# **COMPETITIVE FIXED-PRICE BID SOLICITATION**

### SITE CHARACTERIZATION ACTIVITIES, REMEDIAL ALTERNATIVES ANALYSIS, AND SITE CHARACTERIZATION REPORT / REMEDIAL ACTION PLAN PREPARATION

#### KEYSTONE FUELS 5945 LINDBERGH BOULEVARD, PHILADELPHIA, PHILADELPHIA COUNTY, PENNSYLVANIA 19143

#### PADEP FACILITY ID #51-10908 PAUSTIF CLAIM #2004-0018(S)

#### December 28, 2009

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, Mr. Balkar Singh Saini of Jassi Enterprises, Inc., who hereafter is referred to as the client or Solicitor. In general, this RFB references a scope of work (SOW) for completing site characterization activities and a remedial alternatives analysis, and preparation / submittal of a combination Site Characterization Report (SCR) / Remedial Action Plan (RAP) at an active retail gasoline, diesel fuel, and kerosene sales and car wash facility. The facility is known as Keystone Fuels and is located at 5945 Lindbergh Boulevard in Philadelphia, Philadelphia County, PA.

At the present time, the Solicitor has elected to pursue an Act 2 closure based on demonstrating attainment of the used aquifer Statewide Health Standard (SHS) Medium-Specific Concentrations (MSCs) for soil and groundwater in a residential setting.

The purpose of this assignment is to provide sufficient data that supports identifying and subsequently implementing an effective remedial solution leading to site closure and a relief of liability under Pennsylvania Department of Environmental Protection (PADEP) Act 2 regulations. However, implementing the RAP, once it is approved by the PADEP, will be performed under a separate agreement.<sup>1</sup>

The SOW (Tasks 1 through 13) described below will be subject to a Fixed-Price Agreement (see Attachment 2) to be executed by the Solicitor and the selected consultant. The Solicitor requests a written approach, schedule, and firm fixed-price bid to complete these tasks, which are 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.Additional Background Research
- Task 2. Site Professional Survey
- Task 3. On-Property Geophysical Survey
- Task 4. Source Soil Delineation
- Task 5. Down Well Video Camera Survey
- Task 6.
   Install Additional Shallow Groundwater Monitoring Wells
- Task 7. Investigation of Off-Property Groundwater Seeps

<sup>&</sup>lt;sup>1</sup> This separate agreement will either be negotiated with the consultant selected pursuant to this RFB or will be the subject of a separate competitive bid solicitation.

- Task 8. Groundwater Monitoring and Sampling
- Task 9. Aquifer Characterization Testing
- Task 10. Soil Vapor Study
- Task 11.
   Contaminate Fate-and-Transport Modeling
- Task 12. Conceptual Site Model
- Task 13. Prepare a Draft and Final Combined SCR / RAP

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, the complete bid response must be submitted to ICFI electronically (Adobe PDF format) on a compact disk (CD) to be included with the hard copy bid response. The outside of the hard copy bid response package must be clearly marked and labeled with "Bid – Claim #2004-0018(S)."

Please note that **the bid response (hard copy or digital version) is to be sent only 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 no later than close of business (5 p.m.) on February 5, 2010. 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 <u>www.ins.state.pa.us</u>). While the Technical Contact will assist ICFI, PAUSTIF, and the Solicitor in evaluating the bid responses, it is up to the Solicitor to 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
Ms. Bethany Smith ICF International 4000 Vine Street Middletown, PA 17057	Mr. Balkar Singh Saini Jassi Enterprises, Inc. 105 Mt. Pleasant Road Sewell, NJ 08080	Mr. Joseph Ozog, Jr. 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 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. Bidders must neither contact nor discuss this RFB Solicitation with the Solicitors, PAUSTIF, or ICFI unless approved 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, but the PADEP may elect not to reply to any questions it receives.

Please note that unless a question can be successfully demonstrated to be proprietary in nature, all submitted questions and responses submitted during and after the pre-bid site visit will be shared with all bidders on a non-attributable basis. A bidder shall specify any questions it regards as proprietary upon submitting these questions to the Technical Contact. If said question(s) is (are) determined to be non-proprietary by the Solicitor and the Technical Contact, the bidder will be given the option of withdrawing its question(s) before it is answered and a response distributed.

#### 2. GENERAL SITE BACKGROUND AND DESCRIPTION

The Keystone Fuels facility is located within the city limits of Philadelphia, PA, at the corner of Lindbergh Boulevard and Buist Avenue. The property is bordered to the north-northwest by the railroad right-of-way owned by the Southeastern Pennsylvania Transportation Authority (SEPTA) and vacant / unoccupied land; and to the east-southeast, south, and west by roadway right-of-ways for Lindbergh Boulevard, Buist Avenue, and South 60<sup>th</sup> Street, respectively. The nearest private residences appear to be located approximately 100 to 200 feet to the southeast, south, and west across Lindbergh Boulevard, Buist Avenue, and South 60<sup>th</sup> Street, respectively.

