTRATE A COMMAND OF EXISTING SITE INFORMATION AND OFFER A COMPREHENSIVE/COMPLETE VISION FOR THE NECESSARY CHARACTERIZATION OF THE SITE TO FULLY DEFINE THE ENVIRONMENTAL CONCERNS ASSOCIATED WITH THE RELEASE IN ACCORDANCE WITH PADEP REQUIREMENTS AND FULLY EVALUATE APPROPRIATE REMEDIAL TECHNOLOGIES CAPABLE OF BEING IMPLEMENTED TO ATTAIN AN ROL UNDER THE SSS FOR THE IMPACTED SOIL AND GROUNDWATER WILL BE REGARDED AS RESPONSIVE TO THIS SOLICITATION.**

#### **E. TYPE OF CONTRACT/PRICING**

The Solicitor wishes to execute a mutually agreeable **FIXED PRICE CONTRACT (Remediation Agreement)** A Remediation Agreement is included as Attachment 2 to this RFB Solicitation. This Remediation Agreement contains the standard language that has been previously employed by other Solicitors on other USTIF-funded claims. The bidder must identify in the bid response and document any modifications that they wish to propose to the standard language contained on Pages 1 through 12 of the Remediation Agreement in Attachment 2 other than obvious site-specific modifications to fit this RFB (e.g., site name and PaDEP Facility Number, assumptions, supporting documents, milestone descriptions, costs, and dates). The number and scope of any modifications to the standard agreement language will be one of the criteria used to evaluate the bid. **Any bid response that does not clearly and unambiguously state whether the bidder accepts the language presented in the Remediation Agreement (Attachment 2) "as is", or that does not provide a cross-referenced list of requested changes to this agreement language, will be considered non-responsive.** This statement should be made in a Section entitled "Remediation

Agreement”. Any proposed changes to the agreement language should be specified in the bid response, however, these changes will need to be reviewed and agreed upon by both the Solicitor and the PaUSTIF.

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

The bidder shall provide its bid using the Standardized Bid Cost Summary Spreadsheet included as Attachment 3 with descriptions for each task provided in the body of the bid document. In addition to Attachment 3, the bidder shall provide a unit rate schedule that will be used for any out-of-scope work on this project.

**Please note that the total fixed-price bid must include all costs, including those cost items that the bidder may regard as “variable”. 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.**

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

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

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

## **F. BID RESPONSE DOCUMENT**

At a minimum, each bid response document must include the following:

- 1) Demonstration of the bidder’s understanding of the existing site information provided in this RFB, the objectives of this Site Characterization Plus solicitation, the bidder’s approach to

achieving those objectives efficiently and standard industry practices;

- 2) Fixed-Price bid pricing using the Standardized Bid Cost Summary Spreadsheet in Attachment 3 including a unit rate schedule for any out-of-scope work. The following information relating to the bid pricing is to be included as additional sheets in Attachment 3 or discussed in the body of the bid document:
  - a) The bidder's proposed unit cost rates for each expected labor category, subcontractors, other direct costs, and equipment;
  - b) The bidder's proposed markup on other direct costs and subcontractors (if any);
  - c) The bidder's total cost by task consistent with the proposed SOW identifying all level-of-effort and costing assumptions.
- 3) Documentation of the bidder's levels of insurance;<sup>3</sup>
- 4) The names and brief resumes of key project personnel, including the proposed Professional Geologist and Professional Engineer (if any) of Record who will be responsible for overseeing the work and applying a professional seal to the project deliverables.
- 5) Answers to the following specific questions:
  - a) How many Chapter 245 Corrective Action projects is your company currently the consultant of record for in the State? In the Southwestern Region? Please list up to 10.
  - b) How many Chapter 245 Corrective Action projects has your company and/or the PA- licensed PG closed (i.e., obtained relief from liability from the PADEP following the submission of an SCR, RAP, and RACR) using any of the available standards from the Land Recycling and Environmental Remediation Standards Act? Please list up to five. **Please include concise case histories of up to two sites that you feel best demonstrate your company's capabilities or most-closely resemble this project.**
  - c) Has your firm ever been a party to a terminated PaUSTIF-funded Fixed-Price (FP) or Pay-for-Performance (PFP) contract without attaining all of the Milestones? If so, please explain, including whether the conditions of the FP or PFP contract were met.
  - d) Has your firm ever been the consultant for a PaUSTIF-funded project that reached its claim limit? If so, please explain.
- 6) Identification and sufficient description of subcontractor involvement by task.

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<sup>3</sup> The successful bidder agrees and shall submit evidence to Solicitor and Technical Contact before beginning work that bidder has procured and will maintain Workers Compensation: commercial general liability insurance in the amount of \$1,000,000; contractor pollution liability insurance in the amount of \$1,000,000; automobile liability insurance in the amount of \$1,000,000; and professional liability insurance in the amount of \$1,000,000 for the work to be performed.

- 7) A detailed schedule of activities for completing the proposed SOW inclusive of reasonable assumptions regarding the timing and duration of client and PADEP reviews (if applicable) needed to complete the SOW. Details on any proposed meetings and work product submittals shall also be reflected in the schedule.
- 8) A description of how the Solicitor and ICF / USTIF will be kept informed on the project progress and developments and how the Solicitor (or designee) will be informed of, and participate in, the evaluation of technical issues that may arise during this project.
- 9) Identification of key level-of-effort and costing assumptions made in formulating the proposed cost estimate. The use of overly narrow assumptions will negatively impact the scoring of the bid.
- 10) A list of exceptions or special conditions applicable to the proposed SOW.
- 11) Quotations from major subcontractors.

#### **G. MANDATORY SITE VISIT**

**A MANDATORY SITE MEETING will be held on Monday, July 9, 2012, starting at 1:00 PM.** The Solicitor, the Technical Contact, or their designee will be at the site between 1:00 PM and 2:00 PM to answer questions and conduct a site tour for **ONE PARTICIPANT PER FIRM.** This meeting is mandatory for all bidders – no exceptions. **ANY FIRM THAT DOES NOT ATTEND THE MONDAY, JULY 9, 2012 MANDATORY SITE VISIT WILL NOT BE ELIGIBLE TO SUBMIT A BID RESPONSE.**

A confirmation of your intent to attend this meeting is requested to be provided to the technical contact via e-mail by Friday, July 6, 2012 with the subject “Former Vandermark Citgo 2004-0073(s) – Site Meeting Attendance Confirmation”. The name and contact information of the company participant should be included in the body of the e-mail.