COMPETITIVE FIXED-PRICE BID SOLICITATION

LIMITED SOIL EXCAVATION, ATTAINMENT DEMONSTRATION, GROUNDWATER MONITORING, REMEDIAL ACTION COMPLETION REPORT, AND SITE CLOSURE ACTIVITIES

FALCON OIL COMPANY (FORMER CHARLIE'S MINI-MART) 204 CANAAN STREET CARBONDALE LACKAWANNA COUNTY, PENNSYLVANIA 18407

PADEP FACILITY ID #35-50603 PAUSTIF CLAIM #2003-0104(F)

November 22, 2010

This Request for Bid (RFB) Solicitation has been issued by the Pennsylvania Underground Storage Tank Indemnification Fund (PAUSTIF or "Fund") on behalf of the Claimant, Falcon Oil Company who hereafter is referred to as "Client" or "Solicitor". In general, this RFB references a scope of work (SOW) for performing limited soil excavation, soil and groundwater attainment, preparing a Remedial Action Completion Report (RACR), and site closure activities at a vacant / unoccupied property. The subject "Site" was formerly occupied by the Charlie's Mini-Mart facility located at 204 Canaan Street in Carbondale, Lackawanna County, PA.

The Solicitor has elected to pursue Site environmental closure under Pennsylvania's storage tank regulations based on demonstrating attainment of the Pennsylvania Department of Environmental Protection (PADEP) Act 2 used aquifer Statewide Health Standard (SHS) Medium-Specific Concentrations (MSCs) for soil and groundwater in a residential setting. Implementation of the RFB SOW is expected to yield data sufficient to identify a rational and cost effective remedial solution that will achieve site closure and a relief of liability under PADEP Act 2 regulations. SOW (Tasks 1 through 6) described below will be subject to a Fixed-Price Agreement (see Attachment 2) to be executed by Solicitor and the selected consultant.

Solicitor requests a written approach, schedule, and firm fixed-price bid to complete the 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 100 percent of the reasonable, necessary, and appropriate costs referenced in the Milestone Payment Schedule specified in Section 4 below and as incorporated into the signed Fixed-Price Agreement.

- Task 1.
 Limited Soil Excavation and Soil Attainment Demonstration
- Task 2. Soil Vapor Study
- Task 3.
 Quarterly Groundwater Monitoring and Sampling to Confirm Attainment
- Task 4. Update Groundwater Fate & Transport Model to Complete Groundwater Attainment Demonstration
- Task 5.
 Prepare a Draft and Final Remedial Action Completion Report (RACR)
- Task 6.
 Site Closure / Restoration Activities

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 hard 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 shipping package containing the bid response <u>must be clearly marked and labeled with "Bid – Claim #2003-0104(F)</u>."

Please note that **the bid response (hard copy and 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. No portion or element of any bid response will be distributed by ICFI to any party other than the Solicitor, the Technical Contact, and PAUSTIF.

The signed bid package (hard copy and electronic copy) sent to ICFI must arrive <u>no later than close of</u> <u>business (5 p.m.) on January 7, 2011</u>. 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 <u>who also attended the mandatory pre-bid site visit</u> (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 <u>www.ins.state.pa.us</u>). 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. ICFI, SOLICITOR, AND TECHNICAL CONTACT INFORMATION

ICF International	Solicitor	Technical Contact
Mr. Gerald Hawk ICF International 4000 Vine Street Middletown, PA 17057	Mr. Rodney Passeri Falcon Oil Company 309 Main Street Blakely, PA 18447	Mr. Joseph Ozog, Jr., P.G. Excalibur Group, LLC 91 Park Avenue Windber, PA 15963 joeozog@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 <u>only</u> 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 nonproprietary 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 to all bidders.

2. GENERAL SITE BACKGROUND AND DESCRIPTION

The former Charlie's Mini Mart facility was located at 204 Canaan Street northeast of the town of Carbondale, Pennsylvania. The former Charlie's Mini Mart facility was an automobile retail petroleum distribution facility and convenience store that occupied the Site from the 1970's until ceasing all operations in late 1995. The subject property encompasses approximately 0.73 acres located along the east / southeast side of Canaan Street and is currently vacant of any type of operations (Figure 1). The Site is currently located in an area that is predominately residential or vacant / undeveloped land. More specifically, the Site is bordered to the northeast and east / southeast by residential dwellings and vacant / undeveloped land; to the south / southwest by a veterinary hospital ("Carbondale Veterinary Hospital"); and to the west / northwest by the right-of-way for Canaan Street with residential properties to the west / northwest of Canaan Street. Below-grade utilities on-site and in the area of the subject property consist of public water, sanitary sewer, and storm sewer service, but the locations of these utilities are not known with certainty and will need to be evaluated by the successful bidder (under Task 1, described below).