Features on this approximately 0.5-acre parcel include a separate tunnel car wash building situated along the northwest side of the property; two multi-pump dispenser islands and a kiosk situated beneath an overhead canopy in the central portion of the property; two satellite product dispensers situated to the north of the main fueling islands; UST cavities situated beneath the overhead canopy, and on the north side of the main fueling islands / canopy; vacuum stations situated in the southern portion of the property; and a storage trailer situated in the northern corner of the property. Below-grade utilities consist of public water, sanitary sewer, and storm sewer services, high-pressure natural gas, and electric service to the dispensers and USTs, but the locations of these utilities (and the fuel dispensing piping) are not known with certainty. It is also unclear whether there are two or three separate UST cavities.<sup>2</sup> Waste waters generated by the car wash are reportedly recycled through a below-grade "recycling tank" situated

<sup>&</sup>lt;sup>2</sup> A November 2007 geophysical survey identified only three of the five UST locations along with the fuel dispensing piping and electric lines.

between the car wash building and the main fueling islands. Management of the "recycling tank" (e.g. oil and sediment removal) is unknown. Electric and telephone service to the building are via overhead utilities. Overhead aerial photographs, plan maps, and other photographs of the facility and property can be found in the electronic files accompanying this RFB.<sup>3</sup>

The operational history of this facility is not entirely clear. Based on the age of the in-service USTs, a retail fuels facility has operated at this location since at least the late 1970s. In the late 1970s, the facility appears to have been owned and operated by Joseph Entrepreneurship, Inc. (Joseph E., Inc.) and appears to have been known as Town & Country Sunoco. Site and UST operations history prior to the late 1970s is presently unknown and probably warrants further investigation (see Task 1). In October 1999, the Solicitor began operating the facility under the terms of a lease with Joseph E., Inc. and under the name Keystone Fuels.<sup>4</sup> In October 2002, the Solicitor purchased the property from Joseph E., Inc.

In September 1991, an unleaded gasoline release was reported to the PADEP by Joseph E., Inc. and appears in the eFACTs listings under the name "Town & Country." In eFACTS, this release is indicated as discovered during the removal of one, 10,000-gallon, gasoline tank formerly located in the area of the existing pump island canopy. However, an amendment to the October 1991 UST Closure Report<sup>5</sup> indicates that the release was discovered during the removal of <u>two</u> 10,000-gallon gasoline USTs from this same area in September 1991. Following the removal of the former gasoline USTs, a 10,000-gallon kerosene UST was installed in the open excavation. This UST remains in service, but is presently reported to contain diesel fuel.

In 1991, seven confirmation soil samples were collected from the sidewalls and floor of the open excavation. According to Eagle Environmental Services Co. (EES), only one soil sample collected from the sidewall nearest the car wash building exhibited an elevated Total Petroleum Hydrocarbon (TPH) concentration above standards. Prior to collecting the soil samples, approximately 500 to 600 tons of soil was excavated for off-site disposal, but the excavation apparently could not be expanded any closer to the car wash building due to "unstable soil conditions, overhead power lines, and safety and structural concerns." Upon reviewing the UST Closure Report, the PADEP issued a "no further action is required" determination in a letter to Mr. Fred Bagherpour of Joseph E., Inc., dated May 8, 1997.

The five USTs currently in service on this property are a 10,000-gallon and an 8,000-gallon unleaded gasoline tank installed in the late 1970s or early 1980s; a 10,000-gallon diesel fuel (formerly kerosene) tank installed in 1991, and a 2,000-gallon diesel fuel tank and a 4,000-gallon kerosene tank installed in 2003. While excavating near the gasoline UST cavity to install the 2,000-gallon diesel fuel UST in December 2003, stained soils that reportedly exhibited a petroleum odor were encountered at a depth of 6 to 7 feet below grade.<sup>6</sup> The location of this 2003 excavation is not described clearly in the site background documents, but may have been where the northernmost UST is located adjoining the two USTs oriented perpendicular to the main fueling islands. Given this location, the soil contamination encountered was assumed to have been impacted by an unleaded gasoline release. The discovery of this impacted soil prompted the filing of Claim #2004-018 with the Fund. The cause and timing of this release was never determined. The visually impacted soils were removed and stockpiled on the property for off-site disposal. The available site background documents do not mention the quantity of soil removed.

<sup>&</sup>lt;sup>3</sup> The level of detail for the site survey is unknown (drawings do not appear to scale and are missing the property boundaries, site and surrounding area utilities, reference elevations for monitoring wells and soil borings, other site features [e.g. dispenser islands, all USTs], and surrounding site features).

<sup>&</sup>lt;sup>4</sup> Lease and Asset Purchase Agreement, dated October 15, 1999.

<sup>&</sup>lt;sup>5</sup> <u>Underground Petroleum Storage Tank Closure Report</u>, prepared by Environmental Services Co., dated October 2, 1991.

<sup>&</sup>lt;sup>6</sup> Notification of Reportable Release Form, dated December 10, 2003.

In January 2004, the current consultant of record, MIG Environmental (MIG), advanced one soil boring on site to the depth of 17 feet below grade. One soil sample and one grab groundwater sample were collected from this borehole. Both samples were analyzed for unleaded gasoline constituents (pre-March 2008 parameter list). The groundwater sample exhibited a MTBE concentration at 34,700 micrograms per liter ( $\mu$ g/l), which exceeded Statewide Health Standard Medium-Specific Concentrations (SHS-MSCs) for a used aquifer in a residential setting. No other unleaded gasoline constituents in the groundwater sample and no unleaded gasoline constituents were detected in the soil sample at concentrations above analytical method detection limits. The available background documents do not provide the location for the January 2004 soil boring.

