

**COMPETITIVE BID SOLICITATION FOR
COMPLETION OF SITE CHARACTERIZATION PLUS ACTIVITIES**

SUNOCO MARIETTA AVENUE

2141 MARIETTA AVENUE, LANCASTER, LANCASTER COUNTY, PENNSYLVANIA

PADEP FACILITY ID #36-20447 -- PAUSTIF CLAIM # 2010-0004(F)

March 24, 2011

This Request for Bid (RFB) Solicitation is to prepare and submit a **Cost Not-To-Exceed Time and Materials Competitive Bid** to complete a **Site Characterization Plus** for the subject site.

A petroleum release from the on-site Underground Storage Tank System (UST) was confirmed at the subject site and some site characterizations have been conducted. As a result of those actions, groundwater has been found to have been impacted by petroleum Constituents of Concern (COCs) at concentrations above the Residential Used Aquifer Statewide Health Standard (RUASHS). A Preliminary Site Characterization Report was prepared for the site and submitted to the Pennsylvania Department of Environmental Protection (PaDEP) on July 9, 2010 and was subsequently approved by PaDEP on September 8, 2010, with modifications. Specifically, the PaDEP noted that the extent of groundwater contamination had not been defined.

Additional site investigations and remedial technology evaluations appropriate to this site are being sought in order to fully characterize the extent of the release and to fully evaluate appropriate technologies capable of remediating the release that will result in obtaining a release of liability. The successful bidder will complete the necessary investigations and submit a Site Characterization Plus Report (SCPR) which shall include sufficiently detailed remedial technology evaluations to permit PaDEP's review and approval those technologies which are determined to be viable.

The Solicitor has an open claim (Claim # 2010-0004(F) with the Pennsylvania Underground Storage Tank Indemnification Fund (PaUSTIF or 'Fund'), 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 and the Solicitor.

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

1. Component I activities including: records reviews, interviews, documentation of release and site history, site reconnaissance, etc;

2. Component II Activities including: installing, surveying, gauging and sampling wells, aquifer testing, vapor intrusion testing, etc; and,
3. Component III preparing a Site Characterization Plus Report (SCPR) and remedial alternative evaluations for Solicitor to review prior to PaDEP submittal.¹

Not-to-exceed 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.

Should your company elect to respond to this RFB Solicitation, one (1) hard copy and one (1) electronic copy on a CD of the signed bid package must be provided to the identified ICFI Representative. **The outside of the envelope must be clearly labeled BID – CLAIM #2010-0004(F). The signed response (both electronic and hard copy) to this RFB must be provided to the ICFI Representative no later than close of business (5:00 PM EDT) on May 20, 2011.**

On behalf of ICFI and PaUSTIF, the Technical Contact will assist the Solicitor in evaluating the bid, but the Solicitor will ultimately choose to negotiate the mutually agreeable contract. The Bid evaluation will consider, among other factors, total bid cost, unit costs, schedule, qualifications and contract terms and conditions (no priority or relative weighting is implied by the order of these factors). The Solicitor anticipates informing the bidder with an approval to proceed within nine (9) weeks of the bid response deadline.

A. SOLICITOR AND TECHNICAL CONTACT INFORMATION

<u>Solicitor</u>	<u>ICFI Representative</u>	<u>Technical Contact</u>
Mr. Khalid Mughal Shahmeer Hissan, Inc. 6025 Carlisle Pike Mechanicsburg, PA 17050	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

¹ For clarity, this RFB does not include the preparation or implementation of a Remedial Action Plan (RAP). However, as a Site Characterization Plus, the bidder is required to thoroughly evaluate viable remedial alternatives deemed capable achieving the selected remedial standard.

