

Request for Bid

Fixed-Price Bid to Result

**SITE CLOSURE
VIA
RESIDENTIAL USED-AQUIFER STATEWIDE HEALTH STANDARDS**

Solicitor

Mr. Mike Fleming

Quik Serv

**400 Union Avenue
Pittsburgh, PA 15022**

PADEP Facility ID #: 02-80224

PAUSTIF Claim #: 2010-0132(S)

Date of Issuance

February 7, 2014

Technical Contact Revised February 12, 2014

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The Pennsylvania Underground Storage Tank Indemnification Fund (PAUSTIF), on behalf of the claimant who hereafter is referred to as the Client or Solicitor, is providing this Request for Bid (RFB) to prepare and submit a bid to complete the Scope of Work (SOW) for the referenced site. The Solicitor is the current owner of the Site. PAUSTIF has determined that the claim reported by the Solicitor is eligible for coverage from the PAUSTIF subject to the applicable statutes and regulations. Reimbursement of Solicitor-approved, reasonable and necessary costs, not to exceed the claim aggregate limit, for the corrective action work described in this RFB will be provided by PAUSTIF. Solicitor is responsible to pay any applicable deductible and/or proration.

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 website <http://www.insurance.pa.gov>.

Calendar of Events

Activity	Date and Time
Notification of Intent to Attend Site Visit	Tuesday, <u>FEBRUARY 18, 2014</u> by 5 p.m.
Mandatory Pre-Bid Site Visit	Tuesday, <u>FEBRUARY 25, 2014</u> at 11 A.M.
Deadline to Submit Questions	Friday, <u>MARCH 28, 2014</u> by 5 p.m.
Bid Due Date and Time	Friday, <u>APRIL 11, 2014</u> by 3 p.m.

Contact Information

ICF International	Solicitor	Technical Contact
<p>Mr. Gerald Hawk ICF International 400 Vine Street Middletown, PA 17057 Email – Gerald.Hawk@icfi.com</p>	<p>Mr. Mike Fleming Quik Serv 400 Union Avenue Pittsburgh, PA 15202</p>	<p>Mr. Larry Martin, P.E. Excalibur Group LLC Phone – 724-234-2137 Email – lmartin@excaliburgrp LLC.com</p>

All questions regarding this Request for Bid (RFB) and the subject site conditions must be directed via e-mail to the Technical Contact identified above with the understanding that all questions and answers will be provided to all bidders. The email subject line must be **“Quik Serv 400 Union Avenue – PAUSTIF Claim 2010-0132(S) – RFB QUESTION”**. Bidders must neither contact nor discuss this RFB with the Solicitor, PAUSTIF, the Pennsylvania Department of Environmental Protection (PADEP), or ICF International (ICF) unless approved by the Technical Contact. Bidders may discuss this RFB with subcontractors and vendors to the extent required for preparing the bid response.

Requirements

Mandatory Pre-Bid Site Meeting

The Solicitor, the Technical Contact, or their designee will hold a mandatory site visit on the date and time listed in the calendar of events to answer questions and conduct a site tour for one participant per bidding company. The Technical Contact may answer questions at the Site Meeting or may collect questions and respond via email. All questions and answers will be provided via email to all attendees. This meeting is mandatory for all bidders, no exceptions. This meeting will allow each bidding company to inspect the site and evaluate site conditions. **A notice of the bidder’s intent to attend this meeting is requested to be provided to the Technical Contact via email by the date listed in the calendar of events with the subject Quik Serv 400 Union Avenue – PAUSTIF Claim 2010-0132(S) - SITE MEETING ATTENDANCE NOTIFICATION**. The name and contact information of the company participant should be included in the body of the e-mail. Notification of intent to attend is appreciated; however, is it not required. Attendance at the Pre-Bid Site Meeting is mandatory.

Submission of Bids

To be considered for selection, **one hard copy of the signed bid package and one electronic copy (one PDF file on a compact disk (CD) included with the hard copy) must be provided directly to the PAUSTIF's third party administrator, ICF, to the attention of the Contracts Administrator.** The Contracts Administrator will be responsible for opening the bids and providing copies to the Technical Contact and the Solicitor. Bid responses will only be accepted from those companies that attended the mandatory pre-bid site meeting. **The ground address for overnight/next-day deliveries is ICF International, 4000 Vine Street, Middletown, PA 17057, Attention: Contracts Administrator. The outside of the shipping package containing the bid must be clearly marked and labeled with "Bid – Claim # [insert claim number provided on cover page]".** Please note that the use of U.S. Mail, FedEx, UPS, or other delivery method does not guarantee delivery to this address by the due date and time listed in the Calendar of Events for submission. Companies mailing bids should allow adequate delivery time to ensure timely receipt of their bid.

The bid must be received by 3 p.m., on the due date shown in the Calendar of Events. Bids will be opened immediately after the 3 p.m. deadline on the due date. Any bids received after this due date and time will be time-stamped and returned. If, due to inclement weather, natural disaster, or any other cause, the PAUSTIF's third party administrator, ICF's office is closed on the bid due date, the deadline for submission will automatically be extended to the next business day on which the office is open. The PAUSTIF's third party administrator, ICF, may notify all companies that attended the mandatory site meeting of an extended due date. The hour for submission of bids shall remain the same. Submitted bid responses are subject to the Pennsylvania Right-to-Know Law.

Bid Requirements

The Solicitor wishes to execute a mutually agreeable contract with the selected consultant ("Remediation Agreement"). The Remediation Agreement is included as Attachment 1 to this Request for Bid. The bidder must identify and document in their bid any modifications that they wish to propose to the Remediation Agreement language in Attachment 1 other than obvious modifications to fit this RFB (e.g., names, dates and descriptions of milestones). The number and scope of any modifications to the standard agreement language will be one of the criteria used to evaluate the bid. **Any bid that does not clearly and unambiguously state whether the bidder accepts the Remediation Agreement language in Attachment 1 "as is", or that does not provide a cross-referenced list of requested changes to this agreement, will be considered non-responsive.** This statement should be made in a Section in the bid entitled "Remediation Agreement". Any proposed changes to the agreement should be specified in the bid; however, these changes will need to be reviewed and agreed upon by both the Solicitor and the PAUSTIF.

The selected consultant will be provided an electronic copy (template) of the draft Remediation Agreement in Microsoft Word format to allow agreement-specific information to be added. The selected consultant shall complete the agreement-specific portions of the draft Remediation Agreement and return the document to the Technical Contact within 10 business days from date of receipt.

The Remediation Agreement fixed costs shall be based on unit prices for labor, equipment, materials, subcontractors/vendors and other direct costs. The total cost quoted in the bid by the selected consultant

will be the maximum amount to be paid by the Solicitor unless a change in scope is authorized and determined to be reasonable and necessary. There may be deviations from and modifications to this Scope of Work (SOW) during the project. The Remediation Agreement states that any significant changes to the SOW will require approval by the Solicitor, PAUSTIF, and PADEP. NOTE: Any request for PAUSTIF reimbursement of the reasonable costs to repair or replace a well will be considered on a case-by-case basis.