During site operations, the Site operated five underground storage tanks (USTs) that were installed at the site in June 1973, and included the following: Tanks 001 and 002, each with 20,000-gallon capacity for storing unleaded gasoline; Tank 003, with 12,000-gallon capacity for storing unleaded gasoline; Tank 004, with 15,000-gallon capacity for storing diesel fuel; and Tank 005, with 6,000-gallon capacity for storing kerosene. The Site was also occupied by two additional unregistered USTs that formerly contained gasoline and kerosene, which were out-of-service during the former Charlie's Mini Mart operations¹. Locations of the historical USTs are shown on Figure 2. The 6,000-gallon kerosene UST (Tank 005) and associated piping and dispenser were removed in May 1996. During the UST closure activities, small holes were observed in the tank and contaminated soils were observed beneath the kerosene dispenser and tank.² Approximately 89 tons of contaminated soil was removed for disposal, and only the post excavation soil sample collected beneath the former dispenser contained a concentration of Total Petroleum Hydrocarbons (TPH) – Gasoline Range Organics (GRO) exceeding PADEP standards.

The first documented environmental investigation at the site occurred in August 1995 by Synergist, Inc. as part of a Limited Phase II Environmental Site Assessment (Phase II ESA), and included the advancement of six soil borings (TB-1 through TB-6) to a depth of 15 to 16 feet below ground surface (ft-bgs). Soil boring locations are shown on Figure 3. Soil samples collected from the borings contained concentrations of TPH; and benzene, toluene, ethylbenzene, and xylenes (BTEX) exceeding PADEP standards.³ A Notice of Reportable Release (NORR) was subsequently provided to PADEP on October 5, 1995.⁴

¹ No additional information was available on these out-of-service USTs.

² <u>Underground Storage Tank System Closure Report Form</u>, prepared by D&A Environmental, Inc., dated May 23, 1996, contained as Appendix II of the <u>Site Characterization Report</u>, prepared by Environmental Remediation & Recovery, Inc., dated April 12, 2006.

³ PADEP standards used at this time were the Groundwater Protection Level 1 Action Criteria.

⁴ <u>Limited Phase II Environmental Site Assessment</u>, prepared by Synergist, Inc., dated August 28, 1995, contained as Appendix I of the <u>Site Characterization Report</u>, prepared by Environmental Remediation & Recovery, Inc., dated April 12, 2006.

The release (basis for this USTIF claim) was discovered on June 25, 2003 during the removal of tanks 001 through 004, associated product piping, and dispensers. The release is claimed to have occurred at a loose fitting on submersible pump connecting product delivery line to dispenser and Tank 001 (20,000-gallon unleaded gasoline) as reported in a second NORR for this site⁵. Impacted soils in the form of odors, elevated PID readings, and free product were encountered and excavated from the former UST pit for unleaded gasoline Tanks 001 and 002, the former dispenser island, and former product piping connecting dispenser island and USTs, with approximately 2,000 tons of gasoline impacted soils removed for disposal.^{6,7}

Site characterization and interim remedial activities, following the discovery of the unleaded gasoline release in June 2003 were initiated by SCE Environmental Group, Inc. (formerly Scaccia) and American Resource Consultants (ARC) Inc from October 2003 through to December 2005. The activities performed by SCE and ARC included advancement / sampling of soil borings; source soil excavation involving the removal and disposal of approximately 530 tons of petroleum impacted soils performed in August 2004⁸; the installation of four monitoring wells (MW-1 through MW-4)⁹; and quarterly groundwater monitoring / sampling. Post excavation soil sampling was apparently completed following the August 2004 soil excavation and the soil sampling results did not exceed PADEP Act 2 SHS.¹⁰ Environmental Resources & Recovery, Inc. (ER&R) continued site characterization activities and evaluation of remedial alternatives from March 2006 through to the 3rd quarter 2006, which included an ecological survey; advancement of borings and installation of nine on-site monitoring wells MW-5, MW-6/RC-2, MW-10 through MW-14, RC-1, and RC-3¹¹; advancement of one off-site soil boring GP-4; installation of off-site monitoring wells MW-7, MW-8, and MW-9; installation of on-site recovery wells RW-1 and RW-2; soil sampling and analysis; quarterly groundwater monitoring / sampling and analysis; sampling / analysis of a groundwater seep; abandonment of well RC-1; aquifer slug testing; and feasibility testing which consisted of air extraction and air sparging tests. Existing monitoring well locations are provided on Figure 4.