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

All questions regarding this RFB Solicitation and the subject site conditions must be directed via email to the Technical Contact with the understanding that all questions and answers will be provided to all bidders. The email subject line must be "Sunoco Marietta Avenue 2010-0004(F) – RFB QUESTION." **Bidders must neither contact nor discuss this RFB Solicitation with the Solicitor, PaUSTIF, PaDEP, or ICFI unless approved by the Technical Contact.** This RFB Solicitation may be discussed with subcontractors/vendors to the extent required for preparing the bid response. **All questions must be received by close of business on May 9, 2011.** All questions will be answered by the Technical Contact by no later than May 13, 2011. **There will be no site visits allowed except as provided in Section F.**

B. SITE LOCATION / BACKGROUND

Site Name/Address

Sunoco Marietta Avenue
2141 Marietta Avenue
Lancaster, PA 17603

Municipality /County/ Latitude and Longitude

East Hempfield Township
Lancaster County

40° 03' 10.72" north latitude
-76° 21' 34.69" west longitude

Site Use Description:

The Sunoco Marietta Avenue site is a currently operating convenience store and retail gasoline station, situated on a 0.61-acres tract of land located at the corner of Roherstown Road (State Route 741) and Marietta Avenue (State Route 23) in Lancaster, Pennsylvania . The property is surrounded primarily by commercial and retail properties, with some minor residential usage to the southeast. To the south the property is bordered by Marietta Avenue, across which is a Province Bank branch, adjacent to which is the office of Millfield Construction and then residential properties. To the southwest, across the intersection of Marietta Avenue and Rohrerstown Road is a commercial/retail business, Oh Suzanna Yarn. To the west, the property is bordered by Roherstown Road, across which is the Paparo Cucle Shop, beyond which is a Turkey Hill Convenience Store which does not dispense fuel, and a family restaurant, Louis' Restaurant. To the north and east are currently unoccupied office and warehousing buildings and gravel parking lots of the Pennfield Corporation. Further to the north are commercial properties and an active railroad line across which is a small bulk fuel terminal. Further to the east are residential properties.

The Sunoco Marietta Avenue facility consists of a single story masonry and wood sided structure built on slab. Underground storage tanks associated with the site include three (3) 8,000-gallon fiberglass gasoline USTs, which are located on the southeastern side of the property along with the 4 dispensers which are located beneath a canopy in front of the convenience store.

Nature of Confirmed Release:

The subject site was purchased from Sunoco on July 8, 2009. At that time, Sunoco was conducting sampling events at the site in response to a preexisting release that they had discovered during divestment. On November 25, 2009, the current owner was notified by Sunoco of a spike in unleaded gasoline constituents that was observed in two of the on-site monitoring wells during the prior (October 19, 2009) sampling event. On December 3, 2009 tank and line testing was conducted and the Ultra tank failed the testing event.

On May 13, 2010, PaDEP confirmed that Sunoco had demonstrated attainment of the RUASHS in groundwater for unleaded gasoline constituents, noting that the attainment demonstration only pertains to the historic release discovered during divestment by Sunoco, and not the release discovered as a result of the October 19, 2009 sampling event, following the acquisition of the property by the current owner.

Site Characterization Actions Conducted To Date:

Site characterization activities were initiated by Sunoco in February of 2009 as part of a pre-divestment baseline site assessment. At that time, 5 soil borings were completed and subsequently converted to monitoring wells (MW-1 through MW-5). Soil samples collected from the borings were analyzed for unleaded gasoline COCs, and reported to be below the laboratory detection limits, or below the RUASHSs. Groundwater samples collected from the monitoring wells on March 4, 2009 were also analyzed for unleaded gasoline COCs, with benzene documented to be present in well MW-2, and 1,2,4-trimethylbenzene to be present in wells MW-2 and MW-3 at concentrations exceeding the RUASHS. All other COCs for those wells, as well as all COCs for the remaining wells were reported to be below the laboratory detection limits, or below the RUASHSs.

The 5 groundwater monitoring wells were resampled on April 13, 2009 and reported to have no COCs present in concentrations exceeding the laboratory detection limits.

On July 20, 2009, following the sale of the facility, the 5 on-site monitoring wells were again sampled. While no measurable concentrations of COCs were reported to be present in wells MW-2 through MW-5, detectable concentrations of unleaded gasoline COCs were reported to be present in well MW-1, including benzene which was present at a concentration in excess of the RUASHS.

On August 25, 2009 two additional monitor wells (MW-6 and MW-7) were installed to provide further delineation of the observed groundwater contamination.

