COMPETITIVE FIXED-PRICE BID SOLICITATION REVISED REMEDIAL ACTION PLAN PREPARATION & IMPLEMENTATION INCLUDING SOIL EXCAVATION, ATTAINMENT DEMONSTRATION, AND REMEDIAL ACTION COMPLETION REPORTING

COUNTRY FAIR #44

1843 SOUTH CENTER STREET EXT., GROVE CITY, MERCER COUNTY, PA 16127 PADEP FACILITY ID NO. 43-91315; PAUSTIF CLAIM #98-451(M)

March 3, 2011

This Fixed-Price Request for Bid (RFB) Solicitation to plan and complete remediation of remaining unleaded gasoline contamination from a historical release / spill at the subject Site. The Solicitor seeks to cost effectively attain the Pennsylvania Department of Environmental Protection (PADEP) Statewide Health Standards (SHS) for unleaded gasoline constituents beneath the Site and vicinity in accordance with 25 PA Code §245. The planning, remediation, attainment demonstration and related work covered under this RFB will be completed by the successful bidder for the Solicitor, Mr. Scott Wonsettler.

Solicitor requests a written approach, schedule, and firm fixed-price bid to complete the work scope (SOW) tasks to be completed in accordance with all applicable PADEP rules and regulations. Although not a party to this Agreement, the Fund will reimburse 85 percent of all costs referenced in the Milestone Payment Schedule specified in Section 5 below and as incorporated into the signed Fixed-Price Agreement. SOW (Tasks 1 through 7) described below will be subject to a Fixed-Price Agreement (see Attachment 2) to be executed by Solicitor and the selected consultant.

Task 1	Prepare a Revised Remedial Action Plan	
Task 2	Source Soil Excavation, Screening, Transportation / Disposal & Attainment Demonstration.	
Task 3	Monitoring Well Replacement.	
Task 4	Quarterly Groundwater Monitoring and Reporting.	
Task 5	Groundwater Attainment Demonstration.	
Task 6	Remedial Action Completion Report	
Task 7	Site Restoration	

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

Should your company elect to respond to this RFB Solicitation, one copy of the signed bid package must be provided directly to the Funds' third-party administrator, ICF International (ICFI), at the address and to the attention of the person identified in Section 1

below. In addition to this one hard copy submittal, one electronic (PDF) copy of the complete bid response must be submitted to ICFI on a compact disk (CD)_to be included with the hard copy bid response. The outside of the bid response package response package <u>must be</u> clearly marked and labeled with "Bid – Claim #1998-0451(M)."

Please note that **the bid response** (hard copy or digital version) is to be sent <u>only</u> to ICFI who will be responsible for opening the bids and providing copies to the Technical Contact and the Solicitor. No bid responses will be opened for review until the due date and time elapses. Submitted bid responses are subject to Pennsylvania's Right-to-Know Law.

The signed bid package (hard copy and electronic copy) sent to ICFI must arrive **no later than close of business (5 p.m.) on April 11, 2011**. Please note that if your bid response is not received by ICFI by this due date and time, it will not be considered, i.e., only those bid responses received by the specified due date and time from those bidders who also attended the mandatory pre-bid site visit (see Section 6) will be considered.

Each bid response will be considered individually and consistent with the evaluation process described in the PAUSTIF Competitive Bidding Fact Sheet, which can be downloaded from the PAUSTIF web site (see www.ins.state.pa.us). While the Technical Contact will assist ICFI, PAUSTIF, and the Solicitor in evaluating the bid responses, the Solicitor will select his consultant from those bid responses deemed acceptable to PAUSTIF as reasonable, necessary, and appropriate. The Technical Contact will assist the Solicitor in communicating its choice of the successful bidder, which is anticipated to occur within six (6) weeks after receiving the bid responses.

1. SOLICITOR AND TECHNICAL CONTACT INFORMATION

ICF International	Solicitor	Technical Contact
Mr. Tracy Aubel ICF International 4000 Vine Street Middletown, PA 17057	Mr.Scott Wonsettler, P.G. Environmental Manager United Refining Company 15 Bradley Street Warren, PA 16365	Mr. David J. Allison, P.G. Excalibur Group, LLC 32 Orangeville Road Greenville, PA 16125 Telephone: (724) 588-6125 mailto:dallison@excaliburgrpllc.com

Please note that **there is a single point of contact regarding this RFB Solicitation**. All questions regarding this RFB Solicitation and the site conditions must be directed in **written form only** to the **Technical Contact** and must be received no later than seven (7) calendar days prior to the due date for the bid response. 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, PAUSTIF, or ICFI 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. SITE LOCATION / BACKGROUND

The Site is located at 1843 South Center Street Extension in Grove City, Mercer County, Pennsylvania (also referred to as "the Property" or "the Site"). The Site is located southeast of the intersection of Interstate Route 79 and State Route 208 (South Center Street). A site location map and general site features maps are presented as Figures 1, 2, and 3 in EXHIBIT 1 (provided on compact disk with this RFB).