In October 2006, ER&R provided PADEP with a RAP, which was subsequently approved by PADEP. The closure standards for the site were identified as SHS for both soil and groundwater. Since no site soil samples at the time exceeded SHS, ER&R's selected remedial approach addressed only residual groundwater contamination. ER&R's selected remedial technology included "In-situ Submerged Oxygen Curtain (iSOC)" coupled with quarterly air sparging events.

Subsequent to ER&R's RAP submittal, ER&R came to recognize that the contaminant plume above SHS was contained on the property and was stable or shrinking and, therefore, implementation of the RAP remedy no longer appeared necessary or appropriate. Reconsideration of the site data revealed property boundary point-of-compliance (POC) wells were historically "non-detect" or below SHS and contaminants exceeding SHS were isolated to three interior wells (MW-2, MW-14, and RW-2). Therefore, ER&R changed its approach to performing three rounds of injections of nutrient and oxygen enhanced water in order to enhance natural bioremediation processes in property-interior groundwater in lieu of the remediation system installation.

⁵ <u>Notification of Reportable Release / Notification of Contamination</u> form, dated June 25, 2003.

⁶ "NEW RELEASE – Falcon Oil Company (Charlie's Mini-Mart)" letter prepared by Scaccia, dated June 27, 2003.

⁷ The horizontal and vertical limits of this soil excavation are not available.

⁸ Details surrounding this soil excavation are not available.

⁹ Wells MW-1, MW-3, and MW-4 were later abandoned in May 2008.

¹⁰ Soil sampling locations, sampling results, soil sampling methods (e.g. Systematic Random Sampling or Biased Sampling) were not available.

¹¹ Well RC-1 was abandoned in June 2006 and replaced with well RC-3, and RC-3 was later abandoned in May 2008.

In November 2008, Liberty Environmental, Inc. (Liberty) submitted a RAP¹² to PADEP recommending a revised remedial approach for using the groundwater data and performing fate and transport modeling to demonstrate a stable contaminant plume and attainment of SHS in groundwater.¹³ Activities performed by Liberty included three quarters of groundwater monitoring; short duration aquifer pump testing; preparing a fate and transport model; and initiating the preparation of a RACR. During preparation of the RACR, Liberty could not locate any post-excavation soil data indicating that soil attainment had been demonstrated at the Site. Therefore, Liberty performed a "soil investigation" in April 2010. A total of 59 soil borings were advanced in a grid pattern across most of the site (Figure 5), with a total of 17 biased soil samples collected from a select number of borings. While the soil sampling provided more detailed characterization of the site soil quality, soil attainment was not demonstrated via the biased sampling method because one or more soil samples contained contaminants of concern (COC) exceeding SHS. As a result, Liberty recommended limited soil excavation followed by excavation sidewall soil attainment demonstration.

Bidders should refer to the accompanying electronic files for additional background information on this site (see Attachment 1 for a list of these documents).¹⁴ <u>Bidders should carefully consider what information, analyses, and interpretations contained in Attachment 1 can be used in performing the SOW outlined in this RFB.</u>

3. SCOPE OF WORK OBJECTIVES

This Solicitor seeks competitive, fixed-price bids to complete the six (6) tasks outlined below. **To be** deemed responsive, each bid <u>must</u> respond in detail to each of the SOW tasks, including <u>describing</u> 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. <u>Failure to</u> bid the SOW as is may result in a bid being considered non-responsive.

Once the contract is signed, any modification to the selected consultant's SOW for Tasks 1 through 6 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 5, including submitting a RACR to the PADEP for review, must be completed within 8 months following contract award. Each bidder's proposed project schedule for Tasks 1 through 5 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 RACR before it is finalized and submitted to the PADEP for its review and comment. Task 6 would be performed following PADEP review and approval of the RACR

¹² <u>Remedial Action Progress Report and Remedial Action Plan</u>, prepared by Liberty Environmental, Inc., dated November 26, 2008.