The bidder shall provide its bid cost using the Bid Cost Spreadsheet (included as Attachment 2) with descriptions for each task provided in the body of the bid document. Please note if costs are provided within the text of the submitted bid and there is a discrepancy between costs listed in the Bid Cost Spreadsheet and in the text, the costs listed within the Bid Cost Spreadsheet will be used in the evaluation of the bid and in the Remediation Agreement with the selected consultant. Bidders are responsible to ensure spreadsheet calculations are accurate. Note that bids will be scored technically based on those tasks/milestones included in the Bid Cost Spreadsheet and the total bid cost. Any optional milestones or cost adders that were not requested as part of this RFB will not be considered by the Bid Evaluation Committee in the technical review and technical score.

In addition, the bidder shall provide:

1. The bidder's proposed unit cost rates for each expected labor category, subcontractors, other direct costs, and equipment;
2. The bidder's proposed markup on other direct costs and subcontractors (if any);
3. The bidder's estimated total cost by task consistent with the proposed SOW identifying all level-of-effort and costing assumptions; and
4. A unit rate schedule that will be used for any out-of-scope work on this project.

Each bid will be assumed to be valid for a period of up to 120 days after receipt unless otherwise noted. The costs quoted in the Bid Cost Spreadsheet will be assumed to be valid for the duration of the Remediation Agreement.

Please note that the total fixed-price bid must include all costs, including those cost items that the bidder may regard as "variable". These variable cost items will not be handled outside of the total fixed price quoted for the SOW unless the RFB requests costing alternatives for specific items or services. **Any bid that disregards this requirement will be considered non-responsive to the bid requirements and, as a result, will be rejected and will not be evaluated.**

Each bid response document must include at least the following:

1. Demonstration of the bidder's understanding of the site information provided in this RFB, standard industry practices, and objectives of the project.
2. A clear description, specific details, and original language of how the proposed work scope will be completed for each milestone. The bid should specifically discuss all tasks that will be completed under the Remediation Agreement and what is included (e.g., explain groundwater purging/sampling

methods, which guidance documents will be followed, what will be completed as part of the site specific work scope/SCR/RAP implementation). Recommendations for changes/additions to the Scope of Work proposed in this RFB shall be discussed, quantified, and priced separately; however, **failure to bid the SOW “as is” may result in a bid not being considered.**

3. A copy of an insurance certificate that shows the bidder’s level of insurance consistent with the requirements of the Remediation Agreement. Note: The selected consultant shall submit evidence to the Solicitor before beginning work that they have procured and will maintain Workers Compensation; commercial general and contractual liability; commercial automobile liability; and professional liability insurance commensurate with the level stated in the Remediation Agreement and for the work to be performed.
4. The names and brief resumes/qualifications of the proposed project team including the proposed Professional Geologist and Professional Engineer (if applicable) who will be responsible for overseeing the work and applying a professional seal to the project deliverables (including any major subcontractor(s)).
5. Responses to the following specific questions:
 - a. Does your company employ a Pennsylvania-licensed Professional Geologist that is designated as the proposed project manager? How many years of experience does this person have?
 - b. How many Pennsylvania Chapter 245 projects is your company currently the consultant for in the PADEP Region where the site is located? Please list up to ten.
 - c. How many Pennsylvania Chapter 245 Corrective Action projects involving an approved SCR, RAP and RACR has your company and/or the Pennsylvania-licensed Professional Geologist closed (i.e., obtained Relief from Liability from the PADEP) using any standard?
 - d. Has your firm ever been a party to a terminated PAUSTIF-funded Fixed-Price (FP) or Pay-for-Performance (PFP) contract without attaining all of the Milestones? If so, please explain.
6. A description of subcontractor involvement by task. Identify and describe the involvement and provide actual cost quotations/bids/proposals from all significant specialized subcontracted services (e.g., drilling/well installations, laboratory, etc.). If a bidder chooses to prepare its bid without securing bids for specialty subcontract services, it does so at its own risk. Added costs resulting from bid errors, omissions, or faulty assumptions will not be considered for PAUSTIF reimbursement.
7. A detailed schedule of activities for completing the proposed SOW including reasonable assumptions regarding the timing and duration of Solicitor reviews (if any) needed to complete the SOW. Each bid must provide a schedule that begins with execution of the Remediation Agreement with the Solicitor and ends with completion of the final Milestone proposed in this RFB. Schedules must also indicate the approximate start and end date of each of the tasks/milestones specified in the Scope of Work, and indicate the timing of all proposed key milestone activities (i.e within 30 days of the contract being executed).

8. A description of how the Solicitor, ICF and the PAUSTIF will be kept informed as to project progress and developments, and how the Solicitor (or designee) will be informed of and participate in evaluating technical issues that may arise during this project.
9. A description of your approach to working with the PADEP. Describe how the PADEP would be involved proactively in the resolution of technical issues and how the PADEP case team will be kept informed of activities at the site.
10. Key exceptions, assumptions, or special conditions applicable to the proposed SOW and/or used in formulating the proposed cost estimate. **Please note that referencing extremely narrow or unreasonable assumptions, special conditions and exceptions may result in the bid response being deemed “unresponsive”.**

General Site Background and Description

Each bidder should carefully review the existing information and documentation provided in Attachment 3. The information and documentation has not been independently verified. Bidders may wish to seek out other appropriate sources of information and documentation specific to this site. If there is any conflict between the general site background and description provided herein and the source documents within Attachment 3, the bidder should defer to the source documents.

Site Name / Address / Location: Quik Serv, 400 Union Avenue, Avalon Borough, Allegheny County, Pennsylvania, and can be found at 40° 30' 14.57" north latitude and -80° 03' 42.42" west longitude.

PAUSTIF Eligibility: Following the documented release from the unleaded gasoline underground storage tank (UST) system in 2010, the Solicitor filed a claim with the PAUSTIF and eligibility was granted under PAUSTIF Claim No. 2010-0132(S). PAUSTIF has agreed to 100% reimbursement of Solicitor-approved reasonable and necessary costs up to claim limits for the corrective action work described in this RFB.

Site Use Description: The Site is currently used as a convenience store and retail gasoline sales facility.

Current Petroleum Storage on Site: Based on the characterization activities conducted at the Site to date, there are currently three underground petroleum storage tanks on the Site. All three tanks are in use by the facility.

Nature of Confirmed Release and Subsequent Activities: The following information is based on the documents provided in Attachment 3. This information has not been independently verified by ICF or the Technical Contact.

The site is located on the southwest corner of the intersection of Union Avenue and Sedalia Avenue within a mixed residential and commercial use neighborhood.