The site has been a retail fueling facility since at least the mid 1960s (site is shown on a 1967 aerial photograph). No information was available for the time period between 1967 and 1995. A Notice of Reportable Release (NORR) was submitted in September 1995 when impacts were discovered during tank upgrade activities. Impacted soil in the vicinity of the dispensers was left in place, and remedial system piping was installed to facilitate in-situ treatments using vapor extraction techniques. Apparently, the aboveground components for the vapor extraction system were installed and began operation in November 1996; however, shallow groundwater reportedly flooded the lateral system rendering vapor recovery impractical.

A site characterization investigation consisting of eight soil borings and three monitoring wells was initiated in early 1999, and a Site Characterization Report (SCR) was submitted in July. Groundwater sampling of the on-site potable water well discovered MTBE. Three additional monitoring wells were subsequently installed in September 1999 and a revised SCR was submitted in November 1999.

A Remedial Options Assessment Report was submitted in February 2000. Five additional shallow monitoring wells (MW-7 through MW-11) were installed in July and three deep monitoring wells (DW-1 through DW-3) were installed in October. A replacement well using double cased methodologies was also installed for the on-site water supply and the former supply well was abandoned.

Separate SCRs were submitted for the shallow and the deep aquifers in January and March 2001, respectively. Remedial actions were proposed using biologically enhanced remediation and implemented using the vapor extraction laterals installed previously as part of a water recirculation system. The system became operational in October 2001.

The remedial system was deactivated in January 2004 due to vandalism and a bioremediation feasibility study was also completed in January. Consulting services were transferred to GES in

August 2004 and quarterly monitoring was initiated in September. In October 2005, additional source area delineation was initiated using geoprobe borings in the vicinity of MW-2.

Road construction and widening activities resulted in the abandonment of three monitoring wells (MW-4, MW-5, and MW-10) on the north side of the Site in 2006. GES initiated High Intensity Targeted (HIT) remediation efforts in 2007 at MW-2 and installed MW-12 and MW-13 in June 2007. HIT events continued quarterly at MW-2 and MW-12 to the present time.

Historical site documents include the NORR and Closure Report prepared by Empaco in 1995 through the Second Quarter 2010 RAPR prepared by GES, Inc. These historical reports and correspondence are compiled on the CD (EXHIBIT 2) and detail the history of events and remedial efforts conducted at the site.

The following is a list of selected key site/background facts and observations extracted from project documents. To the extent there are any conflicts between this summary and the documents, the bidder shall rely on the source documents.

- The site is currently an active retail petroleum distribution facility operated as a Country Fair convenience store and Citgo branded fuels.
- File information (tank registration) indicates the original tanks were installed in 1975 (two tanks) and 1980 (two tanks) and the site operated as a Sunoco retail facility.
- Soil and groundwater gasoline contamination, exceeding the SHS was discovered during the closure of four USTs in September 1995. Approximately 600 tons of contaminated soil was removed from the site for disposal. The tank excavation indicated impacts from about four to fourteen feet and impacts to depths of four feet in the product line trenches. Impacted soil was left in place in the dispenser island area. Shallow laterals were installed for in-place soil treatment near the dispensers. A NORR was submitted in September 1995. The closure report indicated that tanks were in 'good condition'.
- ➤ In December 1995, PADEP requested an SCR to determine horizontal and vertical extent.
- ➤ Original remedial efforts consisted of installation of a blower to circulate fresh air and a vacuum system and carbon to treat recovered vapors. The system flooded due to shallow water in the extraction trenches and was subsequently abandoned.
- Site characterization and remedial feasibility field activities (1999) consisted of advancing eight soil borings and three monitoring wells (MW-1 through MW-3. The study concluded that groundwater was perched, discontinuous, and impacted above action levels and that soils from one location (B-5) were above action levels. Subsequently, three additional monitoring wells (MW-4

through MW-6) were installed. Groundwater sampling indicated that the onsite potable well was impacted with MTBE.

- ➤ A 'Remedial Options Assessment' was completed in May 2000 and proposed biological treatment for MTBE. Subsequent RAP proposed using the previously installed laterals to recover impacted water, a bioreactor for treatment, and reintroduction of water for 'soil washing'.
- Additional characterization in 2001 included the installation of three deep wells and replacement of the potable well. Deep monitoring wells were not impacted by site constituents. Separate characterization reports were submitted for the deep aquifer and the 'perched aquifer' systems.
- ➤ The biological remediation system was installed in June 2001 and operated until vandalized in January 2004.
- Quarterly groundwater monitoring was conducted and Remedial Action Progress Reports continue to date.
- ➤ In 2006, monitoring wells MW-4, MW-5, and MW-10 were abandoned to accommodate PennDOT construction related to widening Route 208, north of the site.
- ➤ Targeted vacuum extraction events were initiated at MW-2 and MW-11 in 2007; MW-12 and MW-13 were installed (June 2007). Vacuum events continued at MW-2 and MW-12 to present. Deep monitoring wells DW-1 and DW-2 were abandoned in 2008.
- Quarterly monitoring and vacuum extraction events continued through the 2Q2010.
- Historical analytical data suggests, in deference to years of remedial efforts, that residual contamination may exist in soil in the vicinity of MW-2 and MW-12, due to the persistence of site related constituents in groundwater at those locations.