A groundwater sampling event was then completed on October 19, 2009, at which time all 7 on-site wells were sampled. Results of that sampling documented a significant increase in the

concentrations of COCs in wells MW-1 and MW-2, with concentrations of several COCs reported in excess of the RUASHS. Concentrations reported from the October 19, 2009 sampling event substantially exceed concentrations previously measured in on-site wells, and were considered as evidence of a new release. Wells MW-3 through MW-7 reported no detectable concentrations of the COCs.

Monitor wells MW-1, MW-2 and MW-7 were resampled on December 1, 2009 at which time 0.69 feet of free phase product was found at well MW-1.

Based on the presence of the free phase product, and a failed tank tightness test completed on December 3, 2009, a new release was confirmed and reported to the PaDEP

On March 30, 2009, and again on June 15, 2009, UES, under contract to Shahmeer Hissan, Inc. Resampled the 7 on-site monitoring wells. Results of those samplings reported free phase product to be present on monitoring well MW-1 and detectable concentrations of unleaded gasoline COCs to be present in the samples collected from well MW-2, including benzene, 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene present at concentrations in excess of the RUASHS.

A Preliminary Site Characterization Report was prepared for the site and submitted to the Pennsylvania Department of Environmental Protection (PaDEP) on July 9, 2010 and was subsequently approved by PaDEP on September 8, 2010, with modifications. Specifically, the PaDEP noted that the extent of groundwater contamination had not been defined.

Copies of the March 2010 Remedial Action Completion Report and the July 2010 Preliminary Site Characterization Report are included as attachments hereto.

Constituents of Concern:

The COCs for the subject site are PaDEP unleaded gasoline constituents benzene, toluene, ethylbenzene, xylenes, isopropylbenzene, MTBE, naphthalene, 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

C. OBJECTIVES AND SCOPE OF WORK

This RFB seeks competitive bids from qualified consultants to complete the assessment of the confirmed petroleum release by timely completion of a Site Characterization Plus to fully define the environmental concerns in accordance with PaDEP requirements. The Site Characterization Plus is to be sufficiently comprehensive and is to include a thorough evaluation of appropriate remedial technologies capable of being implemented and achieving a Release of Liability (ROL) under a combination of the RUASHS and NRUSHS for the impacted soil and groundwater. **As this solicitation is for an Site Characterization Plus rather than a standard Site Characterization, it is imperative that the evaluation of remedial technologies be sufficiently detailed to permit the PaDEP to review and approve 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 limited scale pilot testing may 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 Project Planning/Management:

Task 1.1 Records Review/Documentation - The successful bidder shall review and document the site history and details of the release via document inspection, interviews and related activities including:

- Reviewing Federal, State and local environmental and other databases for the subject property and adjacent properties, as well as searching for any environmental liens filed against the property;
- Reviewing the prior tank closure report, preliminary Site Characterization Report and sampling reports completed for the subject property, copies of which are included in Attachment 1 of this RFB;
- Identifying potential concerns with impacts to public and private water supplies, buildings or structures, stormwater and sanitary sewers and other underground utilities;²
- Identifying potential off-site sources, if any, which may have contributed to the identified contamination.
- Identifying drinking water wells on or within a ½ mile radius of the subject site;
- Documenting of properties within a ½ mile radius of the subject site being connected to public water supplies; and,
- Reviewing the suspected location and volume of the release and affected media (soil, groundwater, surface water and/or vapor).

The successful bidder shall document the property historical records review and interviews by preparing a written detailed summary of research findings including site and vicinity general setting, current land use and planned land use on the property, descriptions of existing and proposed structures, utilities, groundwater wells, availability and connections to public water supplies, other improvements on the site and current and past uses of adjoining properties. A written summary of findings shall be prepared and submitted to the Technical Contact and the Solicitor and shall include a detailed discussion of existing and historical underground storage tanks (USTs), any above ground storage tanks (ASTs), pump islands, canopies and underground product conveyance piping systems including diagrams and any other fuel handling, storage or distribution facilities and any potential off-site sources which may have contributed to the contamination. Documentation of this initial work phase shall include maps, sketches, photos, interview sheets, or other relevant documentation supporting the text.