Site characterization activities were not initiated at this site until October 2007. To date, the site characterization activities have consisted of completing and sampling 12 soil borings (SB-1 through SB-12), installing four groundwater monitoring wells on the property and two monitoring wells off the property (MW-1 thru MW-6), groundwater sampling (a total of six events completed between January 2008 and February 2009), and a sensitive receptor survey. A Site Characterization Report (SCR) summarizing these activities was issued by MIG in June 2009 and is included among the accompanying electronic files. In a letter dated July 24, 2009 (also included in the accompanying electronic files), the PADEP disapproved the June 2009 SCR. In its SCR disapproval letter, the PADEP noted that it had only identified an "initial list" of deficiencies—a cautionary note that bidders should keep in mind in evaluating the available site information. The deficiencies that were listed by the PADEP were:

- Failure to submit a map showing boundaries of the site and locations of adjacent features.
- Failure to submit an appropriately scaled drawing indicating location of soil borings.
- Failure to investigate the hillside on the adjacent railroad property for seeps.
- Failure to construct at least one geologic cross-section showing on- and off-site utilities.
- Wells not installed by licensed PA driller.
- Well construction records not submitted for wells MW-1 through MW-4.
- Failure to collect representative groundwater samples (incorrect or missing sampling records and surface infiltration into well MW-4).

Consequently, the PADEP has determined that additional site characterization work is necessary not only to address the identified deficiencies, but to comply fully with the requirements of the Pa. Code, Title 25, Chapter 245.309, 310, and 311.

Bidders are directed to the accompanying electronic files for additional background information on this site (see Attachment 1 for a list of these documents).<sup>7</sup> In light of the "initial list" of deficiencies identified by the PADEP in its SCR disapproval letter, bidders should carefully consider what information, analyses, and interpretations contained in the June 2009 SCR can be relied upon in formulating a **new** comprehensive SCR (along with RAP) submittal.

#### 3. SCOPE OF WORK OBJECTIVES

This RFB seeks competitive, fixed-price bids to complete the 13 tasks outlined below. To be deemed responsive, each bid must respond in detail to each of the scope of work tasks, as well as describe and apply the bidder's conceptual site model interpretation as it pertains to conduct of the proposed SOW.

<sup>&</sup>lt;sup>7</sup> The best scanned-in version of each document available to the Technical Contact has been provided.

Any modification to the selected consultant's SOW for Tasks 1 through 13 will require prior written approval by the Solicitor <u>and PAUSTIF</u> through its third-party administrator, and may also require PADEP pre-approval. Bidders should note that this SOW was provided to the PADEP-SERO case manager in the process of developing the RFB Solicitation package.

It is expected that the selected consultant's approach to completing the SOW will 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).

The Solicitor specifies that the SOW covered by Tasks 1 through 13, including submitting a combination SCR / RAP to the PADEP for review, must be completed within **6 months** following contract award. **The bidder's proposed project schedule for Tasks 1 through 13 must clearly meet this requirement.** This schedule must also specify no less than two (2) weeks for the Solicitor and PAUSTIF to review and comment on the draft SCR / RAP before these reports are submitted to the PADEP for its review and comment.<sup>8</sup>

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 guoted for Tasks 1 through 13, 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 13, 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 13.
  </u>

<sup>&</sup>lt;sup>8</sup> Addressing potential PADEP comments on the SCR / RAP is not a component of this RFB. Should addressing PADEP comments on the SCR / RAP become necessary, the selected consultant will define a scope of work and associated cost at that time for approval by the Solicitor and PAUSTIF.

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.

**Task 1 – Additional Background Research.** Through review and evaluation of the historical information summarized in Section 2 above and the additional site background information included in the accompanying electronic files, bidders will understand what is currently known about: (i) facility features and setting; (ii) current and historical surrounding land uses; (iii) regional and local geology, hydrogeology, and hydrology; (iv) local groundwater use; (v) utilities; (vi) known or suspected source areas; (vii) sensitive receptors; and (viii) previous interim remedial measures, environmental investigations, and regulatory issues. However, under this task, bidders shall address any perceived gaps in the current understanding of site and surrounding area conditions that may prove important for completing the site characterization. At a minimum, each bid shall address the following additional background research needs:

- a) As noted in Section 2, there are uncertainties concerning pre-1980 land use(s), current and past UST locations, and UST operational history. For example, the available documents only provide a general sense of the fueling dispenser locations through time, particularly the dispensers that might be associated with the alleged gasoline release identified in late 2003. Therefore, to ensure that site characterization activities result in identifying and delineating all areas of residual source material, bidders are to propose conducting reasonable, necessary, and appropriate research into depicting past facility configurations and features along with current site features on a scaled site plan included with the SCR / RAP. Of particular interest are locations for all prior generations of UST systems (tanks, lines, and dispensers); the area of impacted soil excavated in September 1991; and December 2003.
- b) The June 2009 SCR does not present sufficient information concerning current and historical uses of properties in the immediately surrounding area, especially for properties on the opposite side of 60<sup>th</sup> Street and Lindbergh Boulevard.
- c) The location, course, depth, and orientation of all below-grade utilities entering and on the subject property for evaluation as preferential contaminant migration pathways.

This task shall also include performing a sensitive receptor survey. The survey shall include, but should not be necessary limited to, researching available databases for private and public water wells, a search of appropriate regulatory databases, assessing underground conduits, utilities, and preferential pathways, and evaluating potential ecological receptors (if any).

Findings from the work completed under Task 1 shall be summarized in the SCR / RAP (Task 13).