3. SCOPE OF WORK OBJECTIVES

The Solicitor's objective is to initiate a cost effective cleanup working toward a goal of obtaining a PADEP Relief of Liability under Act 2 regulations using SHS standards for unleaded gasoline contaminants. To accomplish this objective and begin the cleanup process, the Solicitor is requesting competitive fixed-price bids for preparing and implementing a revised RAP that includes conducting remedial measures (source mitigation), groundwater monitoring and reporting, attainment demonstration and closure. Source mitigation will involve the removal and disposal of source soils. Additionally, during the period of performance, dissolved groundwater contaminants shall be monitored quarterly.

To be deemed responsive, each bid must respond in detail to each of the SOW tasks, including describing the bidder's understanding of the conceptual site model and how that model relates to the bidder's proposed approach to executing the SOW. In other words, bidders shall respond to the SOW as stated herein to enable as much of an "apples-to-apples" comparison of the bids as possible. Recommendations for changes to the SOW should be discussed and quantified separately

Once the contract is signed, any modification to the selected consultant's SOW for Tasks 1 through 7 will require prior written approval by the Solicitor **and PAUSTIF** through its third-party administrator, and may require PADEP pre-approval.

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 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).

Per the Solicitor's request, the SOW covered by Tasks 1 through 7, including submitting a RRAP to the PADEP for review, must be completed within 40 months following contract award. Each bidder's proposed project schedule for Tasks 1 through 7 must meet this requirement clearly and unambiguously. The project schedule must also specify no less than two (2) weeks for the Solicitor and PAUSTIF to review and comment on the draft RRAP before it is finalized and submitted to the PADEP for its review and comment. Therefore, the bid shall also include time to address any PADEP comments received on the RRAP.

In addition to the SOW 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, and shall also include activities related to establishing any necessary access agreements. Project management costs shall be included in the fixed-price quoted for Tasks 1 through 10, as appropriate.
- Be responsible for coordinating, managing and completing the proper management, characterization, handling, treatment, and/or disposal of all impacted soils, water, and derivative wastes generated during the implementation of this SOW in accordance with standard industry practices and applicable laws, regulations, guidance, and PADEP directives. Waste characterization and disposal documentation (e.g., manifests) shall be

maintained and provided to the Solicitor upon request. <u>Waste disposal costs shall be included in the fixed-price quoted for Tasks 1 through 10, as appropriate</u>.

- 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. 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 Tasks 1 through 7.
- Be responsible for keeping all 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 contract at its expense; however, should a well become damaged or destroyed through no fault of the contractor, the Solicitor may request that the selected consultant repair or replace the well as an amendment to this SOW subject to the rate schedule provided in the selected consultant's bid response. Any request for Fund reimbursement of the reasonable costs to repair or replace a well will be considered on a case-by-case basis.

4. WORK SCOPE TASKS (SOW)

Bidders are to detail their approach and costs to completing the work scope tasks summaries provided below.

Task 1 – Prepare a Revised Remedial Action Plan

Develop a draft Revised Remedial Action Plan (RRAP) and submit the document to the Solicitor and USTIF (through its third-party administrator ICF International [ICF]) for concurrence, address comments received from these entities, and forward the finalized RRAP to the PADEP for review and comment. The remedial approach which shall be described in the RRAP shall be excavation of the specifically defined area / volume identified in this RFB, removal / disposal of excessively contaminated soil, and soil attainment demonstration via systematic random sampling and by applying the ad hoc 75%, 10x statistical rule. Up to four quarters of post-excavation groundwater monitoring shall also be specified in the RRAP followed by groundwater attainment demonstration.

The RRAP shall be in compliance with §245.311 of Title 25 of the Pennsylvania Code. The selected bidder will be expected to issue a draft version of a complete and comprehensive revised RAP to the Solicitor and PAUSTIF (through its third-party administrator ICF International [ICFI]) for review and subsequently address comments, if necessary, before the draft revised RAP is submitted to the PADEP for review and comment. In general, the draft revised RAP shall: 1) be consistent with site documents and the work outlined in this RFB; 2) provide technical and cost rationale for, and a detailed description of, the proposed remedial strategy; 3) contain a cleanup timeframe / schedule and engineering estimated cost to closure for implementing the proposed remedial strategy; and 4) be of sufficient quality and content to reasonably expect PADEP approval of a feasible and cost-effective remedial solution.

The bidder's cost estimate shall include a firm, fixed price for draft RRAP preparation, addressing any Solicitor and PAUSTIF comments, and submittal of the draft RRAP to the PADEP.