¹³ RAP approval as per PADEP letter to Falcon Oil Co., dated January 23, 2009.

¹⁴ The best scanned-in version of each document available to the Technical Contact has been provided.

(Task 5). Therefore, the bid shall also include time to address any PADEP comments received on the RACR.

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. <u>Project management costs shall be included in the fixed-price quoted for Tasks 1 through 6, as appropriate</u>.
- 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 6, 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. <u>Return visits to the site
 prompted by a failure to make the necessary logistical arrangements in advance will not
 constitute a change in the selected consultant's SOW or total project cost for Tasks 1
 through 6.
 </u>
- 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.
- Be responsible for securing access agreements with neighboring properties located to the northeast and southwest of the Site prior to beginning any of the SOW task described below. Access to the off-site monitoring wells MW-7, MW-8, and MW-9 is to be acquired for the purpose of routine groundwater monitoring and sampling and well abandonment activities. It is our understanding that the property owners have been cooperative with allowing access to these wells with the previous consultants. Bids shall anticipate and include the level of effort / costs involved with all elements of securing access to both properties. The costs associated with site access shall be included in the fixed-price quoted for Task 1 below.

Task 1 – Limited Soil Excavation and Soil Attainment Demonstration. Under this task, bidders shall provide a fixed price bid inclusive of excavation planning / preparation work (e.g., buried utility location / mark-out, surveying excavation locations, etc.), excavation, backfilling and soil attainment sampling for three defined separate targeted "hot spot" areas / volumes of the site as defined on Figure 5. Bidders are

to assume that the surface material to a depth of five feet at each of the excavations shall be stockpiled on-site to be used as backfill, and that the soils from five feet to the total depth of 18 feet at each of the excavations shall be screened and segregated for either re-use on-site as backfill or removed from site for off-site disposal. The fixed price for Task 1 should not include transportation and disposal of excessively contaminated soil or imported clean fill costs as the precise amount of these are currently unknown. Fixed price and unit cost bids for this work task shall be based upon assumptions provided in this section of the RFB.

Figure 5 depicts the lateral limits for three separate soil excavations, identified as "Zone 1", "Zone 2", and "Zone 3". The bidders fixed cost shall include the costs to perform all work necessary to safely excavate, screen, segregate / manage soil, from the areas shown / specified on Figure 5 including contacting / obtaining the required permits that may be needed before initiating this task. Each of the three defined areas shall be excavated to remove unsaturated / smear zone soils to a depth of 18 feet below grade, the approximate depth of permanent saturation. Each of the three target remediation areas were defined using historical soil and groundwater data obtained from soil borings and the existing monitoring wells. Groundwater level data (~10 to 24 feet) from the existing monitoring wells in the area of the excavations, and the soil types (i.e. silt, sand, and coarse gravel) suggests that there may be groundwater accumulation in the excavations, which may require the removal, sampling, loading, transportation and disposal of impacted groundwater. However, the volume of impacted groundwater that would require managed for disposal can not be determined at this time and shall not be included in the bidder's fixed price. Instead, unit costs shall be provided by the bidders for the management, sampling, loading, transportation and disposal of impacted groundwater removed from the soil excavations.

Although the Site is vacant and below grade utilities are assumed to be inactive, the fixed price cost for this task should include costs for the management and / or replacement of these utilities if they are encountered in any of the three excavations. Costs should also include any temporary repairs made prior to permanent replacements.

Fixed price bids for this remedial component shall include concurrent PID¹⁵ screening of excavated soil for head space for volatile organic compounds (VOCs). Soils excavated from the depth interval of 5 to 18 ft-bgs shall be screened, segregated and managed based on PID head space readings. Only excavated soils with PID 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 the excavations. Bidders shall detail there approach for the PID screening / frequency (i.e. every excavated bucket). 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 describe the approach at side wall attainment soil sampling from the completed excavations consistent with PADEP guidance using the Systematic Random Sampling procedures and analysis using the PADEP's 75%/10x Ad Hoc Rule. Attainment soil samples shall be analyzed for the post-March 2008 PADEP short-list of unleaded gasoline parameters by a PADEP-accredited laboratory using appropriate analytical methods and detection levels. The details of the source soil removal activities and soil attainment shall be documented in the RACR and at a minimum include the following: scaled drawings depicting the lateral and vertical dimensions of the completed excavations superimposed on the site plan with locations of systematic random side-wall soil samples collected for attainment; all field observations and PID readings; identify the quantity of soil excavated, disposed off-site, used as backfill, and imported for backfill; waste profiling documentation; soil waste disposal manifests and disposal facility; source and amount of imported fill; impacted groundwater management, sampling / analysis, and disposal (if needed); include dated photographs taken before breaking ground, after restoration and throughout the excavation; and documentation (boring logs / well construction diagram and survey information) for any replacement monitoring wells.