The site was operated as a retail petroleum facility since 1960. From 1960 until 2001, the facility was used for the retail sale of leaded and unleaded gasoline and general auto repairs. In 2001, the current owner converted the garage bays into a convenience store and continued the retail sale of gasoline from the facility.

According to the PADEP storage tank database, the current UST system was installed at the site in May and September 1988, and consists of two 6,000 gallon and one 4,000 gallon fiberglass jacketed steel tanks. These tanks are used to store unleaded gasoline. The 4,000 gallon UST and one of the 6,000 gallon USTs were installed in May 1988. The other 6,000 gallon UST was installed in September 1988. New dispensers with containment sumps, double-wall product piping, and tank top sumps were installed at the property from December 2010 to January 2011.

In January 1999, a 550 gallon used oil UST was closed in place at the facility. Confirmatory soil samples collected from near each end of the UST reported no concentrations of chemicals of concern above the SHS and no groundwater was reportedly encountered during the closure in place.

Given that the site has been a retail petroleum since 1960, prior USTs would have been associated with the site. However, files maintained by the PADEP Southwest Region Offices contained no information regarding prior UST systems at the facility.

A geophysical survey conducted at the site reported no buried objects indicative of USTs.

Various buried utilities including sanitary sewer, storm sewer, public water, and natural gas lines are located on and/or surrounding the site. Overhead telephone and electric lines are located along Union Avenue and Sedalia Avenue. The West View Water Authority provides potable water to the site and surrounding area.

On November 6, 2010, complaints of gasoline odors were reported in a home near the site and lower explosive limit (LEL) readings above 10% LEL were measured in the sewer manhole located northwest of the site on Sedalia Avenue. A blower was placed on the manhole and the sewer line was flushed with water to mitigate the gasoline vapors.

On November 9, 2010 all three product lines and one Stage II recovery line at the site were inspected, found to be cracked and confirmed as the source of the release at the site, and the tanks were removed from service.

On December 9, 2010, as part of a dispenser, piping, and tank top upgrade, trenches beneath the former dispenser locations and product piping and petroleum impacted soil was encountered. Approximately 114 tons of petroleum impacted soil was removed and disposed of at an off-site facility. However, as the USTs were not being removed, the excavation of impacted soils ceased when the USTs were encountered, although it was reported that the sand backfill surrounding the USTs was impacted, presumably from the unleaded gasoline released from the product piping in November 2010. Confirmatory samples collected from beneath the former dispenser locations and piping runs did not contain concentrations of chemicals of concern above the SHS.

As part of the Site Characterization, twelve soil borings were advanced during August of 2011 to assess the extent of soil contamination associated with the release. An additional soil boring was advanced during November of 2011 for the purpose of collecting samples for percent fraction organic carbon and soil bulk density. All soil borings were installed using direct push technology and advanced until refusal was encountered at depths between 16 and 24 feet below grade.

In October of 2012, two additional soil borings were advanced utilizing hollow stem augers, in an attempt to locate a possible buried stream channel to ascertain if chemical of concern were moving north from the site along that pathway. Those borings only reached a depth of 4.5 feet below grade where bedrock reportedly was encountered.

A total of twenty groundwater monitoring wells have been installed as part of the site characterization of the Quik Serv property. Ten wells, (MW-1 through MW-10), were installed on the Quik Serv property to assess groundwater conditions beneath the site; seven monitoring wells (MW-11 through MW-17) were installed along Sedalia Avenue just north and west of the site; one monitoring well (MW-18S) was installed approximately one hundred forty feet north of Sedalia Avenue to characterize groundwater conditions downgradient of the site; and two bedrock monitoring wells (MW-18D and MW-19D) were installed to characterize groundwater in the bottom of a twenty five foot deep trench containing an Avalon borough sewer line that trends to the north from the site.

Current Conditions: Groundwater sampling and interim remedial actions in the form of vac events have been conducted through at least the 1st Quarter of 2013. Results of those actions are summarized in the Site Characterization Report and 1st Quarter 2013. Remedial Action Progress Report included in Attachment 3. These documents include summaries of the chemistry, groundwater elevations, groundwater elevation and chemistry contour maps, and narratives of activities conducted during the reporting period.

Scope of Work (SOW)

This RFB seeks competitive bids from qualified contractors to perform the activities in the Scope of Work (SOW) specified herein. A copy of this RFB has previously been provided to PaDEP for review and comment. PaDEP has not provided any comments.

Objective

This solicitation requests a fixed price bid for achieving Site SHS goals by using the bidder's recommended course of action through the completion of the specific tasks/milestones defined in this RFB. For the Quik Serv Site, the desired result or project goal is to "close" the Quik Serv Site under Chapter 245 consistent with Pennsylvania Act 2 standards, and obtain an associated release of liability from PADEP by demonstrating attainment of the SHS for soil, and attainment of residential used-aquifer SHS for groundwater.

This is a Bid to Result bid solicitation. Bid to Result RFBs identify task goals and rely on the bidders to provide a high level of project-specific detail on how they will achieve the goal. Each bid must detail the approach and specific methods for achieving the milestone objectives. In reviewing the quality of bids submitted under Bid to Result solicitations, there is an increased emphasis placed on technical approach and reduced emphasis on cost (as compared to bids for "Defined Scope of Work" RFBs).

Any bidder recommendations for changes/additions to the RFB outline shall be discussed, quantified, and priced separately; however, **failure to bid the RFB milestone format "as is" may result in a bid not being considered.**

Constituents of Concern (COCs)

The list of COCs for this Site are the current PaDEP Unleaded Gasoline Shortlist of Petroleum Products. Specifically:

Benzene Toluene Ethylbenzene Xylenes (total) MTBE (Methyl tert-Butyl Ether)	Naphthalene 1,2,4 – Trimethylbenzene 1,3,5 - Trimethylbenzene Cumene (Isopropylbenzene)
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General SOW Requirements

The bidder’s approach to completing the SOW shall be in accordance with generally accepted industry standards/practices and all applicable federal, state, and local rules, regulations, guidance, and directives. The latter include, but are not limited to, meeting the applicable requirements of the following:

- The Storage Tank and Spill Prevention Act (Act 32 of 1989, as amended),
- Pennsylvania Code, Title 25, Chapter 245 - Administration of the Storage Tank Spill and Prevention Program,
- The Land Recycling and Environmental Remediation Standards Act of 1995 (Act 2), as amended),
- Pennsylvania Code, Chapter 250 - Administration of Land Recycling Program, and
- Pennsylvania's Underground Utility Line Protection Law, Act 287 of 1974, as amended by Act 121 of 2008.