**Task 2 – Site Professional Survey.** Currently, available site drawings lack an appropriate scale, do not show property boundaries, right-of-ways and easement, if any, and do not depict the adjacent properties. Therefore, under this task, bidders shall provide a firm, fixed-price quote for conducting a survey of the site by a professional surveyor licensed in the Commonwealth of Pennsylvania. Work under this task should include, but is not necessarily limited to including the following:

- Obtaining tax maps of the subject property and surrounding adjoining properties;
- Surveying in property boundaries, roadway right-of-ways, site features (e.g. buildings, fueling islands, etc.), and above and below grade utilities;
- Surveying in locations and ground surface elevations for the soil borings to be completed under Task 4; and
- Surveying in ground surface (top of surface cover) and top-of-casing (PVC riser pipe) elevations for the four existing on-property monitoring wells and the two existing off-property monitoring wells and any additional monitoring wells that are to be installed.

Monitoring well and soil boring locations should include northing and easting coordinates. All elevations should be based on the nearest USGS benchmark and recorded to the nearest 0.01 foot. Results of the professional survey should be displayed on an appropriately scaled site plan to be included in the SCR / RAP.

**Task 3 – On-Property Geophysical Survey.** Although a geophysical survey was conducted on this property in November 2007, it appears that this survey did not identify all of the UST systems and associated piping and other buried utilities. Therefore, under this task, bidders shall conduct a geophysical survey encompassing the paved portions of this property from its borders with Lindbergh Boulevard and South 60<sup>th</sup> Street up to the walls of the car wash building, as well as any proposed location(s) for additional soil borings (Task 4) and monitoring wells (Task 6) that may fall outside of this area. The bidder shall select the appropriate geophysical method(s) it shall use to locate product piping, buried utilities, current and former UST cavities, areas of past excavation activity, etc. Results of the geophysical survey shall be (a) utilized to aid depicting current and historical site features on the scaled site map and (b) combined with other utility clearance activities such as the PA One Call notification and the use of location-specific borehole clearance methods to locate proposed additional soil borings and monitoring wells. As appropriate, the location and extent of subsurface features identified through the geophysical survey shall be marked on the ground surface for subsequent positioning of the soil borings and/or monitoring wells. The conduct and results of the geophysical survey shall be described in the SCR / RAP.

**Task 4 – Source Soil Delineation.** In October 2007 and July 2008, soil borings were completed in locations on the north side of the existing dispenser island area. Although the available site drawing is not scaled appropriately, it appears that most of the boring locations were concentrated along the northernmost UST on the property, which is assumed to be the diesel fuel UST installed in 2003. However, it appears that this soil boring investigation failed to identify the source of the unleaded gasoline release.

Under this task, bidders shall provide a fixed-price cost for implementing a soil boring program to assess the magnitude and extent of potential soil impacts in the area of the dispenser islands and gasoline USTs. Each bid shall assume advancing eight (8) soil borings in this area in proposed locations that may change based on the Tasks 1, 2, and 3 findings. The intent is to collect soil samples from borings completed as close to the dispenser islands area and UST cavities as can be accomplished safely and without risking damage to utilities or UST system infrastructure. If gross soil impacts are evident based on field screening data and observations, additional soil borings should be completed subject to a comprehensive fixed unit cost per boring to be included with each bid. The unit cost per boring would include borehole advancement, logging, and screening.

Considering that it may be necessary to close one lane of each pump island at a time to complete this task, the Solicitor requires at least two (2) weeks advance notice and coordination with facility personnel,

conducting all intrusive work within one day, and, if possible, completing the work in such a way as to keep one lane of vehicular access to the dispenser pumps open at all times.

Each soil boring shall achieve a depth that ensures vertical delineation of unsaturated and periodically saturated soils. For the purposes of this bid, bidders shall assume each soil boring shall be completed to an average depth of 18 feet below grade based on the range in depth to groundwater reported for existing on-property wells MW-1 through MW-4. In the event that additional drilling footage is required at one or more of the proposed soil boring locations, bidders shall provide a unit cost per foot for any additional borehole advancement, logging, and screening.

In addition to contacting PA One Call and completing the Task 2 geophysical survey, bidders shall assume clearing and sampling the initial five (5) feet of each boring location using a hand auger. Below five feet, each soil boring shall be advanced using direct-push or hollow stem auger / split-spoon sampling methods. Continuous soil samples shall be collected beginning immediately beneath the asphalt / concrete surface cover for description of lithologic characteristics, groundwater occurrence, and staining / odor indicative of potential petroleum impacts. Hand auger, direct-push, or split-spoon soil core samples shall be screened in the field using a calibrated photoionization detector (PID) and standard headspace methods. One soil sample per boring shall be submitted for laboratory analysis (eight total). This soil sample shall be collected from the depth interval exhibiting the highest organic vapor concentration based on PID headspace screening. If no elevated organic vapor levels are measured along the length of a boring and no staining and/or odors are evident, the one sample shall be obtained either from the depth interval immediately above the water table or the bottom borehole, whichever occurs first. However, to accommodate the possible need to collect additional soil samples based on field observations and in order to delineate the vertical extent of soil contamination, bidders shall provide a unit cost per additional soil sample.

Soil samples shall be analyzed for the **post**-March 2008 PADEP short list of leaded and unleaded gasoline parameters, including 1,2,4- and 1,3,5-trimethylbenzenes. Appropriate quality assurance/quality control (QA/QC) samples shall also be obtained for laboratory analysis. Based on these analytical results, the approximate dimensions and volume of remaining source material exceeding the PADEP Act 2 SHS MSCs for soil, if any, shall be estimated.