² Scope of work includes the notification requirements specified in 25 PA Code §245.305

Task 1.2 Preparation of Project Guidance Documents - Documents to be prepared include a Site Specific Health And Safety Plan, a Field Sampling And Analysis Plan, a Quality Assurance/Quality Control Plan, a Pennsylvania One Call Notification Plan, a PennDOT Access/Notification Plan and/or other plans that may be required by regulations or that may be necessary and appropriate.³ Where applicable, the pertinent project guidance documents should be prepared in accordance with 25 PA CODE § 245.

Task 1.3 Project Management – The successful bidder shall complete necessary, reasonable and appropriate project management activities for the duration of the contract period consistent with release investigation projects. Such activities would be expected to include client communications/updates and meetings, permitting, record keeping, subcontracting, personnel and subcontractor management, quality assurance/quality control, scheduling and other activities.

Work Task 2.0 – Work Plan Implementation Activities:

Task 2.1 Licensed Professional Survey of Site/Base Map Preparation – The successful bidder shall have a professionally survey of the site completed by a Pennsylvania-licensed surveyor including all site features (i.e. - buildings, structures, property boundaries, USTs, ASTs, conveyance lines (if known), pump islands, canopies, tank pit observation wells, groundwater monitoring wells and soil boring locations, supply wells, overhead and underground utilities, topography, uses of adjacent properties, rights-of-way, property boundaries, etc.). A professionally sealed reproducible base map shall be included in the SCPR.

Task 2.2 Soil Borings and Monitoring Wells – The successful bidder shall install a sufficient number of additional soil borings and groundwater monitoring wells at appropriate locations, both on and off the subject property, to fully define the extent of contamination. Bidders shall identify the locations and construction details of all proposed wells and borings, along with a narrative detailing the rationale for each proposed well and boring.

As part of the installation of the monitoring wells, the selected consultant shall consider the following:

- a. As a minimum, all soil boring 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;

³ In accordance with 25 PA Code 245.309. Successful bidder shall be responsible for contacting Pennsylvania One Call prior to any invasive field work. In addition, successful bidder shall be responsible for obtaining all necessary permits for monitoring wells drilled in PennDOT or municipal rights-of-ways or cartways.

- b. The overseeing geologist shall conduct continuous geological characterization and screening of soil (boring logs) from borings using a photoionization ionization detector (PID). Continuous geological logs shall be prepared for each boring and monitoring well using standard and consistent classification system procedures (e.g., Modified Burmister or USCS). The soil boring and well logs shall be reviewed, approved sealed by a Pennsylvania Registered Professional Geologist
- c. The overseeing geologist shall collect discrete soil samples from a depth coincident with the water table. One additional sample may 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 ppm. Historical data from existing wells and contemporaneous data from drilling and boring activities should be considered while sampling. 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 identified by PaDEP's Revised Short List of Petroleum Products for unleaded gasoline (i.e.– benzene, toluene, ethylbenzene, xylenes, isopropylbenzene, MTBE, naphthalene 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene) via EPA Method 5035/8260B;
- d. Monitoring wells shall be constructed of minimum 2-inch internal diameter well screens and riser pipe. Centralizers must be used to assure that the sand packs are evenly distribute around the well.
- e. All wells shall be constructed such that the well screen extends from the bottom of the boring to a point at which the screen straddles the unsaturated/saturated zone interface.
- f. Each monitoring well riser pipe will be fitted with a pad locked compression cap, and will be completed at the surface with a water tight securable manhole, set in concrete flush with the ground surface.
- g. All padlocks are to be keyed alike, and 1 set of keys is to be provided to the Technical Contact upon completion of the well installations.

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).

Bidders shall, within their bid packages, provide written detail of their proposed drilling and construction techniques for all wells and borings.

Soil cuttings and liquids generated during the drilling activities shall be containerized disposed of offsite in a manner consistent with the protocols set forth by PaDEP. Disposal of soil cuttings and liquids shall be arranged through a certified waste disposal subcontractor.

Soil cuttings and liquids generated during the drilling activities may be temporarily stored on-site, but shall be removed from the subject site in a timely manner. Temporary on-site storage shall not exceed 90-days from the date of initiation of well drilling.