During completion of the milestone objectives specified below and throughout implementation of the project, the selected consultant shall¹:

- Conduct necessary, reasonable, and appropriate project planning and management activities until the project (i.e., Remediation Agreement) is completed. Such activities may include Solicitor communications/updates, meetings, record keeping, subcontracting, personnel and subcontractor management, quality assurance/quality control, scheduling, and other activities (e.g., utility location). 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 are necessary and appropriate to complete the SOW, and shall also include activities related to establishing any necessary access agreements. Project planning and management shall include identifying and taking appropriate safety precautions to not disturb site utilities; including but not limited to, contacting Pennsylvania One Call as required prior to any ground-invasive work. As

¹ As such, all bids shall include the costs of these activities and associated functions within the quote for applicable milestones.

appropriate, project management costs shall be included in each bidder's pricing to complete the milestones specified below.

- 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. The investigation-derived wastes, including purge water shall be disposed of 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 and the PAUSTIF upon request.
 - **The Quik Serv site is located in PADEP Southwest Region:** All investigation derived wastes shall be handled and disposed of per PADEP's Southwest Regional Office guidance. Investigation derived wastes include personal protective equipment, disposable equipment, soil and drill cuttings and groundwater obtained through monitoring well development and purging, as well as equipment decontamination fluids. Investigation derived wastes must be containerized in DOT-approved drums and staged on-site in a pre-determined location, pending results of laboratory analyses and selection of final disposal method(s). Each container must be labeled to indicate contents, site location and date of generation. It is the selected consultant's responsibility to conform with current PADEP Southwest Regional Office guidance requirements.
- Be responsible for providing the Solicitor and facility operator with adequate advance notice prior to each visit to the property. The purpose of this notification is to coordinate with the Solicitor and facility operator to ensure that appropriate areas of the property are accessible. Return visits to the site will not constitute a change in the selected consultant's SOW or result in additional compensation under the Remediation Agreement.

Site –Specific Guidelines

As part of this RFB, the selected consultant will need to consider the following site specific guidelines:

- **Scheduling:** As part of this RFB, the selected consultant shall provide a clear deadline (i.e. within 30 days of the contract being executed) as to when each of the milestones will be completed. This includes the expected date (i.e. within 90 days of the contract being executed) when the draft SCR will be submitted to the Solicitor, PAUSTIF and ERA for review. All on-site work should be completed during the normal working days and hours of 8 am to 5 pm from Monday through Friday.

- **Responsibility:** The selected consultant will be the consultant of record for the Site. They will be required to take ownership and responsibility for the project and will be responsible for representing the interests of the Solicitor and ICF/PAUSTIF with respect to the project. This includes utilizing their professional judgment to ensure reasonable and appropriate actions are recommended and undertaken to protect sensitive receptors, adequately characterize the Site, and move the Site towards closure.
- **Scope of Work:** Bid the scope of work as provided in the RFB. Consultants are welcome to propose or suggest a change in the SOW; however the consultant must bid the SOW as presented in the RFB and provide any suggested modification to the SOW and provide the cost difference (+ or -) separately in the proposal.
- **Field-Screening Instrument:** Each consultant should determine and state in their bid response the appropriate field-screening instrument to be used during the completion of the SOW. Specifically, the product associated with this investigation is unleaded gasoline. As such, the type of field-screening instrument should be able to detect the presence of hydrocarbons associated with that type of product.
- **Safety Measures:** Each consultant should determine the level of safety measures needed to appropriately complete the milestones. Specifically, if a consultant feels it is appropriate and necessary to complete activities such as a hole clearing activities, the cost should be included in their proposal and costs. More importantly, if a consultant includes the cost to complete safety activities, they should specify it in their proposal and discuss why it is appropriate and necessary and indicate which methods will be utilized and to what extent. As discussed in the RFB, cost is not the only factor when evaluating proposals and other factors are taken into consideration during the review process, including appropriate safety measures.
- **Waste Disposal:** The IDW waste (including, but not limited to, soil/rock cuttings, development water, and liquids generated during installation and aquifer testing) shall be disposed of per the instructions included in the “General SOW Requirements” section of the RFB. Bidders will be responsible for arranging any offsite waste disposal (if required) and including costs in their bid response to cover the disposal of all potential waste related to the milestones included in the SOW. Containerized soil and groundwater may be temporarily stored on site, but should be removed from the Site in a timely manner. In an effort to eliminate or minimize the need for change orders on a fixed price contract, please include costs to dispose of all anticipated volumes of waste in your bid response. **ICF and PAUSTIF will not entertain any assumptions on the contract with regards to a volume of waste** (i.e. Project costs assume that no more than 1,000 gallons of groundwater will require disposal after the completion of the pump test). Bidders will be responsible for including costs in their bid response to cover the disposal of all potential waste related to the milestones included in the SOW. Please estimate the volume of waste using your professional opinion, experience, and the data provided. Invoices submitted to cover additional costs on waste generated as part of activities included under the fixed price contract for this Site will not be paid.

Site –Specific Milestones

The following Milestones are to be included in bid responses:

Milestone A – Quarterly Groundwater Monitoring and Reporting

Under this milestone, bidders shall provide a firm fixed-price to complete quarterly groundwater monitoring and reporting events relative to the Quik Serv Site. This milestone shall commence immediately following the execution of the associated fixed-price Remediation Agreement and shall terminate with the initiation of RAP implementation. **For bidding purposes, all bids shall assume six quarterly sampling / reporting events under Milestone A** and all bids shall include a quarterly event unit rate that will be used to adjust for any increase or decrease in the number of quarterly monitoring events that are actually required prior to the initiation of Milestone F4 during the RAP implementation phase of this project.

The following Site wells are designated for representative sample collection, analyses, and documentation during each quarterly groundwater monitoring event: MW-1, MW-2, MW-3, MW-4, MW5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW- 13, MW-14, MW-15, MW-16, MW-17, MW-18S, MW-18D and MW-19D. (20 monitoring wells).

Each quarterly monitoring event shall include gauging the depth to groundwater (and separate-phase hydrocarbons, if present) in all 20 existing monitoring wells prior to purging any of the wells for sampling.

Groundwater-level measurements obtained from the monitoring wells shall be converted to groundwater elevations consistent with the current (most recent) vertical datum used at the Site to assess groundwater flow direction and hydraulic gradient.

For each quarterly monitoring event, once all depth to groundwater data has been measured and recorded, each monitoring well designated for sample collection shall be purged then sampled in accordance with EPA's Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures (EPA/540/S-95/504 – April 1996). Documentation of the flow rate, low-flow parameter measurements, low-flow parameter changes and the final low-flow purging “stabilized” values shall be maintained and reported for each quarterly monitoring event.

Any well with a numerically quantifiable thickness of separate-phase hydrocarbons shall not be purged or sampled.

All sampling and gauging equipment shall be decontaminated between purging and sampling at each monitoring well.

Once collected, the groundwater samples shall be sealed in pre-preserved laboratory supplied glassware, labeled, documented, custody sealed, placed in an ice-filled cooler(s) and delivery to an PADEP-accredited analytical laboratory for analyses within the regulatory holding times for the analytic suites to be run.