¹⁵ PID with 10.6 eV bulb calibrated to 100 ppm isobutylene.

Fixed price bids shall also include backfilling and mechanically compacting in lifts the three excavated areas with a combination of reused site soil and imported clean fill to within 5 inches of grade. Excavated material stockpiled on site for re-use should be sampled prior to backfilling, and the fixed price bids should include costs for the sampling and laboratory work in accordance with PADEP guidance documents. Bids shall also include surface completion / restoration finished with a minimum 3-inch base and 2-inch finishing course of asphalt.

Only one existing groundwater monitoring well MW-2 is within the proposed excavation footprint for "Zone 2". This well will need to be decommissioned in accordance with PADEP guidance as part of this task prior to initiating the excavations.¹⁶ If any of the "hot-spot" remedial excavations through consultation / concurrence with Solicitor and USTIF need to extend beyond the limits indicated on Figure 5, additional wells that are within the expanded excavations may need to be closed in accordance with PADEP guidance. However, only source area wells RW-2 and MW-14 and the on-site POC wells RW-1, MW-6, MW-10, and MW-12 will need to be replaced. Since excavation expansion is not currently expected given Liberty's detailed soil investigation, the additional well closures and replacements is not part of Task 1. 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.

In addition to providing a fixed price bid for excavating, backfilling, restoring the defined hot-spot soil volumes, and attainment sampling, bidders shall also provide excavation-related unit costs for:

- A.1 Management, loading, transportation and proper off-site disposal of excessively 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 beyond identified target excavation area limits (cost per square foot);
- A.5 Additional excavation beyond identified lateral boundaries of the hot-spot limits (cost per in place cu yard)¹⁷;
- A.6 Additional backfilling and compaction beyond identified limits, excluding clean imported fill costs identified under A3 (cost per in place cu yard); and
- A.7 Additional well closures and re-installations if excavation is expanded (cost per well).

Task 2 – Soil Vapor Study. Under this task, bidders shall provide a fixed-price cost for conducting a soil vapor study <u>if</u> warranted after applying the decision matrices in the Land Recycling Program Technical Guidance Manual – Section IV.A.4, Vapor Intrusion into Buildings from Soil and Groundwater, and as dictated by factors such as the presence of SPH and/or the location / depth of any identified preferential pathways. Consequently, should a soil vapor study prove unnecessary at this site, the fixed-price quote for this task will be deducted from the Total Fixed Price referenced in the Fixed-Price Agreement; however, evaluation of the application of the decision matrices shall be included in the RACR.

If a soil vapor study proves necessary, PADEP concurrence on the need for and scope of the study shall first be secured by submitting a Soil Vapor Sampling Plan for PADEP review and approval. This plan shall be consistent with the requirements, guidance, and decision matrices in the *Land Recycling*

¹⁶ Well MW-2 will not be replaced.

¹⁷ The successful bidder cannot count on reimbursement of excavation beyond the limits depicted in Figure 5 without having obtained prior written approval of the supplemental work by Solicitor and USTIF or its agents before completing the supplemental excavation work.

Program Technical Guidance Manual – Section IV.A.4, Vapor Intrusion into Buildings from Soil and Groundwater. For the purpose of comparing cost quotes, bidders shall assume installing and sampling a total of three soil vapor monitoring points, and each bid shall provide the anticipated locations and constructed depth of the soil vapor sample points. In addition, bidders shall quote an all-inclusive unit price (installation and sampling) per soil vapor monitoring point should more or fewer monitoring points be needed. The installed soil vapor monitoring points shall be sampled twice with each sampling event separated by a period of at least four (4) weeks.