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.

Groundwater and sediment removed from the wells during development shall be containerized and disposed of offsite in a manner consistent with the protocols set forth by the PaDEP. Disposal of extracted groundwater shall be arranged through a certified waste disposal subcontractor.

The groundwater may be temporarily stored on-site, but shall be removed from the subject site in a timely manner. Temporary on-site storage shall not exceed 90-days from the date of initiation of well development.

Subsequent to installing the soil borings and wells, all wells and borings shall be surveyed by a professional surveyor to identify locations on the scaled base site plan and to determine top of casing elevations (elevation above mean sea level).

Task 2.3 Summary Soil Sampling Reporting - Upon completion of monitoring well installations, well development and soil sampling, the successful bidder shall review and analyze the results of the well installations and the reports of the laboratory testings and shall compile and submit a Summary Soil Sampling Report (SSSR). **The SSR shall include copies of the completed well logs for each monitoring well, copies of the laboratory reports of the soil sample analyses, a summary table of soil analytic results, copies of the well development records and field notes of each sampling event.** One copy of each SSSR shall be provided to PaDEP, 1 copy of each SSSR shall be provided to the Solicitor and 1 additional copy of each SSSR shall be provided to the ICFI Representative. **SSSRs are to be submitted to the parties identified above within 30-days of the successful bidder's receipt of the laboratory results of the soil samplings.**

Task 2.4 Groundwater Sampling - The successful bidder shall complete regular quarterly groundwater monitoring of all on-site and off-site monitoring wells, until such time as termination of continued sampling is approved by PaDEP or the solicitor⁴.

⁴ For bidding purposes, bidders should assume 8 quarters of quarterly monitoring.

Prior to the collection of any groundwater samples, the successful bidder shall check all wells for the presence of free phase petroleum product and collect and record product thicknesses (if present) and static water levels measurements for all wells. If free phase product is present in any of the wells, the consultant shall remove and contain the product and shall immediately verbally notify the Technical Contact and confirm the notification via email.

Following the collection of static water levels from all wells, the successful bidder shall purge and sample all wells in which no free phase petroleum product was present.

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. Full groundwater sampling records as identified by the low-flow guidance document shall be completed and maintained for each sampling event.

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 identified by PaDEP's Revised Short List of Petroleum Products for unleaded gasoline (i.e.– benzene, toluene, ethylbenzene, xylenes, isopropylbenzene, MTBE, naphthalene 1,2,4-trimethylbenzene and 1,3,5- trimethylbenzene) via EPA Method 5030B/8260B.

During each sampling event, 1 trip blank (provided by laboratory) and 1 blind duplicate QA/QC groundwater sample shall be collected and analyzed for the COCs.

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

Bidders shall, within their bid packages, provide written detail of their proposed purging, sample collection and sample handling techniques and methods.

Task 2.5 Quarterly Groundwater Sampling Reporting - Upon completion of each quarterly groundwater 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 Groundwater Sampling Report (QGWSR). **Each QGWSR 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 UARSHS and copies of the low-flow purging records and field notes of each sampling event.** One copy of each QGWSR shall be provided to PaDEP, 1 copy of each QGWSR shall be provided to the Solicitor and 1 additional copy of each QGWSR shall be provided to the ICFI Representative. **QGWSRs are to be submitted to the parties identified above within 30-days of the successful bidder's receipt of the laboratory results of the sampling event.**

Task 2.6 Aquifer Testing – Slug tests shall be complete within multiple wells to identify the horizontal and vertical spatial variability in the aquifer characteristics⁵. Both rising and falling head tests shall be completed at each tested well. The evaluation of the rising and falling head test data shall be performed according to the Bouwer and Rice method for completely or partially penetrating wells in unconfined or semi-confined aquifers. Should the test data suggest confined aquifer conditions, then another method of data reduction shall be used such as the curve matching techniques developed by Cooper.

Task 2.7 Fate and Transport Modeling - Fate and Transport Modeling shall be completed. The Quick Domenico two-dimensional analytical model to predict fate and transport of COCs exceeding the RSHS in groundwater beneath the subject site, if appropriate; however, due to the presence of groundwater within the underlying fractured carbonate bedrock, alternative fate and transport models to be more appropriate.