Each groundwater sample collected from the monitoring wells shall be analyzed for the Constituents of Concern previously identified within this RFB (ie - Benzene, Toluene, Ethylbenzene, Xylenes (total) MTBE (Methyl tert-Butyl Ether), Naphthalene, Cumene (Isopropylbenzene), 1,2,4 – Trimethylbenzene and 1,3,5 – Trimethylbenzene) by a PADEP-accredited laboratory using USEPA Method SW-846 8260B, with method detection levels below individual SHS for each compound. Quality assurance/quality control (QA/QC) samples shall also be collected and analyzed for the same parameters as part of each event.

Each bidder's approach to implementing Milestone A 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.

The results of each quarterly groundwater monitoring event shall be documented in separate quarterly RAPRs (see below). In addition, any such available data shall also be documented in any update reports.

Each quarterly RAPR shall be prepared, completed, and submitted for PADEP review in accordance with standard industry practices and applicable laws, regulations, guidance, and PADEP directives. Each quarterly report shall provide the data generated during the reporting period, shall be complete and concisely organized, and shall contain at least the following elements:

- As applicable, a summary of Site operations and remedial progress made during the reporting period that addresses whether or not the degree of remedial progress is reasonably “on track” to achieve a timely and cost-effective Site closure.
- Data collected from the monitored wells, including the depth to groundwater and thickness of any free product encountered.
- At least one groundwater elevation contour map, which also depicts a licensed professional's interpretation of groundwater flow direction.
- Tabulated historical quantitative groundwater analytical results, including results from the current quarter.
- The laboratory analytical report(s) for the samples collected during the current quarter.
- One Site-wide iso-concentration contour map for each compound detected in groundwater at a concentration exceeding its SHS during the quarter. (All figures included in each quarterly report (e.g., Site plan, groundwater elevation maps, dissolved plume maps, etc.) shall be available in electronic format to the Solicitor upon request.)
- For each well that has exhibited a SHS exceedance during the reporting period and/or during the previous year, a graphical depiction of historical key contaminant concentrations and groundwater elevations to provide an assessment of correlations between fluctuating water levels/precipitation events and contaminant concentrations. This assessment should specifically address whether observed dissolved-phase constituent concentration fluctuations may be related to changing hydrogeologic conditions or whether these fluctuations may be potentially indicative of changed conditions requiring further investigation and/or a possible change in the Site closure strategy.
- For each well that has exhibited an SHS exceedance during the reporting period or previously, a graphical depiction of recent key contaminant concentration trends. Each quarter, contaminant concentration trend lines shall be calculated using the previous two-years of analytical data (or data collected after the active remediation has been initiated, if applicable) to be plotted on an x-y scatter plot with a logarithmic scale. The exponential trend lines shall be projected forward in time to assess the pace of or projected timeframe for remediation to achieve attainment of the selected remediation standard(s).

- As applicable, a discussion of the data to offer an updated assessment whether these data are consistent with a stable, shrinking, or expanding plume and, therefore, whether or not the plume appears to be responding to the remedial action in a manner suggestive of a timely and cost-effective Site closure.
- Treatment and disposal documentation for waste generated during the reporting period.

PAUSTIF will only reimburse for only necessary quarterly groundwater sampling / reporting events actually completed under this milestone.

Each quarterly RAPR shall be signed and sealed by a Professional Geologist registered in the Commonwealth of Pennsylvania.

Milestone B – PADEP File Review and Meeting

Under this milestone, bidders shall provide a firm fixed-price for conducting a detailed review of project-related files (reports, correspondence, etc.) maintained by PADEP in their SWRO (Pittsburgh, Pennsylvania office) that relate to the Quik Serv Site. This review is intended to assist the selected consultant in gaining a full understanding of the site history, documented environmental conditions, remedial activities conducted to date, the regulatory and permitting issues associated with the Site.

The fixed-price for reviewing files shall also include a project-specific meeting to discuss issues related to the Quik Serv Site and, most importantly, to learn PADEP's perspective regarding the Site. This meeting, which shall take place in-person with the current PADEP case manager, may be held either on-Site or at PADEP's Southwest Regional Office in Pittsburgh, Pennsylvania. The meeting is intended to keep PADEP involved this new Site-related project from its inception, which should help expedite the resolution of any historic or new regulatory issues. Key meeting discussion points, all action items, and any comments provided by the PADEP case manager during this meeting shall be discussed with the Solicitor and PAUSTIF and documented in an associated letter.

Both the review of PADEP files and the in-person meeting with the PADEP case manager shall take place within 30 days of execution of the fixed-price Remediation Agreement associated with this RFB.

Milestone C – Supplemental Site Characterization Activities and Reporting

This milestone provides bidders the opportunity to identify which additional site characterization work will be completed in advance of finalizing the remedial approach design and moving ahead with its implementation. Conducting supplemental investigative activities under this milestone is mandatory. PAUSTIF will be reimbursing up to \$10,000 for supplemental site characterization and reporting costs under this milestone. Bidders are to describe what supplemental site characterization will be completed, the rationale for the work and how the derived data will be used. For purposes of bidding, and to ensure consistent cost scoring of bids, each bidder will enter exactly \$10,000 as the bid price for Milestone C in the Standard Bid Cost Spreadsheet. PAUSTIF will only reimburse up to \$10,000 of reasonable and necessary costs for those tasks actually performed. The selected bidder must provide time and material documentation in addition to

supporting documentation required (in Exhibit C of the executed Remediation Agreement) to support the requested reimbursement and completion of this milestone.

Bidders may use this opportunity to: 1) confirm any elements of the site characterization completed by a previous consultant; 2) address any perceived data gaps in the existing site characterization work; 3) assist in the evaluation and determination of remedial technologies and system design; 4) assist with refining the cleanup timeframe estimate and/or other reasons related to validating the bidder's remedial approach and design.

Milestone D – Discretionary Pilot Testing

Under this milestone, bidders shall provide a firm fixed-price for discretionary pilot testing activities at the Site. Should a bidder elect not to conduct any activities under Milestone D, a fixed-price of \$0.00 shall be entered into the appropriate location of the Standardized Bid Form (Attachment 2). Bidders that elect not to propose discretionary pilot testing to facilitate the efficient closure of the Site under Act 2 must provide the technical rationale (basis) for this decision within their bid, along with supporting examples (as appropriate). In addition, bidders that do not believe that discretionary pilot testing is necessary to efficiently close the Site under Act 2 must explicitly state within their bid that they accept the inherent risk in relying almost entirely or exclusively on data collected by others.