Task 2- Source Soil Excavation / Disposal

Excavate the delineated / defined volume of source material and perform soil screening, "clean" / excessively contaminated soil segregation, soil attainment sampling, loading, transportation and disposal of excessively contaminated soil, backfilling, and restoration activities. This task shall include the proper abandonment of groundwater wells located within the excavation footprint (MW2, MW12, and EW-2), capping / sealing of buried remediation system piping that extended to EW-2 at the completed excavation side wall. Soil attainment through the smear zone (up to zone of permanent saturation) shall be demonstrated through systematic random soil sampling of side walls and 75%, 10x statistical rule.

Bids shall include a fixed price cost for targeted source soil excavation. The dimensions of the targeted area are approximately 50 feet long by 50 feet wide by 6 feet deep (EXHIBIT 3). The volume and extent of soil to be excavated, screened and segregated has been defined in this fixed price solicitation. However, the mass of excessively contaminated soil that needs to be removed from the site cannot be quantified at this time; therefore, the off-site loading, transportation and disposal of this material shall not be included in the bidder's fixed price. Unit costs shall be provided by the bidders for loading, transportation & disposal of excessively contaminated soils (based on PID headspace readings), and corresponding mass of clean fill purchase, delivery and emplacement.¹ Fixed price and unit cost bids for this work task shall be based upon assumptions provided in this section of the RFB.

EXHIBIT 3 identifies the RFB target vertical and lateral limits for the soil excavations, identified as "Proposed Remedial Excavation". Bidders shall include costs to perform all work necessary to safely excavate, screen, segregate / manage soil from the areas shown / specified on Figure 4 in EXHIBIT 3 including contacting / obtaining the required permits that may be needed before initiating this task. Soil delineation data collected in 2005 (GES) indicated soil impacts above the regulatory standard as deep as six to eight feet bgs. Shallow groundwater is also present. Historical gauging data indicates the groundwater occurs at depths between one to four feet through the planned excavation area. Therefore, groundwater may accumulate in the soil excavation, and impacted groundwater that would need to be removed from the excavations to effectively excavate soils cannot be quantified at this time; therefore, the removal, sampling, loading, transportation and disposal of impacted groundwater shall not be included in the bidder's fixed price. Unit costs shall be provided by the bidders for the management, sampling, loading, transportation and disposal of impacted groundwater removed from the soil excavations.

Fixed price bids for this remedial component shall include concurrent PID² screening of excavated soil head space for volatile organic compounds (VOCs). Soils shall be screened, segregated and managed based on PID head space readings. Only excavated soils with PID

¹ Full documentation of unit cost work will need to be provided for reimbursement of these costs (e.g., waste disposal facility weigh tickets, source of clean fill, etc.).

² PID with 10.6 eV bulb calibrated to 100 ppm isobutylene.

headspace readings greater than ~ 50 ppm shall be loaded, transported and disposed off-site. Excavated soils with PID headspace readings at or below ~ 50 ppm shall be staged, managed and reused to backfill completed sections of the excavation. Fixed price bids for the excavation work shall include any waste profiling (including any sampling & laboratory work) and securing waste facility acceptance prior to beginning the soil excavation. Additionally, fixed price bids shall include attainment soil sampling from the completed excavation consistent with PADEP guidance (e.g., on systematic random sampling, etc.) and preparing / issuing a report documenting the soil removal effort.

Fixed price bids shall also include backfilling and mechanically compacting in lifts the excavated areas with a combination of reused site soil and imported clean fill to within five inches of grade. Excavated material stockpiled on site for re-use should be sampled prior to backfilling. The fixed price bids should include costs for the sampling and laboratory work as documented in the technical document "Closure Requirements for Underground Storage Tank Systems". Bids shall also include surface completion / restoration finished with a minimum three-inch base and two-inch finishing course of asphalt or more to be adequate to support the facility traffic loads.

At least one extraction well and two monitoring wells (EW-2, MW-2, and MW-12) will need to be decommissioned by the successful bidder as part of Task 1 prior to initiating the excavations. Therefore, casings for wells within the proposed areas of soil removal will need to be sealed with grout or otherwise closed in accordance with PADEP guidance.

If the interim remedial excavation activities through consultation / concurrence with Solicitor and USTIF need to extend beyond the limits indicated in EXHIBIT 3, any other wells that are within the expanded excavations will need to be closed in accordance with PADEP guidance and replaced subsequent to completing the excavation work. Since any excavation expansion is not currently expected, the additional well closures and replacements is not part of Task 1 the base SOW. Additionally, should the excavation limits be extended to the north, it may be necessary for the successful bidder to secure access agreements with PennDOT. To the extent they are necessary, reimbursement of cost for these supplemental well closures and replacements due to an expanded excavation would be handled on a unit cost basis.