Activities under Task 4 shall also include: (i) contacting the PA One Call System, Inc.; (ii) professional surveying of the soil boring locations and elevations for inclusion on the site plan and geologic cross sections; (iii) sealing each boring with bentonite and an asphalt or concrete surface patch after completion; and (iv) managing the drilling and personal protective equipment wastes in accordance with applicable regulations, guidance, and directives. The soil boring program methods and results shall be detailed in the SCR / RAP to be prepared under Task 13.

**Task 5 – Down Well Video Camera Survey.** The boring and monitoring well construction logs for onproperty monitoring wells MW-1 through MW-4, including the screened interval elevations, are not available. It is understood that MW-1 was completed to an approximate depth of 30 feet below grade, and that MW-2, MW-3, and MW-4 were completed to an approximate depth of 25 feet below grade. In light of this apparent data gap, the PADEP has requested conducting a down-well video camera survey. Bidders shall provide a firm fixed-price cost for performing a down-well video camera survey of the four existing on-property groundwater monitoring wells (MW-1 through MW-4) in order to establish the screened interval depths and confirm total well depth. Findings from the camera survey shall be used to effectively re-create the well construction logs for these wells for inclusion in the SCR / RAP.

**Task 6 – Install Additional Shallow Groundwater Monitoring Wells.** Under this task, bidders shall provide a firm fixed-price cost for installing two additional shallow groundwater monitoring wells on the

subject property and one additional off-property shallow groundwater monitoring well.<sup>9</sup> Suggested locations for these three additional monitoring wells are shown on the site drawing (Suggested Locations for Additional Wells) included with the accompanying electronic files, but each bidder shall develop its proposed locations for these wells based on its interpretation of groundwater flow variations and configuration of the dissolved-phase plumes. The objectives for installing additional wells at this site are to: (a) delineate the horizontal extent of dissolved-phase contaminants in shallow groundwater; (b) refine the interpretation of groundwater flow; (c) enable representative aquifer testing; (d) facilitate contaminant fate-and-transport modeling; and (e) evaluate natural attenuation processes. Should additional wells be needed to accomplish horizontal delineation of the dissolved-phase plumes, such work will be considered an out-of-scope task under the Fixed-Price Agreement, which will require Solicitor and PAUSTIF approval of a work plan and cost estimate before beginning the work.

The additional off-property shallow monitoring well is suggested to be installed on the property to the southeast, on the opposite side of Lindbergh Boulevard, having the physical address of 5946 Lindbergh Boulevard and owned by the City of Philadelphia. The previous consultant, MIG, executed an access agreement, dated December 24, 2008 and titled "License Agreement", with the City of Philadelphia to install and collected samples from existing wells MW-5 and MW-6. A copy of the access agreement is included with the accompanying electronic files. The bidders are encouraged to review this access agreement; however, it appears that the access agreement was executed between MIG and the City of Philadelphia and may not be applicable by other entities.<sup>10</sup>

Borings for the three additional shallow monitoring wells shall be advanced to intersect the shallow waterbearing zone intercepted by the existing on- and off-property monitoring wells. This interval is expected to be present at depths between 8 to 16 feet below grade based on the existing water level data.<sup>11</sup> For costing purposes, bidders shall assume that each shallow well borings will attain a depth of 25 feet below grade, although the total depth is likely to vary based on actual field conditions encountered. In the event that more or less drilling footage is required, bidders shall provide unit costs per foot inclusive of borehole advancement, logging, screening, and well installation.

Bidders shall assume advancing all monitoring well borings using standard hollow stem auger and continuous split-spoon sampling drilling methods. Continuous soil samples shall be examined in the field and described for lithology, groundwater occurrence, and potential staining / odor indicative of hydrocarbon contamination. Although the bid shall assume no soil samples will be collected from the monitoring well boreholes for laboratory analysis, the soil samples shall be screened in the field with a PID. Should field screening and/or visual or olfactory observations suggest petroleum impacts to soil in these additional monitoring well locations, bidders shall quote a unit cost for sample collection and laboratory analysis as an option. If any soil samples are collected for laboratory analysis, these samples

<sup>&</sup>lt;sup>9</sup> In discussions with the PADEP, the need for additional vertical delineation of the dissolved-phase contamination is not required at this time. Should site data suggest additional vertical delineation of the contaminant plume is necessary, this need will be considered an out-of-scope task under the Fixed-Price Agreement, which will require Solicitor and PAUSTIF approval of a work plan and cost estimate before beginning the work.

<sup>&</sup>lt;sup>10</sup> Bidders should be aware that it took almost 6 months to execute the access agreement between MIG and the City of Philadelphia. Therefore, it would be understandable if the winning bidder of the RFB solicitation would need to request an extension to the deadline for the submittal of the SCR / RAP because of the delay in the procurement of off-site access.

<sup>&</sup>lt;sup>11</sup> The reported range in depth to groundwater underlies current depictions of a relatively steep hydraulic gradient, which appears to contrast with the relatively flat to slightly sloping surface topography. In any event, the conceptual site model discussed in the June 2009 SCR does not offer a potential explanation for this apparent difference. For example, one possible explanation could be that the screened intervals of some wells may intercept a localized perched water-bearing zone. Consequently, drilling activities should include monitoring for evidence of a perched water-bearing zone.

shall be analyzed for the **<u>post</u>**-March 2008 PADEP short list of leaded and unleaded gasoline parameters, including 1,2,4- and 1,3,5-trimethylbenzenes.