Work that may be conducted under this milestone is discretionary and the scope thereof will vary by bid according to each bidder's vision for remediation of the Site (Site Conceptual Model). Milestone D shall be used by bidders to collect the data they feel is necessary to assess or finalize the design of the remedial system (or approach they plan to use at the Quik Serv Site to achieve SHS for soil or groundwater). The work proposed and conducted under this milestone (if any), as well as the fixed- or unit-price(s) associated therewith, shall be formulated independently by each bidder at their sole discretion. Milestone work breakdowns (if any) and their associated pricing entered into the Standardized Bid Form (Attachment 2) will vary by bid.

Should a bidder believe that it is reasonable, appropriate, and necessary to conduct feasibility studies or pilot test to assess or finalize the design of the remedial system or approach that they plan to use at the Quik Serv Site to achieve SHS for soil or groundwater, such additional activities and their associated bid pricing shall be included under Milestone D. Potential considerations regarding the need for Milestone D activities include: determination of Site-specific remedial design data, confirmation that the proposed technology is technically feasible, confirmation that the proposed technology is cost-effective, and confirmation that the proposed technology will provide a timely closure of the Site under Pennsylvania Act 2.

Although not an endorsement to implement (or not to implement) any such work, potential activities for bidders to consider may include, but not be limited to, the following:

- In-situ pneumatic or hydraulic permeability studies (radius of influence tests).
- Feasibility studies and/or pilot testing activities to assess the effectiveness of a specific remedial technology or approach.

- Remedial design calculations, technology information, equipment specifications, and materials specifications as appropriate to support implementation of and PADEP approval of the remedial technology proposed within your bid.

Any and all Milestone D activities that are proposed with your firm's bid shall be accompanied by the following:

- The purpose and need for each Milestone D activity and an appropriate breakdown (Milestone D1, D2, etc.).
- A detailed scope description of each activity, including the use of and incorporation of pre-existing Site data.
- The timing and schedule of each activity relative to the overall project schedule.
- A description of the anticipated results of each activity and how such results may impact your proposed conceptual remedial action plan.
- For activities involving the evaluation of a remedial technology, such as a feasibility study or pilot test, bids shall describe in detail the likelihood that of the resulting data will dictate a change in the conceptual remedial action plan proposed in your bid.
- Firm fixed-pricing and any appropriate unit pricing for each Milestone D activity (Milestone D1, D2, etc.) within each bidder's completed Standardized Bid Form (Attachment 2).

Additional, discretionary feasibility / pilot testing activities (if any) conducted under Milestone D shall be documented in the Site RAP (Milestone E), which shall be submitted to both the Solicitor and PAUSTIF for review prior to its submission to PADEP. Each bidder's project schedule shall provide two weeks advance notice for Solicitor and PAUSTIF review of the draft document. The final RAP shall address comments received from the Solicitor and PAUSTIF on the draft report before it is submitted to PADEP. The RAP shall be consistent (with regard to approach and level of effort) with the conceptual remedial action plan provided in the selected consultant's bid.

Bidders shall specify within their bids the critical criteria (if any) that will be used to evaluate data obtained through Milestone D activities. These critical criteria shall be used by the successful bidder to assess whether or not their proposed conceptual remedial action plan is feasible. As such, and as applicable, bids shall list an upper and lower limit for each critical criterion that will define the range of acceptable results (i.e., feasibility study or pilot testing results). These criteria must be tightly controlled measurements or calculations that could be independently measured or verified by others during testing. Based on these criteria, Exhibit A of the Fixed-Price Agreement (Attachment 1) will contain a provision for cancellation of the agreement if the results (i.e., the data obtained during the implementation of Milestone D) do not meet certain bidder-defined criteria bounds (ranges). Each bidder, therefore, shall explicitly specify any and all critical criteria and their associated acceptable ranges for key design elements on which their proposed remedy depends (i.e., the

critical criteria and quantified ranges of values that will make the proposed conceptual remedial action plan technically feasible, cost-effective, and timely).

For example, and only if a bidder proposes to conduct activities under Milestone D, bids shall include language along the lines of:

“For our proposed conceptual remedial action plan to be successful and the for technology(ies) used thereby to operate as planned and meet our proposed cleanup schedule, our proposed recovery well pumping test must demonstrate the following:

- 1. The long-term, sustainable groundwater recovery rate must be assessed to be greater than 2 gpm per recovery well,*
- 2. Recovery well capture zones at the minimum sustainable groundwater recovery rate will require no more three recovery wells to hydraulically manage the site contaminant plume,*
- 3. The dissolved iron concentration within groundwater collected during the pumping test will not exceed 5 milligrams per liter (mg/L).”*

End of Example bid language. Actual bid language, if any, and their associated critical criteria will vary by bidder.

The critical criteria identified in each bid and their associated acceptable range of testing results will be evaluated by the bid evaluation committee as part of the technical review. Unrealistic criteria or criteria that are unreasonably narrow will reduce the favorability of the bid as viewed by the bid review committee.

The selected bidder will prepare a Pilot Test Report and submit it to the Solicitor with a copy to PAUSTIF (or their representative). The Pilot Test Report shall show that the pilot test was conducted according to their bid and shall constitute documentation for payments on Milestone D activities regardless of the result. If the results of the pilot testing show that the proposed remedial action is feasible based on the specified criteria and ranges, the selected consultant shall move forward on the project. However, if the results of the pilot testing show that the testing is outside of the pre-determined critical criteria range needed for timely achievement of remedial goals, either party to the associated fixed-price Remediation Agreement may cancel (see paragraph 11.b.vii of the example fixed-price remediation Agreement provided as Attachment 1).

This stage of the project is referred to as the “Pilot Test Off-Ramp” and is intended to protect the selected consultant and the Solicitor from being obligated to move forward with a remedial action that is not optimal or is expected to fail. While the selected bidder will be under no obligation to cancel the eventual fixed-price Remediation Agreement if the pilot test results are outside the criteria or range specified in the RFB Solicitation response, the following conditions will apply:

- With advance Solicitor and PAUSTIF approval, the Consultant may elect to modify the remediation plan and continue with the project at no additional cost; that is, for the same total fixed price found in the RFB Solicitation response, based on the remaining fixed description and price for the remaining tasks.
- If the Solicitor or PAUSTIF choose not to approve the Consultant’s plan, the Remediation Agreement for the project will terminate, or if the Consultant elects not to proceed and withdraws, the Remediation Agreement for the project will terminate.

The pricing for Milestone D (i.e., Milestones D1, D2, etc., as applicable) on the Standardized Bid Form (Attachment 2) shall incorporate all costs associated with the documentation of the associated pilot tests, regardless of whether the documentation of the associated pilot tests ultimately is to be presented as a standalone document or contained within the RAP.

Milestone D activities (if any) shall be conducted as soon as possible following the completion of Milestones B and C.