Under Task 1, the interim remedial work will be documented in an Excavation Completion Report (ECR) that will prepared and submitted to PADEP upon completion of the source removal and site restoration activities (including well abandonment and replacement installations). This report shall be submitted as a stand-alone appendix to the appropriate quarterly RAPR and will document soil excavation, screening, sampling and disposal activities. This report shall include scaled drawings depicting the lateral and vertical dimensions of the completed excavations superimposed on the site plan with locations of soil samples collected for attainment laboratory analysis clearly identified. All field observations (e.g., PID readings) of the excavation work shall be presented and summarized in the excavation completion report. The report shall identify the quantity of soil: excavated; disposed off-site; used as backfill; and imported for backfill. Documentation shall be included on waste profiling, soil waste disposal manifests, soil disposal facility, source and amount of imported fill, and impacted groundwater sampling / analysis and disposal. The report shall include dated photographs taken before breaking ground, after restoration and throughout the excavation; and documentation (boring logs / well construction diagram and survey information) for the replacement monitoring wells.

Excavation-related unit costs shall be provided by the bidders for:

- A.1 Management, loading, transportation and disposal of contaminated soils (cost per ton);
- A.2 Management, sampling / analysis, loading, transportation and disposal of impacted groundwater removed from the soil excavations (cost per gallon);
- A.3 Purchase, transportation and on-site management of clean imported fill (cost per ton);
- A.4 Surface completion for paved areas (concrete and asphalt) beyond identified target excavation area limits (cost per square foot);
- A.5 Additional excavation and backfilling (exclude unit costs for soil transportation /disposal and clean fill replacement which are already accounted for in A1 and A3, respectively) beyond identified excavation limits / depths (cost per in place cu yard)³; and
- A.6 Additional well closures and re-installations if excavation is expanded (cost per well).

Task 3 – Monitoring Well Replacement

The two groundwater monitoring wells (MW-2 and MW-12) which will be destroyed to complete the excavation, shall be replaced under this task. The replacement wells shall be installed in the same general locations and constructed with same specifications (same depth, screen interval, etc.) as the original wells. This task shall include the preparation of boring / well construction logs and the development of these replacement wells satisfactorily for sampling.

Task 4 – Quarterly Groundwater Monitoring and Reporting

Conduct quarterly monitoring of all existing on-site groundwater monitoring well network for four (4) quarters, in conjunction with routine regulatory reporting of the monitoring data. The monitoring wells to be monitored under this task are MW-1, MW-2, MW-3, MW-6, MW-7, MW-8, MW-9, MW-11, MW-12, and MW-13. The quarterly groundwater monitoring will commence the month of the next scheduled quarterly event after contract award and shall continue each quarter into the post-excavation period.

Groundwater monitoring and regulatory reporting of the results will be performed on a quarterly basis to continue the assessment of dissolved contaminant trends, natural attenuation processes, and plume size / configuration concurrent with the implementation of other tasks in this RFB. For this RFB solicitation, the bidder will assume the completion of four quarters of groundwater monitoring and reporting, which is expected to provide sufficient time for the completion of the other RFB tasks.

³ The successful bidder cannot count on reimbursement of excavation beyond the limits depicted in Exhibit 3 without having obtained prior written approval of the supplemental work by Solicitor and USTIF or its agents before completing the supplemental excavation work.

A fixed price cost for the four quarterly monitoring events shall be provided which will include labor, equipment / materials, vehicle charges, sample shipment, laboratory analyses, and report preparation. Currently, there are a total of ten on-site wells within the groundwater monitoring network. The initial quarterly event shall be conducted prior to initiating the soil excavation (Task 2) so that a final round of monitoring data can be collected from the on-site wells that are scheduled to be decommissioned during that work.

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 equipment decontamination fluids and groundwater generated by the well purging and sampling activities in accordance with standard industry practices and applicable laws, regulations, guidance, and PADEP directives.

Groundwater samples collected during the sampling event shall be analyzed for the <u>pre-March</u> 2008 PADEP short-list of unleaded gasoline parameters 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.⁴ 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 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) a narrative description of the sampling procedures and results; b) tabulated data from current quarterly and all historical data; c) maps depicting groundwater flow directions and groundwater analytical data; d) discussion of the data to offer an updated assessment as to whether these data are consistent with a stable, shrinking, or expanding plume; and e) shall be sealed by a Professional Geologist registered in the Commonwealth of Pennsylvania.

The bidders fixed price should include costs for repair of flush-mounted monitoring well covers and replacing the expandable / locking sanitary caps for all of the on-site wells. Wells shall be purged and sampled using low-flow methods in accordance with PADEP guidance. The groundwater analytical program should include the PADEP petroleum short list parameters for unleaded gasoline, and geochemical indicators to assess the natural biodegradation of hydrocarbon compounds (first and third quarterly events only).

Remedial Action Progress Reports (RAPR) 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

⁴ Each bidder's approach to implementing Task 4 shall clearly identify the number of sampling events, number of wells / samples per event, well purging and sampling method(s), QA/QC measures, analytes, and other key assumptions affecting the bid price.

results for each quarter. Each report shall be complete and concisely organized and shall contain the following elements:

- ➤ A 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;
- At least one groundwater elevation contour map for the shallow / perched groundwater zone and one map for the deeper groundwater zone depicting groundwater flow directions;
- > Tabulated historical quantitative groundwater analytical results including results from the current quarter;
- Current quarter laboratory analytical report(s);
- ➤ One site-wide isoconcentration contour map for each compound detected in any one well above the SHS during the quarter⁵;
- 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 as to whether these data are consistent with a stable, shrinking, or expanding plume;
- > Evaluation of natural bioattenuation data; and
- ➤ RAPRs shall be sealed by a Professional Geologist or Professional Engineer registered in the Commonwealth of Pennsylvania.