The additional shallow groundwater monitoring wells will be constructed in accordance with the PADEP Groundwater Monitoring Guidance Manual. Bidders shall assume constructing each well of 2-inch diameter Schedule 40 PVC casing and well screen. Final construction must ensure that the screened interval intersects the water table surface and accounts for seasonal groundwater fluctuations.<sup>12</sup> For cost comparison purposes, bidders shall assume 20 feet of well screen. However, other considerations may include the screened intervals established for existing wells MW-1 through MW-4 under Task 5. Should one of the additional wells be installed with a submerged screen, this newly installed well will be replaced at the selected consultant's sole expense.

Annulus materials shall consist of a filter-pack of silica sand extending to a height of approximately two feet above the top of the screen section overlain by a minimum 2.0 feet of hydrated bentonite pellets as a well seal. The remaining annulus shall be filled with a cement / bentonite slurry to within approximately one-foot below grade. Considering the suggested locations of the three additional shallow monitoring wells, bidders shall assume surface finishing consisting of an expandable locking cap fitted to the top of the PVC riser and a flush-mounted traffic-rated manhole with a bolt-on lid. The flush-mounted manholes shall be set into a 2 ft by 2 ft concrete pad.

Also included within this task are repairs to an existing monitoring well. The surface seal at on-property well MW-4 is damaged and the bidders fixed price should include the costs for repairing the flush-mounted manway cover and concrete seal at existing on-property well MW-4.

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

**Task 7 – Investigation of Off-Property Groundwater Seeps.** In its letter disapproving the June 2009 SCR, the PADEP requests investigating the bank of the railroad cut along the north side of the site for possible groundwater seeps. Therefore, under this task, bidders shall propose a firm fixed-price to complete such an investigation. Bidders should note that this adjacent property is owned and operated by SEPTA, which means an access agreement will need to be negotiated and which may involve performing this work during low rail traffic hours and in a manner consistent with SEPTA health and safety requirements. In general, the north-facing bank of the railroad cut shall be inspected visually and locations noted and mapped for any observed active groundwater seeps or visual indications of formerly active seeps. Bidders should also quote an inclusive fixed unit price to collect and analyze a water sample from any active groundwater seep that may be observed. If any seep samples are collected for laboratory analysis, these samples shall be analyzed for the **post**-March 2008 PADEP short list of leaded and unleaded gasoline parameters, including 1,2,4- and 1,3,5-trimethylbenzenes.

Task 8 – Groundwater Monitoring and Sampling. Under this task, bidders shall provide a firm fixedprice to complete two (2) groundwater monitoring and sampling events (an initial and a confirmatory

<sup>&</sup>lt;sup>12</sup> If a bidder believes monitoring wells are needed to assess a shallow perched water-bearing zone, additional details in support of installing such wells should be provided in the proposal as an optional task.

monitoring and sampling event). Both groundwater monitoring and sampling event will include the additional on- and off-property wells installed under Task 6, as well as the six existing wells (MW-1 through MW-6). The conduct and results of these two events shall be documented in the SCR / RAP.

The initial groundwater monitoring and sampling event shall be performed no later than two weeks, but no sooner than one week after installing and developing the three additional wells discussed under Task 6. The confirmatory monitoring and sampling event shall be conducted no less than four (4) and no more than six (6) weeks after the initial event. During each event, the depth to groundwater and any potential separate-phase hydrocarbons (SPH) shall be gauged in all available monitoring wells prior to purging any of the wells for sampling. Groundwater level measurements obtained from the monitoring wells 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 event 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 SPH shall not be purged and sampled (approximately 0.01 foot of SPH was measured at MW-1, MW-3, and MW-4 in February 2009). 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 these two events shall be analyzed for the **post**-March 2008 PADEP short-list of leaded and 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.<sup>13</sup>

In addition, each event shall include field measurements for these natural attenuation parameters: pH, temperature, specific conductance, dissolved oxygen (measured in-situ), and oxidation/reduction potential. Laboratory analysis of the following suggested natural attenuation parameters shall be conducted on three well samples during the confirmatory sampling event only: dissolved manganese, ferrous iron, methane, nitrate nitrogen, sulfate, alkalinity, and microbial plate counts (heterotrophic and gasoline degraders). Bidders shall assume analyzing samples for these parameters from one well located upgradient, within, and downgradient of the contaminant plume in the shallow groundwater zone. However, bidders shall quote a per-well cost should more or fewer wells be selected for natural attenuation parameters sampling and analysis. The natural attenuation data shall be evaluated as part of the remedial alternatives analysis to be included in the SCR / RAP in considering whether monitored natural attenuation may be an appropriate and feasible remedy for this site.

**Task 9 – Aquifer Characterization Testing.** Based on the available document record, it appears that no data have been collected concerning the hydraulic properties of the overburden aquifer to date. Therefore, each bidder shall provide a fixed-price cost to conduct and evaluate the data from a single 24-hour constant-rate pumping test. Each bidder shall specify the monitoring well it believes may be the most appropriate groundwater extraction well and observation wells for the test. The test data shall be analyzed to: (a) confirm / determine hydraulic characteristics; (b) evaluate aqueous contaminant transport; (c) develop a fate-and-transport model; and (d) determine a sustainable yield and radius of hydraulic influence for the overburden groundwater as input to the Remedial Feasibility / Alternatives Analysis (RF/AA) to be included in the SCR / RAP (Task 13). Raw data from the pumping tests shall be

<sup>&</sup>lt;sup>13</sup> Each bidder's approach to implementing Task 8 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.

reduced using appropriate techniques and the test methods and conclusions shall be described in the SCR / RAP.