Milestone E – Preparation, Submission, and PADEP Approval of the RAP

Under this milestone, bidders shall provide a firm fixed-price for the preparation, submission to PADEP, and approval by PADEP of a Remedial Action Plan (RAP). Milestone E shall be conducted immediately upon completion of Milestones B, C, and D. Under Milestone E, the selected consultant shall prepare a RAP that is consistent with the conceptual remedial action plan proposed in their bid and consistent with any new data obtained via work conducted under Milestones A through D.

The RAP shall contain all information required under 25 PA Code 245.311 and other applicable statutes, regulations, and guidance including being signed and sealed by a Professional Geologist and a Professional Engineer registered in the Commonwealth of Pennsylvania. The RAP shall be of sufficient quality and content to reasonably expect PADEP approval.

In addition, the RAP shall be consistent with the updates to 25 Pa. Code Chapter 250 that became effective January 8, 2010. The updates include changes to some of the regulated substances listed in the Statewide Health Cleanup Standard tables and a requirement to evaluate impacts due to vapor intrusion in accordance with the Department's guidance document titled "Vapor Intrusion into Buildings from Groundwater and Soil under the Act 2 Statewide Health Standard." The updates also changed certain SHS for some petroleum short list constituents.

The RAP shall detail the methodology and incorporate results of any new groundwater monitoring results (Milestone A), any new Site characterization data (Milestone C), and any new pilot test results (Milestone D) conducted to assess Site-specific conditions. As applicable, this may in part be accomplished by incorporating the Pilot Test Report (if appropriate) prepared for Milestone D into the RAP (Milestone E).

The RAP shall present a clear discussion to PADEP as to what activities and testing has been completed, their associated results, and a structured argument as to why the selected remedial strategy is reasonable, appropriate, and necessary for the Quik Serv Site. Tables, site plans, remedial system drawings, calculations, photographs, equipment requirements, and material specifications, and relevant attachments shall be incorporated into the RAP as necessary to support narrative discussions.

Bids, as well as the RAP, shall identify and present the selection basis for the Site monitoring wells to be used as points of compliance wells (POC wells) during Milestone G.

Bids, as well as the RAP, shall provide the conceptual design that clearly identifies how the selected technology(ies) will achieve Site closure under Act 2 via SHS (e.g., areas/zones of remedial focus and the expected timeframe required to achieve SHS). Bids, as well as the RAP, shall clearly describe the proposed remedial system, including (as appropriate): the number, depth, construction of treatment points, expected rates/pressures for addition or removal of gases, liquids or solids, major equipment items including motor

horsepower expectations for each planned major unit, size/specifications of any liquid or off-gas control units, etc. The conceptual design within the bid and the RAP shall also identify all applicable construction permits and operational permits.

The RAP shall be submitted to both the Solicitor and PAUSTIF for review and comment. Each bidder's project schedule shall provide two weeks advance notice for Solicitor and PAUSTIF review of the draft document. The final RAP shall address the comments received from the Solicitor and PAUSTIF before it is submitted to PADEP for review. The quoted cost to complete this milestone shall also include addressing any comments received from PADEP on the final RAP.

**Milestone F – RAP Implementation
Up, Operation and Maintenance)**

- Final Design,

Using their bid-specified conceptual remedial action plan (as ultimately specified in the RAP, Milestone E, under this milestone bidders shall provide a firm fixed-prices for the final design, final remedial system equipment selection and procurement, final remedial system material selection and procurement, remedial system permitting, remedial system installation, remedial system start-up, remedial system operation and maintenance (including groundwater monitoring and reporting) of their conceptual remedial action plan (as ultimately specified in the RAP, Milestone F). Bids shall indicate that the Solicitor and PAUSTIF shall have the opportunity to inspect and confirm that the new remedial system has been installed and is being operated and maintained as described in the associated fixed-price Remediation Agreement.

Each bidder shall submit with their bid a conceptual remedial action plan for the Quik Serv Site. This conceptual remedial action plan shall provide all the narrative and graphic information necessary for both the Technical Contact and PAUSTIF to fully understand the bidder's intentions.

Bids for Milestone F are to provide an all-inclusive, "turnkey," design-build scope of work and the associated pricing to implement the proposed RAP following its approval by PADEP. To assist the bid evaluation process, all bids shall incorporate and conform to the following general breakdown of Milestone F activities (both in bid of Milestone F and on the Standardized Bid Form (Attachment 2)):

Milestone F1 – Final Design, Equipment Selection/Procurement, and Material Selection/Procurement, and Preparation of Associated Work Plans (Health and Safety, Construction Quality Assurance Plan, Remedial System Start-Up and Testing Plan, etc.).

Milestone F2 – Remedial System Permit Procurement, Remedial System Installation, Remedial System Start-Up and Testing.

Milestone F3 –Monthly Remedial System Operation and Maintenance (Reporting via Quarterly RAPRs).

Milestone F4 – Quarterly Groundwater Monitoring During Remedial System Operation (This is an uninterrupted continuation of the requirements specified in Milestone A (Quarterly Groundwater Monitoring and Reporting) that begins with the approval of the RAP by PADEP and ends with the commencement of Milestone G (Groundwater Attainment Demonstration))

Milestone F1 shall be presented within bids and on the associated Standardized Bid Form with a single firm fixed-price.

Milestone F2 shall be presented within bids and on the associated Standardized Bid Form with a single firm fixed-price.

Milestone F3 shall be presented within bids and on the Standardized Bid Form as a monthly unit price.

Milestone F4 shall be presented within bids and on the Standardized Bid Form as a quarterly unit price.

Bids shall provide the Solicitor and PAUSTIF with an estimated length of time (i.e., number of months) that the remedial system will need to be operated in order to achieve the project goal and allow the initiation of Milestone G (Groundwater Attainment Demonstration). **For consistency of bid evaluation and pricing only, each bidder shall enter costs for 24 months of remedial system O&M (Milestone F3) and 8 quarterly groundwater monitoring events during remedial system O&M (Milestone F4) on the Standardized Bid Form (Attachment 2).**

Bids shall describe the specific remedial system monitoring, permit compliance tests/reporting, operation protocols, and maintenance procedures that will be used to monitor and evaluate its performance. Bids shall also describe how their proposed remediation system may be adjusted to address changing Site conditions as the on-Site remedial effort proceeds.

Milestone G – Groundwater Attainment Demonstration

Consistent with the bidder-proposed POC wells (see Milestone E), under this milestone, bidders shall provide a firm fixed-price for completing eight consecutive quarters of groundwater monitoring, sampling, and reporting events to demonstrate achievement of SHS for groundwater relative to the Quik Serv Site. Each groundwater monitoring and sampling event shall only include the monitoring wells designated in the approved RAP as POC wells. **(For consistency of bid evaluation and pricing only, all bids shall assume that PADEP will require 10 POC wells at the Quik Serv Site.)**

Groundwater attainment demonstration monitoring and reporting shall be initiated following successful remediation of the Site to SHS and shall continue as required for a total of eight consecutive quarterly events (24 months). Bidders shall include language in their bid that if groundwater data in the designated POC wells meet the conditions for Site closure for four consecutive quarterly events, a petition to approve a reduction in the total number of groundwater attainment sampling events shall be filed with PADEP. All work under Milestone G shall be conducted in accordance with 25 PA Code §250.702, §250.704, and §250.707.