Task 5 – Groundwater Attainment Demonstration.

Upon completing the quarterly post-excavation groundwater sampling, groundwater attainment demonstration shall be completed at the seven designated point of compliance wells. The POC wells, MW-3, MW-6, MW-7, MW-8, MW-9, MW-12, and MW-13, were approved by PADEP on October 27, 2010 based on a September 28, 2010 request by Solicitor / Solictor's agent. Quarterly reports presenting these data shall continue to be prepared and presented to PADEP. At the end of eight quarters, the successful bidder shall apply the 75%, 10x ad hoc statistic rule to demonstrate the POCs have attained the standard.

Each of the POC wells shall be purged and sampled in accordance with the PADEP Groundwater Monitoring Guidance Manual and standard industry practices. Bidders shall manage equipment decontamination fluids and groundwater generated by the well purging and

⁵ All figures included in each RAPR (e.g., site plan, groundwater elevation maps, dissolved plume maps, etc.) shall be made available in electronic format to the Solicitor upon request.

sampling activities in accordance with standard industry practices and applicable laws, regulations, guidance, and PADEP directives.

Groundwater samples collected during the sampling event shall be analyzed for the <u>pre</u>-March 2008 PADEP short-list of unleaded gasoline parameters 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.⁶ 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 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) a narrative description of the sampling procedures and results; b) tabulated data from current quarterly and all historical data; c) discussion of the analytical data relative to successful attainment demonstration and d) shall be sealed by a Professional Geologist registered in the Commonwealth of Pennsylvania.

NOTE: Under this task, the successful bidder will be expected to petition PADEP for reduced quarters of attainment sampling if the combined data from Tasks 4 and 5 indicate that groundwater attainment can be demonstrated in fewer quarters. The successful bidder will only be reimbursed for quarterly attainment sampling events that were necessary and actually completed.

Task 6 – Remedial Action Completion Report

Under this task, the bidder will prepare a fixed-price cost to prepare a draft and final RACR following the completion of Task 5. At a minimum, the RACR shall detail the results of RRAP implementation, 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. The project schedule should allow two (2) weeks for Solicitor and PAUSTIF 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

Task 7 – Site Restoration

Under this task, the bidder shall describe and provide a fixed-price bid for properly closing the site, including: in-place abandonment of monitoring wells both on- and off-site (if applicable) consistent with PADEP guidelines; well head removals; and re-vegetation, concrete / asphalt repairs, as necessary. This task shall also include photo-documenting the site restoration work and completion of the well abandonment forms. Copies of these photographs and forms shall be provided for the Solicitor's files.

⁶ Each bidder's approach to implementing Task 5 shall clearly identify the number of sampling events, number of wells / samples per event, well purging and sampling method(s), QA/QC measures, analytes, and other key assumptions affecting the bid price.

NOTE: The successful bidder will be responsible for keeping the site wells in good condition, with all wells properly sealed and locked in-between each monitoring / sampling event. The successful bidder is responsible for repairing any seals or locks that become defective during the period of this contract at its expense; however, should a well become damaged or destroyed through no fault of the contractor, the Solicitor shall be responsible for repairing or replacing the well at its cost subject to the rate schedule provided in the successful bidder's bid response.

If, based on the pre-bid site tour observations (see Section 8), a bidder believes one or more well rehabilitation activities are required at this time, the bidder should include the necessary task(s) and fixed price cost(s) as a clear and separate line item in its bid. Should rehabilitation / redevelopment of a well be demonstrated as necessary during the contract period, the Solicitor will also be responsible for this cost subject to the unit cost rate provided in the successful bidder's bid response.

5. TYPE OF CONTRACT / PRICING

The Solicitor wishes to execute a mutually agreeable, firm, fixed-price, not-to-exceed contract for the SOW addressed by Tasks 1 through 7. A sample Fixed-Price Agreement is included as EXHIBIT 4.⁷ The Fund will facilitate negotiations between the Solicitor and the selected consultant towards executing this Fixed-Price Agreement.

As noted earlier, a bidder's response to this RFB Solicitation Package means it has accepted all the contractual terms unless explicitly stated to the contrary in the bid response. 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 PAUSTIF.

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 Tasks 1 through 7. The by-task and by-subtask quotes are to be entered into the Cost Tabulation Spreadsheet / Standardized Bid Format included as Table 1 in EXHIBIT 5 to this RFB (Table 1 is provided with the accompanying electronic files). Please note that the total fixed-price bid must include all costs, including those cost items that the bidder may regard as "variable,." i.e., these variable cost items will not be handled outside of the Total Fixed Price quoted for the SOW. Finally, please note that referencing extremely narrow or unreasonable assumptions, special conditions, and exemptions may make the bid response too difficult to evaluate and may result in the bid response being deemed "unresponsive."