Bidders shall identify the fate and transport model they propose to use, along with a detailed discussion of why that particular model is proposed and appropriate for the site.

Task 2.8 Vapor Intrusion Into Buildings – The successful bidder shall complete vapor intrusion investigations consistent with the Land Recycling Technical Guidance Manual – Section IV.A.4 Vapor Intrusion Into Buildings from Groundwater and Soil under the Act 2 Statewide Health Standard, Document 253-0330-100, dated January 24, 2004. Because of the presence of FPP in well MW-1, soil and indoor air quality sampling is required.

Bidders shall identify the locations and number of soil and air quality sampling locations to be included, along with a detailed rationale for the selection of those locations and a detailed description of the methodologies that will be employed to collect and analyze air quality samples.

Work Task 3.0 – 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 impacted soils, water, and derivative wastes generated during the implementation of this Scope of Work in accordance with standard industry practices and applicable laws, regulations,

⁵ Slug test work shall be completed as per accepted industry standards and in accordance with the American Society for Testing and Materials (ASTM) standards as defined in ASTM D4104-96 (2004), ASTM D5785-95 (2000), ASTM D5881-95 (2000) and ASTM D5912-96 (2004).

guidance, and PaDEP directives. Waste characterization and disposal documentation (e.g., manifests) shall be maintained and provided to the Solicitor upon request.

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 SOW. Waste disposal costs shall be included in the not-to-exceed-price quoted for all work tasks, as appropriate

The successful bidder shall manage purge water from the on-site monitoring wells consistent with the guidelines set forth by PaDEP's Groundwater Monitoring Guidance Manual PaDEP Document # 383-3000-001.

Soil/rock cuttings and liquids generated during the drilling activities shall be disposed of offsite in a manner consistent with the protocols set forth by the PaDEP. Disposal of soil/rock cuttings shall be arranged through a certified waste disposal subcontractor.

Work Task 4.0 – Site Characterization Plus Report:

Reporting of the results of the site characterization shall be in the form of a Site Characterization Plus Report (SCPR) **which shall include sufficiently detailed 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. The format and content of the report shall be generally consistent with 25 PA Code §245 309, except that a substantially more rigorous evaluation of the remedial alternatives shall be included. The SCPR shall be sealed by a Professional Geologist registered in the Commonwealth of Pennsylvania. A draft of the SCPR 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 SCPR. Once the successful bidder has addressed comments on the draft, the successful bidder shall finalize and issue the SCPR 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.⁶

The scope of work as described above shall be conducted in accordance with industry standards/practices, and consistent with the PaDEP requirements and guidelines (e.g. the current PaDEP Groundwater Monitoring Guidance Manual Document No 383-3000-0011)⁷

Each bidder should carefully review the existing site information provided in Attachment 1 to this RFB and seek out other appropriate sources of information to develop a cost estimate

⁶ Figures and AutoCAD drawings are to be prepared on no larger than Ledger Sized (11" x 17") paper.

⁷ In the event that site conditions preclude adherence to industry standards/practices, and consistent with the PaDEP requirements and guidelines bidders shall proposal alternate techniques which must be preapproved by the Technical Contact and PaDEP prior to implementation.

and schedule leading up to and including preparing the SCPR. 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 RSHS for the impacted soil and groundwater will be regarded as responsive to this solicitation.⁸

D. QUALIFICATION QUESTIONS

In order for proposals to be considered administratively complete, bidder's proposals must provide written answers to the four (4) qualifications and experience questions provided below:

1. Does your company employ (not subcontract) a Pennsylvania Licensed Professional Geologist (P.G.) that is designated as the proposed project manager? How many years of experience does this person have?
2. How many Chapter 245 Corrective Action projects in the State has your company and/or the Pennsylvania Licensed P.G. closed after the completion and acceptance of an SCR, RAP and RACR (i.e., obtained relief from liability from the PaDEP) using the Statewide Health or Site Specific Standards? Please list up to five.
3. How many Chapter 250 Corrective Action projects in the State has your company and/or the Pennsylvania Licensed P.G. closed (i.e., obtained relief from liability from the PaDEP) using the Statewide Health or Site Specific Standards? Please list up to five.
4. 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.