Before beginning the pumping test, groundwater levels shall be monitored in all site monitoring wells over a minimum 24-hour period to identify the influence of natural background fluctuations. Next, a stepdrawdown (or stepped-rate) test will be conducted within the selected extraction well to determine a sustainable flow rate for the 24-hour pumping test. Groundwater levels in the extraction well and surrounding observation wells shall be monitored during the stepped-rate test. After pumping for the stepped-rate test has been discontinued, the extraction well and observation wells must be monitored until water levels return to at least 90 percent of the pre-pumping static conditions.

A constant-rate 24-hour pumping test shall be conducted following the stepped-rate test. Prior to initiating the constant-rate pumping test, water-level measurements shall be obtained from all on- and off-property monitoring wells. During the pumping test, groundwater levels in the selected extraction well and surrounding observation wells shall be monitored continuously. After the extraction well has been pumped for a minimum period of 24 hours, pumping shall be terminated and water levels in the wells shall be allowed to recover. During the recovery phase, groundwater levels in the selected extraction well and all observation wells will be monitored until it is determined that the water level in the extraction well has recovered to at least 90 percent of the original static groundwater level.

Monitoring of the selected extraction well and observation wells shall be performed using electronic pressure transducers and data logging equipment, although other secondary observation points can be monitored manually using an electronic water level meter.

Bidders shall manage groundwater generated by the aquifer testing activities in accordance with standard industry practices and applicable laws, regulations, guidance, and PADEP directives.

**Task 10 – 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 SCR / RAP.

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 Program Technical Guidance Manual – Section IV.A.4, Vapor Intrusion into Buildings from Soil and Groundwater.* Currently, absent knowing whether residual source soil exists in areas of the site, selecting proposed locations for the soil vapor monitoring points may be difficult. However, for the purpose of comparing cost quotes, bidders shall assume installing and sampling a total of three (3) soil vapor monitoring points. In addition, bidders shall quote an all-inclusive unit price per soil vapor monitoring point should more or fewer monitoring points be needed. The installed soil vapor monitoring points shall be sampled twice over the winter or early spring months 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 except for the samples to be submitted for naphthalene analysis, which shall be collected using XAD-2 tubes. 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 <u>post</u>-March 2008 unleaded gasoline parameters using appropriate analytical methods and detection levels. Soil vapor samples shall be analyzed by Method TO-15 with the exception of naphthalene, which shall be analyzed by NIOSH Method 5515. Appropriate QA/QC samples shall also be collected and analyzed for the same unleaded gasoline compounds. The soil vapor study shall be described in the SCR / RAP along with any recommendations regarding the necessity for an expanded vapor intrusion assessment inclusive of indoor air quality sampling, if appropriate.

**Task 11 – Contaminant Fate-and-Transport Modeling.** After the additional groundwater monitoring wells have been installed and sampled twice (Tasks 6 and 8) and subsequent to collecting and evaluating the aquifer characterization test data (Task 9), a quantitative contaminant fate-and-transport model shall be developed to address all dissolved-phase constituents whose concentrations exceed the residential used aquifer SHS-MSCs for groundwater.

Prior to implementing this task, the selected consultant shall contact the PADEP project officer for his/her input on the type of modeling to be performed. Use of the PADEP New Quick Domenico model may be appropriate for this site because groundwater appears to be present in the unconsolidated natural soils; however, numerical groundwater modeling methods using software such as MODFLOW and MT3D may also be used. For cost comparison purposes, bidders shall assume that the PADEP will allow the use of New Quick Domenico for the modeling effort. Should the PADEP subsequently disagree, this new requirement will constitute a "new condition" under the Fixed-Price Agreement.

Bidders shall provide a firm fixed-price cost for developing a calibrated New Quick Domenico contaminant fate-and-transport model utilizing data generated from the site characterization tasks described above and any relevant historical site characterization data. The fixed-price cost shall include documenting the modeling effort in the SCR / RAP (Task 13). This documentation shall describe all model input/output, provide a thorough explanation of model construction, justify all input parameters, and include a detailed discussion of the modeling results and conclusions regarding current and predicted future plume stability (or lack thereof).

Environmental data currently available for the site suggest that surface water modeling applications such as SWLOAD5B and PENTOXSD are probably <u>not</u> necessary to assess potential impacts to downgradient surface water. Should additional site characterization data indicate contaminant loading to surface water should be evaluated, such modeling will be subject to the "New Conditions" provision of the Fixed-Price Agreement.

**Task 12 – Conceptual Site Model.** Under this task, bidders shall provide a fixed-price cost for developing a conceptual site model (CSM) for the site and its vicinity based on evaluating the results of the site characterization tasks outlined above. Information contained in the prior SCR may also be referenced, although bidders are reminded that this report was not approved.

Information considered in developing the CSM shall consist of, but should not necessarily be limited to, stratigraphic and lithologic characteristics / relationships; groundwater elevations and flow direction; hydrogeologic controls on groundwater movement and contaminant transport; intrinsic aquifer parameters; the distribution of hydrocarbon contaminants in soil and groundwater; evaluation of potential sensitive receptors, and consideration of the contaminant fate-and-transport modeling results. The CSM shall be presented and discussed in the SCR / RAP.