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

<u>Payment Milestones:</u> Table 2 below illustrates the approximate timing expected for completion of respective milestone tasks and milestone 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 Develop Revised RAP (Task 1).
- Milestone B Soil Excavation / Attainment Demonstration (Task2)
- Milestone C Monitoring Well Replacement (Task 3)
- Milestone D1 through D4 Groundwater Monitoring (Task 4).
- <u>Milestones E1 through E8</u> Groundwater Attainment Monitoring and Reporting (Task 5).
- Milestone F Prepare a Draft and Final RACR (Task 6).
- <u>Milestone G</u> Site Closure / Restoration Activities (Task 7).

B1 through B6 below, represent potential "cost adders" to Milestone B (Task 2) and are not to be included in the bidder's fixed bid because the quantities of units are not known at this time. Bidder <u>must</u> submit unit prices (inclusive of labor, equipment, and materials), for "cost adders" B1 through B6.

- <u>Unit Cost Adder A1</u>: Managed, loaded, transported and disposed of contaminated soils. Bidders shall provide a unit cost in dollars per ton.
- Unit Cost Adder A2: Pumping, management, sample / analysis, loading, transportation, and disposal of impacted groundwater from the soil excavation. Bidders shall provide a unit cost in dollars per gallon.
- <u>Unit Cost Adder A3</u>: Purchased, transported and managed clean fill importation and placement. Bidders shall provide a unit cost in dollars per ton.
- <u>Unit Cost Adder A4</u>: Complete additional (supplemental) surface paving <u>above and beyond</u> that needed for restoration after the excavation of the delineated source soils. Bidders shall provide a unit cost in dollars per square foot.
- <u>Unit Cost Adder A5</u>: Complete additional excavation, screening and backfilling (exclude soil T&D and clean fill unit costs covered under A1 and A3, respectively) if needed outside the delineated target excavation area / depth. Bidders shall provide a unit cost in dollars per in-place cubic yard.
- Unit Cost Adder A6: Closure and replacement of additional wells (if more than MW2 and MW12 need to be destroyed / replaced) destroyed excavating beyond the delineated target excavation area. Bidders shall provide a unit cost in dollars per monitoring point.

Field PID reading/observations, soil waste disposal manifests, and contaminated water disposal manifests documenting the mass of soil and volume of groundwater removed from the site and the disposal facilities must be provided to receive payment for A1 and A2. Additionally, documentation on the origin and mass of clean fill imported to the Site must be provided to satisfy completion of A3.

The bidder shall provide its bid using the format identified in EXHIBIT 5 with descriptions provided for each cost element task provided in the body of the bid document. Payment will be made in accordance with milestones listed on EXHIBIT 5.

The successful bidder's efforts to complete the excavation / soil disposal, remedial feasibility testing, prepare the draft revised RAP, and perform groundwater monitoring and reporting will be subject to ongoing review by PAUSTIF to assess whether the work actually completed / incurred costs are reasonable, necessary, and appropriate.

TABLE 2 - SAMPLE MILESTONE COMPLETION / PAYMENT SCHEDULE

Estimated Milestone Timing Month After Contract Award	SOW Activities Anticipated / Completed for that Month	Milestone ¹
3	Revised RAP Submittal to PADEP	A
5	Soil Excavation / Reporting	В
3	Well Replacement	С
3	Groundwater Monitoring / Reporting	D1
6	Groundwater Monitoring / Reporting	D2
9	Groundwater Monitoring / Reporting	D3
12	Groundwater Monitoring / Reporting	D4
15	Groundwater Attainment	E1
18	Groundwater Attainment	E2
21	Groundwater Attainment	E3
24	Groundwater Attainment	E4
27	Groundwater Attainment	E5
30	Groundwater Attainment	E6
33	Groundwater Attainment	E7
36	Groundwater Attainment	E8
37	Prepare Draft and Final RACR	F
40	Site Closure / Restoration Activities	G

^{1.} Each bidder should modify this sample Milestone Completion / Payment Schedule for Tasks 1 through 10 to reflect its proposed task schedule, as long as the proposed schedule meets the deliverable deadlines specified in Section 3 of this RFB.

Please note that the selected consultant's work may be subject to ongoing review by the PAUSTIF 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 PAUSTIF, project costs shall be invoiced following the task structure specified in the selected bidder's bid response. Tracking incremental and cumulative costs by task will also be required to facilitate invoice review.