E. TYPE OF CONTRACT/BID INSTRUCTIONS

The Solicitor wishes to execute a mutually agreeable **Cost Not-to-Exceed Time-and-Materials Contract** (Remediation Agreement) based on unit prices for labor, equipment, materials, subcontractors/vendors and other direct costs. The total cost quoted by the successful bidder will be the maximum amount to be paid by the Solicitor unless a change in scope is authorized and determined to be reasonable, necessary and appropriate.

⁸ If bidders believe additional work steps beyond work scope items identified herein are necessary to complete the SCPR, these items should be identified in the bidder's proposal. Reasonable, necessary and appropriate work that is performed outside of this scope of work due to unforeseen conditions shall be reimbursed according to the unit rate schedule.

A copy of the Standard Remediation Agreement is included as Attachment 2 to this RFB solicitation. This sample agreement has been previously employed by other Solicitors on other PaUSTIF-funded claims. The bidder must identify in the bid response document any modifications that they wish to propose to the Standard Remediation Agreement language in Attachment 1, other than obvious modifications to fit this RFB (e.g., names and dates). The number and scope of any modifications to the standard agreement will be one of the criteria used to evaluate the bid.

All bid responses must clearly and unambiguously state whether or not the bidder accepts the Remediation Agreement included in Attachment 1 "as is," or provide a cross-referenced list of requested changes to this agreement. Any requested changes to the agreement should be specified in the bid response; however, these changes will need to be reviewed and agreed upon by both the Solicitor and the PaUSTIF.

The Remediation Agreement costs shall be based on unit prices for labor, equipment, materials, subcontractors/vendors and other direct costs.

Because site characterization is an iterative process with each phase of characterization being shaped by the results of the previous phase, it is realistic to assume that reasonable, necessary and appropriate deviations from and modifications to this Scope of Work may occur during the project. The Remediation Agreement states that any significant changes to the Scope of Work will require approval by the Solicitor, PaUSTIF, and PaDEP.

The bidder shall provide its bid using the Standardized Bidding Spreadsheet format included in Attachment 1 with brief descriptions provided for each task provided in the body of the bid document. An electronic version of the Standardized Bidding Spreadsheet (in Microsoft Excel Format) has been provided within Attachment 1. In addition, the bidder shall provide a unit rate schedule that will be used for any out-of-scope work on this project.

The bidding firm **MUST INCLUDE THE FOLLOWING** in their proposal:

- A demonstration of the bidder's understanding of the existing site information provided in this RFB, industry standard practices and the objectives of the project.
- The bidder's approach to achieving the project objectives (implementing the scope of work) efficiently.
- A detailed **Cost Not-to-Exceed** price quotation for completion of the scope of work; using the standardized format provided within the Standardized Bidding Spreadsheet included with Attachment 1, including a rate schedule for any out-of-scope work. **The following information relating to the bid pricing must be included:**

- The bidder's proposed unit cost rates for each expected labor category, subcontractors, other direct costs and equipment;
 - The bidder's proposed mark-ups on other direct costs and subcontractors (if any);
 - Estimated cost by task and total costs must be defined within the proposal text **AND** on the Standardized Bidding Spreadsheet included with Attachment 1; and,
 - The bidder's estimated total cost by task consistent with the proposed scope of work identifying all level-of-effort and cost assumptions.
-
- A detailed schedule of activities for completing the proposed scope of work inclusive of reasonable assumptions regarding the timing and duration of client and/or regulatory agency reviews (if any) need to complete the scope of work defined by this RFB;
 - Indication of whether the bidder accepts or seeks changes in the proposed contract/terms and conditions;
 - A copy of the bidder's proposed contract/terms and conditions;
 - The bidder's levels of insurance;⁹
 - The bidder's proposed unit cost rates for each expected labor category, subcontractors, other direct costs and equipment;
 - The bidder's proposed markup on other direct costs and subcontractors (if any);
 - Identification and detailed description of subcontractor use and involvement;
 - Identification of any exceptions, assumptions or special conditions applicable to the scope of work;
 - Costs by task must be defined within the proposal text and on the cost spreadsheet included in Attachment 1 and the bidder's cost by task consistent with the proposed scope of work identifying all level-of-effort and costing assumptions;
 - A statement of qualifications including that of any major subcontractor(s);

⁹ 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.