Aside from the change in list (and, therefore the number) of wells to be sampled and analyzed (i.e., only Site POC wells shall be monitored during the implementation of Milestone G), all protocols for groundwater sample collection, management, analysis, and reporting (i.e., quarterly RAPRs) specified under Milestone A apply to groundwater attainment monitoring conducted under Milestone G. This includes, but is not limited to, groundwater depth gauging, SPH monitoring, monitoring well purging, low-flow sampling requirements, groundwater sample management, purge water management, QA/QC protocols, documentation and reporting protocols, etc.

As such, each quarterly groundwater attainment sampling event shall be documented in a quarterly RAPR submitted to PADEP within 30 days of receiving the analytical results for each event. At a minimum, each RAPR prepared during Milestone G shall contain the following:

The applicable RAPR requirements specified under Milestone A, a narrative description of the sampling procedures and results, tabulated data from current quarterly and all historical data, a discussion of the data and an updated assessment of progress toward successful demonstration of attainment via the 75%/10x ad hoc statistical rule.

Each RAPR shall be sealed by a Professional Geologist or a Professional Engineer registered in the Commonwealth of Pennsylvania.

Milestone H – Soil Attainment Demonstration

Under this milestone, bidders shall develop and implement a soil sample collection and analysis program to demonstrate compliance with 25 PA Code 250.703 (General Attainment Requirements for Soil) at the Quik Serv Site. Soil attainment demonstration shall be conducted following the completion of Milestone F (RAP Implementation) and upon initiation of Milestone G (Groundwater Attainment Monitoring).

The location / depth of the soil samples shall be determined using PADEP's systematic random sampling procedures, assuming one soil sample per boring (or sampling point) shall be submitted for laboratory analysis. Soil samples shall be analyzed for the post-March 2008 PADEP short list of unleaded gasoline parameters. Appropriate quality assurance/quality control (QA/QC) samples shall also be obtained for laboratory analysis. The soil sampling results shall be analyzed using PADEP's 75%/10x Ad Hoc Rule.

Bids shall clearly identify the number of soil attainment samples to be collected and analyzed under Milestone H.

Results of the soil attainment demonstration monitoring shall be incorporated into the RACR (Milestone I).

Milestone I – Preparation, Submission, and PADEP Approval of Remedial Action Completion Report

Under this milestone, the bidder will prepare a fixed-price cost to prepare a draft and final RACR following the completion of both Milestones G and H. The RACR shall contain all information required under 25 PA Code 245.313 and other applicable statutes, regulations, and guidance including being signed and sealed by a Professional Geologist registered in the Commonwealth of Pennsylvania.

Each bidder's project schedule shall provide two weeks advance notice for Solicitor and PAUSTIF review of the draft document. The final RACR shall address comments received from the Solicitor and PAUSTIF on the draft report before it is submitted to PADEP. The RACR shall request relief from liability relative to soils and groundwater for the Quik Serv petroleum release by demonstrating compliance with the residential, used-aquifer SHS for soils and groundwater (total dissolved solids in groundwater less than or equal to 2,500 mg/l) without the use of any activity and use limitations, institutional controls, or engineering controls.

Milestone J – Site Restoration and Well Abandonment

Under this milestone, bidders shall provide a firm fixed-price for: proper abandonment of all Site-related monitoring wells; proper abandonment of any Site-related recovery wells or injection wells; proper abandonment of any Site piezometers, vapor extraction wells, and vapor monitoring wells; removal and proper disposal of any remaining wastes, removal and proper disposal of any on-Site treatment building; removal and proper disposal of any remedial equipment and materials, as-needed grading of all ground surface areas that have been disturbed by site characterization or remedial action activities, and in-kind restoration (pavement or vegetation) of all ground surface areas that have been disturbed by site characterization or remedial action activities.

Work and bid pricing for this milestone shall include all associated documentation required by PADEP or the Solicitor. This includes, but is not limited to: daily photo-documentation of all site restoration and well abandonment activities, and submitting properly completed well abandonment forms to PADEP on behalf of the Solicitor. Copies of these photographs and well abandonment forms shall be provided to the Solicitor and PAUSTIF.

Work under Milestone J shall be completed within 60 days of final RACR approval by PADEP and shall be conducted in accordance with standard industry practices and applicable laws, regulations, guidance, and PADEP directives. Monitor well abandonment and Site restoration activities will be coordinated with the Solicitor. Prior to abandonment, all monitoring wells shall be checked for obstructions that may interfere with any abandonment grouting protocol. If obstructions are found, they shall be removed prior to monitoring well abandonment.

All groundwater monitoring wells, and any groundwater recovery wells, piezometers, vapor extraction wells, and vapor monitoring wells at the Site shall be properly abandoned in a manner consistent with PADEP's 2001 Groundwater Monitoring Guidance Manual. Copies of the completed Groundwater Monitoring Abandonment Forms shall be forwarded to PADEP so that PADEP may close its files on this facility. Prior to abandonment, all wells and piezometers shall be checked for obstructions that may interfere with any abandonment grouting protocol. If obstructions are found, they shall be removed prior to well or piezometer abandonment.

The selected consultant shall determine whether the Solicitor wishes to maintain any components of any remedial system (e.g. treatment building) before removing it from the Site. All debris and waste materials generated during well abandonment and Site renovation activities shall be properly disposed of in accordance with all applicable laws, regulations, and PADEP guidance.

Additional Information

In order to facilitate PAUSTIF's review and reimbursement of invoices submitted under this claim, the Solicitor requires that project costs be invoiced by the Milestone identified in the executed Remediation Agreement. The standard practice of tracking total cumulative costs by milestone will also be required to facilitate invoice review. Actual milestone payments will occur only after successful and documented completion of the work defined for each milestone. The selected consultant will perform only those

tasks/milestones that are necessary to reach the Objective identified in this RFB. Selected consultant will not perform, invoice, or be reimbursed for any unnecessary work completed under a Milestone.

Any “new conditions”, as defined in Attachment 1, arising during the execution of the SOW for any of the milestones may result in termination of or amendments to the Remediation Agreement. Modifications to the executed Remediation Agreement will require the written approval of the Solicitor and the PAUSTIF. PADEP approval may also be required.

List of Attachments

1. Fixed-Price Remediation Agreement
2. Bid Cost Spreadsheet
3. Site Information/Historic Documents
 - a. March 29, 2013 Site Characterization Report (14 parts)
 - b. 1st Quarter 2013 Interim Remedial Actions Report – April 5, 2013 (2 parts)