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

6. ADDITIONAL BID PACKAGE REQUIREMENTS

In addition to the requirements specified above, each bid package must:

- 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 already reviewed the existing site information provided in this RFB Solicitation.
- Provide an answer to the following questions regarding the bidder's qualifications and experience:
 - How many Chapter 245/250 sites has your company closed (i.e., obtained a Release of Liability under Act 2) in Pennsylvania?
 - How many Chapter 245/250 sites has your company or the proposed PA-licensed Professional Geologist (P.G.) and Professional Engineer (P.E.) closed (i.e., obtained a Release of Liability from the PADEP) under either the SHS and/or the Site Specific Standard? [NOTE: The Solicitor requires the work described herein to be completed under the responsible care and directly supervised by a P.G. and P.E. consistent with applicable regulations and licensing standards.]
 - Whether there were or were not circumstances consistent with the cancellation provision of a signed contractual agreement, and has your firm ever terminated work under a fixed-price or pay-for-performance contract before attaining all of the project objectives and milestones? If yes, please list and explain the circumstances of each such occurrence.
- ➤ A complete firm fixed-price cost bid for Tasks 1 through 7 by completing the bid cost tabulation spreadsheet provided in EXHIBIT 5 (included among the accompanying electronic files) following the SOW 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 EXHIBIT 4) or has provided a list of requested changes to the Fixed-Price Agreement.
- Provide a statement of applicable / pertinent qualifications, including the qualifications of any proposed subcontractors (relevant project descriptions are encouraged).
- ➤ Identify the proposed project team and provide resumes for the key project staff, including the proposed Professional Geologist and Professional Engineer of Record who will be responsible for endorsing work products prepared for PADEP review and approval.
- Provide a task-by-task description of the proposed technical approach. If this task-by-task description fails to address a specific requirement of this RFB, it will be assumed that the bidder has accepted all the requirements specified herein by task.
- ldentify 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, inclusive of reasonable assumptions regarding the timing and duration of client, PAUSTIF, and PADEP reviews needed to complete the SOW. Details on such items as proposed meetings and work product submittals shall also be reflected in the schedule of activities.
- Describe your approach to working with the PADEP from project inception to site closure. Describe how the PADEP would be involved proactively in the resolution of technical issues and how the PADEP case team will be kept informed as to project status.
- ➤ Describe how the Solicitor and ICFI / PAUSTIF 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 1 through 7.

7. MANDITORY PRE-BID SITE VISIT

On March 25, 2011 the Technical Contact will conduct a <u>mandatory pre-bid site tour</u> for a limited number of participants per firm at this property starting at 9:00 AM. Please inform the Technical Contact at least three (3) business days in advance of this date as to the number of participants attending from your firm. Again, any firm that does not attend this mandatory pre-bid site tour will <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.⁸

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⁸ The list of assumptions, special conditions, or exemptions will be discussed with the Solicitor. As part of that discussion, the PAUSTIF may advise the Solicitor that 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.

EXHIBIT 1	Figures 1, 2, & 3 – Site Location Map and Site Features Maps
EXHIBIT 2	Historical reports, PADEP SCR approval and other historical documents
EXHIBIT 3	Figure 4 – Excavation Plan
EXHIBIT 4	Sample Fixed Price Template Contract
EXHIBIT 5	Costing Spreadsheet for Competitive Bid Solicitation

Figure 1 Figure 2 Figure 3

Historical/Background Documents

Filename:	Document:
Historical SCR, RAP, RAPRs.pdf	Tank Registration Forms (1992) Closure Report/Closure Notification Forms (1995) Empaco UST Closure Report (1995) Empaco SCR/RAP (1996) American Environmental Associates – Subsurface Remediation Proposal (1996) Shafer Environmental – Final Site Characterization (1999) Shafer – Phase III Site Characterization (1999) Insite Group – Remedial Options Assessment (2000) Insite Group – Biocharacterization Study (2000) Insite Group – RAP (2001) Insite Group – SCR of Deep Aquifer (2001) Insite Group – SCR of Perched Aquifer (2001) Insite Group – 3Q2000/4Q2000 Status Report (2001) Insite Group – 1Q2001/2Q2001 Status Report (2001)
Q1 2010 RAPR.pdf	Note: Other correspondence also in this file.
Q1 – Q4 2007 RAPRs & Q1 2008	GES Q1 2010 RAPR GES Q1 – Q4 2007 RAPRs
RAPR.pdf	GES Q1 2008 RAPR
Q2 2010 RAPR.pdf	GES Q2 2010 RAPR
Q3 and Q4 2008 RAPRs.pdf	GES Q3 – Q4 2008 RAPR
Q4 2009 RAPR.pdf	GES Q4 2009 RAPR
RAPRs – 2002, 2003, 2005.pdf	Insite Group – RAPRs for 2002 Insite Group – RAPRs for 2003 Insite Group – Proposal for Additional Infrastructure (2003) GES Q3 2004 RAPR GES Q3 2005 RAPR
Soil Table 2005.pdf	Results of GES Soil Investigation in 2005
44 Grove City SB10-05.pdf	Boring Locations for GES Soil Investigation in 2005
CF44 GW attainment sampling program 9-22-10 (44)-1.pdf	GES proposal to DEP regarding attainment sampling (2010)
CF 44_PADEPgwAttainment.pdf	PADEP response to attainment sampling (2010)

Figure 4 – Excavation Plan

Sample Fixed-Price Template Contract

(This agreement has been provided in an electronic form that does <u>not</u> permit the user 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.)

Costing Spreadsheet for Competitive Bid Solicitation