- Description of the bidders approach to working with PaDEP from project inception through PaDEP approval of the SCR. Description of how PaDEP would be involved proactively in the resolution of any technical issues and how the PaDEP case team will be kept informed of activities at the subject site;
- Description of how the Solicitor and ICFI/PaUSTIF will be kept informed as to project progress and developments and how Solicitor (or designee) will be informed of and participate in evaluating technical issues that may arise during this project;
- Answers to the qualification questions discussed in the RFB;
- Identification and resumes of the members of the proposed project team for key project staff, including the proposed Pennsylvania Registered Professional Geologist of Record who will be responsible for overseeing the work and applying a Pennsylvania Professional Geologist's Seal to the project deliverables.

The bidder shall provide its bid pricing using the format identified in this RFB and will provide brief descriptions of each task in the body of the bid document. Also, the bidder must complete the detailed cost sheet (in Microsoft Excel Format) included within Attachment 1 of this RFB.

The scope of work, as described within this RFB, shall be conducted in accordance with industry standards and practices, and consistent with PaDEP requirements and guidelines. The successful bidder's work to complete all work tasks associated with this RFB will be subject to ongoing review by the PaUSTIF or its representatives to assess whether the work actually completed and the associated incurred costs are reasonable, necessary and appropriate

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

The bid responses must clearly and unambiguously state their acceptance of the provided contract or must clearly cross reference any requested changes.

Each bid package received will be assumed to be good for a period of up to 120 days after receipt unless otherwise noted. Please note that ICFI, PaUSTIF and Earth Resource Associates, Inc. will treat the bids as confidential, but that limited general information may be released to the Solicitor and/or Earth Resource Associates, Inc. after the bid selection process is completed. In addition, for your reference, a copy of the PaUSTIF Competitive Bidding Fact Sheet is provided within Attachment 1. The aforementioned guidance document provides you with additional information relative to the bidding process.

F. MANDATORY SITE VISIT

THERE WILL BE A MANDATORY SITE MEETING ON APRIL 18, 2011. The Technical Contact (or his designee) will be at the site at 11:00 AM to answer questions and conduct a site tour for **ONE (1)** participant per firm. **This meeting is mandatory for all bidders – no exceptions. Any firm that does not attend the April 18, 2011 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, no later than April 11, 2011 with the e-mail subject line containing “SUNOCO MARIETTA AVENUE SITE - PAUSTIF CLAIM 2010-0004(F) – SITE MEETING ATTENDANCE CONFIRMATION.” The name and contact information of the prospective bidding firm should be included in the body of the e-mail.

ATTACHMENT 1

Project Documents

1. Groundwater & Environmental Services SCR/RAP (June 2009)
2. PaDEP SCR/RAP Approval Letter (July 27, 2009)
3. Groundwater & Environmental Services 4th Quarter 2009 RAPR (January 2010)
4. EnviroTrac Remedial Action Completion Report (March, 2010)
5. PaDEP RACR Approval Release of Liability Letter to Sunoco (May 13, 2010)
6. Preliminary United Environmental SCR (July, 2010)
7. PaDEP SCR Approval Letter (September 8, 2010)
8. PaDEP Groundwater Monitoring Guidance Manual, Document # 383-3000-001(December 1, 2001)
9. EPA Low-Flow (Minimal Drawdown) Ground -Water Sampling Procedures (EPA/540/S-95/504) (April 1996)
10. PaDEP Land Recycling Technical Guidance Manual – Section IV.A.4 Vapor Intrusion Into Buildings from Groundwater and Soil under the Act 2 Statewide Health Standard, Document 253-0330-100 (January 24, 2004)
11. Standardized Bidding Spreadsheet Format (Microsoft Excel)
12. PaUSTIF Competitive Bidding Fact Sheet
13. Sample Remediation Agreement (contract)