**Task 13 – Prepare a Draft and Final Combined SCR / RAP.** Upon completing Tasks 1 through 12 described above, the selected consultant will prepare a combined draft SCR / RAP for review and comment by the Solicitor and PAUSTIF. This combined SCR / RAP shall contain all necessary information required under 25 PA Code §§245.309, 245.310, and 245.311 and be of sufficient quality and

content to reasonably expect PADEP approval. Each bidder's project schedule shall provide two (2) weeks for Solicitor and PAUSTIF review of the draft document. The final SCR / RAP shall address comments received from the Solicitor and PAUSTIF on the draft report before it is submitted to the PADEP for its review.

The SCR / RAP shall document, describe, and evaluate all findings provided from Tasks 1 through 12 above and incorporate information and data from the previous site documentation as the selected consultant deems appropriate. The document shall also: (a) contain all necessary figures, tabulated data, and appendices; (b) present a detailed and comprehensive RF/AA describing at least three options for site closure and remediation (if necessary); (c) reference the selected remedial goal for soil and groundwater; (d) discuss the recommended site closure strategy and its viability for achieving the remedial goal within a reasonable time frame; (e) identify the proposed point-of-compliance monitoring wells; and (f) present a detailed schedule for implementing the recommended remedial approach. As appropriate, the document may also need to include at least a conceptual remediation system design, installation schedule, compliance-relating sampling program details, and an operations and maintenance plan. The SCR / RAP shall be signed and sealed by a Professional Geologist <u>and</u> a Professional Engineer registered in the Commonwealth of Pennsylvania.

#### 4. TYPE OF CONTRACT / PRICING

The Solicitor wishes to execute a mutually agreeable, firm, fixed-price, not-to-exceed contract for the SOW addressed by Tasks 1 through 13. A sample Fixed-Price Agreement is included as Attachment 2.<sup>14</sup> 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 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 13. 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 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> Additional Background Research (Task 1).
- <u>Milestone B</u> Site Professional Survey (Task 2).

<sup>&</sup>lt;sup>14</sup> 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 C</u> On-Property Geophysical Survey (Task 3).
- <u>Milestone D</u> Source Soil Delineation (Task 4).
- <u>Milestone E</u> Down-Well Video Camera Survey (Task 5).
- <u>Milestone F</u> Install Additional Shallow Groundwater Monitoring Wells (Task 6).
- <u>Milestone G</u> –Investigation of Off-Property Groundwater Seeps (Task 7).
- <u>Milestones H1 and H2</u> Groundwater Monitoring and Sampling (Task 8). Note that the schedule assumes two Milestone H payments.
- <u>Milestone I</u> Aquifer Characterization Testing (Task 9).
- <u>Milestone J1 and J2</u> Soil Vapor Study (Task 10). Note that the schedule assumes two Milestone J payments
- <u>Milestone K</u> Contaminant Fate-and-Transport Modeling (Task 11).
- <u>Milestone L</u> Conceptual Site Model (Task 12).
- <u>Milestone M</u> Prepare a Draft and Final Combined SCR / RAP (Task 13).

Estimated Milestone Timing Month After Contract Award	SOW Activities Anticipated / Completed for that Month	Milestone <sup>1</sup>
1	Additional Background Research (A); Site Professional Survey (B); On- Property Geophysical Survey (C)	A, B, C
2	Source Soil Delineation (D); Down Well Video Camera Survey (E); Install Additional Shallow Groundwater Monitoring Wells (F); Soil Vapor Study (probe installation and initial sampling event)(J1)	D, E, F, J
3	Investigation of Off-Property Groundwater Seeps (G); Groundwater Monitoring and Sampling (Initial Event) (H1); Aquifer Characterization Testing (I)	G, H1, I
4	Groundwater Monitoring and Sampling (Confirmation Event) (H2); Soil Vapor Study (confirmation sampling event)(J2)	H2, J2
5	Contaminant Fate-and-Transport Modeling (K); Conceptual Site Model (L)	K, L
6	Prepare a Draft and Final Combined SCR / RAP $(M)^{(2)}$	М

#### TABLE 2 – SAMPLE MILESTONE COMPLETION / PAYMENT SCHEDULE

1. Each bidder should modify this sample Milestone Completion / Payment Schedule for Tasks 1 through 13 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 SCR / RAP must be submitted in final form to the PADEP within 6 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 13 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, 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 submittal of the SCR / RAP. 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 13.

#### 6. MANDATORY PRE-BID SITE VISIT

On **Wednesday, January 20, 2010**, 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 1 PM. 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.<sup>15</sup>

<sup>&</sup>lt;sup>15</sup> 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:
MIG June 2009 SCR.pdf	June 2009 SCR Prepared by MIG
PADEP SCR Disapproval Ltr_090724.pdf	PADEP SCR Disapproval Letter, dated July 24, 2009
Lease & Asset Purchase Agreement.pdf	Lease and Asset Purchase Agreement, dated October 15, 1999
Dec 10 2003 NORR.pdf	Notification of Reportable Release Form, dated December 10, 2003
MIG Groundwater Progress Rpt.pdf	Groundwater Progress Report prepared by MIG
Off Site Access Agreement.pdf	License Agreement, dated December 24, 2008
Misc PADEP File Documents.pdf	PADEP file documents (correspondence, UST system inspections / testing, site characterization data)
Addit Monitoring Wells.pdf	Drawing showing the suggested locations for the additional monitoring wells

### **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**