Each soil vapor sample shall be collected in pre-certified Summa canisters supplied by the analytical laboratory. The Summa canisters must be fitted with a properly calibrated regulator to allow an approximate 8-hour draw so that each sample represents an 8-hour time-weighted composite. All soil vapor samples shall be submitted to a PADEP-accredited laboratory for analysis of the PADEP **post**-March 2008 unleaded gasoline parameters using appropriate analytical methods and detection levels. Soil vapor samples shall be analyzed by Method TO-15. Appropriate QA/QC samples shall also be collected and analyzed for the same unleaded gasoline compounds. The soil vapor study shall be described in a quarterly RAPR (Task 3) along with any recommendations regarding the necessity for an expanded vapor intrusion assessment inclusive of indoor air quality sampling, if appropriate. The soil vapor study shall also be described in the RACR (Task 5).

Task 3 – Quarterly Groundwater Monitoring and Sampling to Confirm Attainment. The POC wells for the site were identified as on-site wells MW-1, RW-1, MW-6, MW-10, and MW-12; and off-site well MW-8 by Liberty in their PADEP-approved November 2008 Revised RAP.¹⁸ However, the list of POC wells was incorrect as well MW-1 did not exist at the time the Revised RAP was written as it had been previously abandoned by ER&R in May 2008. Before it was abandoned, MW-1 was consistently "non-detect" of all COC since first sampled in November 2005. Bidders shall consequently include in costs for this task for issuing a letter to PADEP identifying this error and removing well MW-1 from the list of site POCs.¹⁹

Groundwater attainment has already been demonstrated at the existing downgradient POC wells (RW-1, MW-6, MW-10, MW-12, and MW-8), because groundwater data from these wells showed COCs (if detected) below SHS for at least 8 consecutive quarters (i.e., from April 2007 through to December 2008). Therefore, under this task, bidders shall provide a firm fixed-price to complete two quarterly groundwater monitoring and sampling events following the completion of Task 1 to update contaminant trends and confirm groundwater attainment. Both groundwater monitoring and sampling events will include gauging groundwater elevations in all existing on- and off-site wells. However, groundwater samples will only be collected from existing source area wells RW-2 and MW-14, on-site downgradient well MW-13, and the designated POC wells RW-1, MW-10, MW-6, MW-8, and MW-12. The conduct and results of each event shall be documented in quarterly Remedial Action Progress Reports (RAPRs).

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

Each of the monitoring wells designated for sample collection during each of the quarterly events shall be purged and sampled in accordance with the PADEP Groundwater Monitoring Guidance Manual and standard industry practices. Any well exhibiting more than a sheen of separate phase hydrocarbons (SPH) shall not be purged and sampled (no SPH is expected to be encountered). Bidders shall manage

¹⁸ <u>Remedial Action Progress Report and Remedial Action Plan</u>, prepared by Liberty Environmental, Inc., dated November 26, 2008, p. 5. Report approved by PADEP in letter to claimant dated January 23, 2009.

¹⁹ For the purposes of the RFB solicitation, bidders are to assume that PADEP will not require re-installation of well MW-1.

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 these two quarterly events shall be analyzed for the **post**-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.²⁰

In addition, each quarterly event shall include field measurements for these natural attenuation parameters: pH, temperature, specific conductance, dissolved oxygen (measured in-situ), and oxidation/reduction potential. The natural attenuation data shall be evaluated and included in the RAPRs.

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.

Task 4 – Update Fate & Transport Model to Complete Groundwater Attainment Demonstration. Under this task, bidders shall provide a fixed-price cost for updating the quantitative contaminant fateand-transport model to address all dissolved-phase constituents whose concentrations exceed the residential used aquifer SHS-MSCs for groundwater following the completion of the limited soil excavation activities and quarterly groundwater sampling (Tasks 1 and 3). Prior fate-and-transport modeling conducted by Liberty to demonstrate contaminant stability and continued attainment of SHS at the downgradient POC was based on using Bioscreen AT. Modeling was performed for the contaminants benzene, MTBE, 1,2,4-TMB, and 1,3,5-TMB which exceeded the SHS at source area wells RW-2 and MW-14.²¹ The modeling for benzene, MTBE, 1,2,4-TMB, and 1,3,5-TMB indicated that the groundwater contaminant plume is stable and contracting.

Bidders shall provide a firm fixed-price cost, and describe the approach for performing a fate-andtransport analysis using the Bioscreen AT contaminant fate-and-transport model, utilizing all applicable historical and recent groundwater and soil data generated from site characterization activities in addition to data resulting from implementation of Task 3 of this RFB. The fixed-price cost shall include documenting the modeling effort in the RACR (Task 5), which shall include documenting all model input/output; providing a thorough explanation of model construction, justifying all input parameters, and discussing the modeling results and conclusions in detail with respect to assessing current and predicted future plume stability in support of the site groundwater attainment demonstration, which has already been achieved.

Task 5 – Prepare a Draft and Final RACR. Under this task, the bidder will prepare a fixed-price cost to prepare a draft and final RACR following the completion of Task 4. The RACR shall be prepared in accordance with Section 245.313. At a minimum, the RACR shall provide the details for Tasks 1 through 4. The RACR shall also discuss the selected closure criteria for the site, provide proof of soil and groundwater attainment, and request permanent closure for the site for the current release under an Act 2 Relief of Liability (ROL). The project schedule should allow two (2) weeks for Solicitor and PAUSTIF

²⁰ Each bidder's approach to implementing Task 3 shall clearly identify the number of sampling events, number of wells / samples per event, well purging and sampling method(s), QA/QC measures, analytes, purge water management / disposal methods, and other key assumptions affecting the bid price.

²¹ <u>Fate-And-Transport Modeling Report</u>, prepared by Liberty Environmental, Inc., dated October 28, 2010.

review of the draft RACR before a final version is submitted to the PADEP. The selected consultant shall then prepare and submit the final RACR to the PADEP in accordance with Section 245.313, and be sealed by a Professional Geologist registered in the Commonwealth of Pennsylvania. The fixed-price cost shall also include addressing any PADEP comments on the RACR.

Task 6 – Site Closure / Restoration Activities. 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 and any soil vapor monitoring points both on- and off-site 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.

4. TYPE OF CONTRACT / PRICING

The Solicitor wishes to execute a mutually agreeable, firm, fixed-price, not-to-exceed contract for the SOW addressed by Task 1 through 6. The fixed price contract ceiling is increased only through applying the documented required number of units by the bid Task 1 unit costs for A1 through A7. A sample Fixed-Price Agreement is included as Attachment 2.²² The Fund will facilitate negotiations between the Solicitor and the selected consultant towards executing this Fixed-Price Agreement.

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

Each fixed price bid is to clearly identify unit cost basis of the fixed price bid, e.g., 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 6. The by-task and by-subtask quotes are to be entered into the Cost Tabulation Spreadsheet / Standardized Bid Format included as Table 1 in Attachment 3 to this RFB (Table 1 is provided with the accompanying electronic files). Please note that the total fixed-price bid and unit cost bids for Task 1 (subtasks A1 through A7) 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."

Payment Milestones: 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:

- <u>Milestone A</u> Limited Soil Excavation and Soil Attainment Demonstration (Task 1).
- <u>Milestone B1 and B2</u> Soil Vapor Study (Task 2). Note that the schedule assumes two Milestone B payments.
- <u>Milestone C1 and C2</u> Quarterly Groundwater Monitoring and Sampling to Confirm Attainment (Task 3). Note that the schedule assumes two Milestone C payments.

²² The selected consultant will be provided an electronic copy of the sample contract in Word format to allow contractspecific information to be added.

- <u>Milestone D</u> Update Groundwater Fate & Transport Model to Complete Groundwater Attainment Demonstration (Task 4).
- <u>Milestone E</u> Prepare a Draft and Final RACR (Task 5).
- <u>Milestone F</u> Site Closure / Restoration Activities (Task 6).

Estimated Milestone Timing Month After Contract Award	SOW Activities Anticipated / Completed for that Month	Milestone ¹
2	Limited Soil Excavation and Soil Attainment Demonstration	A
3	Soil Vapor Study (Initial Event); Quarterly Groundwater Monitoring and Sampling to Confirm Attainment	B1, C1
6	Soil Vapor Study (Confirmation Event); Quarterly Groundwater Monitoring and Sampling to Confirm Attainment; and Update Groundwater Fate & Transport Model to Complete Groundwater Attainment Demonstration	B2, C2, D
8	Prepare Draft and Final RACR ²	E
12	Site Closure / Restoration Activities	F

TABLE 2 – SAMPLE MILESTONE COMPLETION / PAYMENT SCHEDULE

- 1. Each bidder should modify this sample Milestone Completion / Payment Schedule for Tasks 1 through 6 to reflect its proposed task schedule, as long as the proposed schedule meets the deliverable deadlines specified in Section 3 of this RFB.
- 2. The RACR must be submitted in final form to the PADEP within 8 months of contract award.

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.

5. ADDITIONAL BID PACKAGE REQUIREMENTS

Each submitted bid response must include the following:

- A reasonable demonstration that the bidder (i) understands the objectives of the project, (ii) offers a reasonable approach for achieving those objectives efficiently, and (iii) has reviewed the existing site information provided in or attached to this RFB Solicitation Package.
- Provide an answer to the following questions regarding the bidder's qualifications and experience:
 - How many Chapter 245/250 sites has your company closed (i.e., obtained a Release of Liability under Act 2) in Pennsylvania?

- How many Chapter 245/250 sites has your company or the proposed PAlicensed 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 6 by completing the bid cost tabulation spreadsheet provided in Attachment 3 (included among the accompanying electronic files) following the SOW task structure specified herein.
- A description and discussion of all level-of-effort and costing assumptions.
- Indicate whether the bidder accepts the proposed contract / terms and conditions (see Attachment 2) or has provided a list of requested changes to the Fixed-Price Agreement.
- Provide a statement of applicable / pertinent qualifications, including the qualifications of any proposed subcontractors (relevant project descriptions are encouraged).
- Identify the proposed project team and provide resumes for the key project staff, including the proposed Professional Geologist and Professional Engineer of Record who will be responsible for endorsing work products prepared for PADEP review and approval.
- Provide a task-by-task description of the proposed technical approach. <u>If this task-by-task description fails to address a specific requirement of this RFB, it will be assumed that the bidder has accepted all the requirements specified herein by task.</u>
- Identify and sufficiently describe subcontractor involvement by task (if any).
- Provide a <u>detailed schedule</u> complete with specific by-month dates for completing the proposed SOW (<u>Tasks 1 through 6</u>), 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 6.

6. MANDATORY PRE-BID SITE VISIT

On *Friday, December 17, 2010*, the Technical Contact will conduct a *mandatory pre-bid site tour* for a limited number of participants per firm at this property starting at <u>1PM</u>. 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.²³

²³ 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.

ATTACHMENT 1

Filename:	Document:
Charlies_RFB Figures.pdf	Figure 1 – Site Location; Figure 2 – Historical UST Locations; Figure 3 – Limited Phase II Soil Boring Locations; Figure 4 – Existing Monitoring Well Locations; & Figure 5 – Liberty Soil Boring Locations / Estimated Boundaries for Soil Excavations
Charlies_F&T Rpt_Liberty_101028.pdf	Liberty's Fate & Transport Report, dated 10/28/10
Charlies_Liberty Soil Sampling Results.pdf	Liberty's Soil Sampling Locations & Results
Charlies_Liberty Soil Boring Logs.pdf	Liberty Soil Boring logs
Charlies_Liberty Soil Sampling Plan_100309.pdf	Liberty's Soil Sampling Plan & PADEP Approval
Charlies_Liberty RAPR_090730.pdf	Liberty's RAPR, dated 7/30/09
Charlies_Liberty RAPR & Revised RAP_081126.pdf	Liberty's RAPR & Revised RAP, dated 11/26/08
Charlies_RAP_ER&R_Oct 2006.pdf	ER&R's Oct 2006 RAP
Charlies_SCR_ER&R_April 2006.pdf	ER&R's April 2006 SCR
Charlies_SCE Interim Status Rpt_050823.pdf	SCE Interim Status Report, dated 8/23/05
Charlies_SCACCIA New Release Ltr_030627.pdf	SCACCIA Letter to ICFI, New Release, dated 6/27/03
Charlies_June 2003 NORR NOC.pdf	June 2003 Notification of Reportable Release
Charlies_1996 Kerosene UST Closure Infor.pdf	Information for 1996 Kerosene UST Closure
Charlies_Aug 1995 NOC.pdf	August 1995 NOC
Charlies_Misc PADEP Correspondence.pdf	PADEP Inspection Reports

ATTACHMENT 2

Fixed-Price Agreement

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

ATTACHMENT 3

Standardized Bid Format