

## **Request for Bid**

**Fixed-Price Defined Scope of Work  
To Complete Site Characterization**

## **Solicitor**

**East Penn Tire and Battery, Inc.**

**East Penn Tire and Battery**

**4094 Chestnut Street  
Emmaus, PA 18049**

**PADEP Facility ID #: 39-27735      PAUSTIF Claim #: 20180151(I)**

## **Date of Issuance**

**December 11, 2020**

## Table of Contents

Calendar of Events .....	1
Contact Information .....	2
Requirements .....	3
Mandatory Pre-Bid Site Meeting .....	3
Submission of Bids.....	3
Bid Requirements.....	4
Bid Review, Scoring and Evaluation .....	8
General Site Background and Description .....	10
Site Address.....	10
Site Location and Operation Information .....	10
Site Background Information .....	11
Scope of Work .....	12
Objective.....	12
Constituents of Concern.....	12
General SOW Requirements.....	13
Project-Specific Guidelines.....	14
Additional Information.....	33
List of Attachments .....	34

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 and operator 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. The Solicitor is responsible to pay any applicable deductible and/or proration. The deductible has been met and no proration is applicable on this claim.

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 <https://ustif.pa.gov>.

## Calendar of Events

Activity	Date and Time
Notification of Intent to Attend Site Visit (due to COVID-19 pandemic this is a required activity)	December 23, 2020 by 5 p.m.
Mandatory Pre-Bid Site Visit (The Technical Contact will provide a scheduled time to each person who submits a Notification of Intent to Attend Site Visit)	January 5, 2021
Deadline to Submit Questions	January 20, 2021 by 5 p.m.
Bid Due Date and Time	February 3, 2021 by 3 p.m.

## Contact Information

<b>Technical Contact</b>
Mr. Timothy J. Pilcher, P.E. B&B Diversified Enterprises, Inc. PO Box 70 Barto, PA 19504 Phone – 570-369-5410 Fax – 610-845-0650 Email – tpilcher@bbde.com

All questions regarding this RFB and the subject Site conditions must be directed via email 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 **“East Penn Tire and Battery - PAUSTIF Claim #: 20180151(I) - RFB QUESTION”**. Bidders must neither contact nor discuss this RFB with the Solicitor, PAUSTIF, the Pennsylvania Department of Environmental Protection (PADEP), or 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**

On behalf of 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 conduct a Site tour for one (1) participant per bidding company. Subsequent to the Site visit, the Technical Contact will collect questions that are submitted in writing and respond via email. All questions and answers will be provided via email to all attendees. This meeting is mandatory for all bidders with no exceptions. This meeting will allow each bidding company to inspect the Site and evaluate Site conditions. Due to the circumstances surrounding the COVID-19 pandemic, the number of attendees on-site at the same time will be limited; and, all attendees should follow CDC safety guidelines. **A notice of the bidder's intent to attend this meeting is required to be provided to the Technical Contact via email by the date listed in the Calendar of Events with the subject "East Penn Tire and Battery - PAUSTIF Claim #: 20180151(I) – SITE MEETING ATTENDANCE NOTIFICATION".** The name and contact information of the company participant should be included in the body of the email. Attendance at the Pre-Bid Site Meeting is mandatory and each attendee must check in with the Technical Contact on site to record attendance. Changes to the Site meeting date and/or time due to inclement weather conditions or other unexpected circumstances will be posted at <https://ustif.pa.gov/bids>; and, the Technical Contact may notify via email all companies that provided Site Meeting Attendance Notification.

### **Submission of Bids**

To be considered for selection, an electronic .pdf version of the signed bid package must be submitted to RA-Bid-Submission@icf.com by the bid due date and time in the Calendar of Events. Bid Cost Spreadsheets may be submitted in Microsoft Excel format. File sizes in excess of 5 MB are to be submitted using a file share service of your choosing. If you do not have access to a file share service, an email must be sent to RA-Bid-Submission@icf.com at least 24 hours prior to the bid due date and time to request access to PAUSTIF's third party administrator, ICF, file share service. Reply messages will be sent to acknowledge receipt of all emails. Bids attempted to be submitted through ground services such as USPS, UPS, Fed-Ex, etc. or hand delivery will not be considered for selection.

**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 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 Pre-Bid 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 RFB. 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 (1) 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 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. The technical score for bids will be based solely on those tasks represented as milestones included in the Bid Cost Spreadsheet and the total bid cost. Any optional bidder-defined tasks, milestones, or cost adders

that are not requested as part of this RFB will not be considered by the Bid Evaluation Committee in the technical review and technical score for the bid.

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.

The RFB is requesting a total fixed-price bid (unless the RFB requests costing alternatives for specific items or services). PAUSTIF will not agree to assumptions (in bids or the selected bidders executed Remediation Agreement) referencing a level of effort and/or hours. Costs provided in your bid should be developed using your professional opinion, experience, and the data provided. PAUSTIF will not reimburse costs for additional hours to complete activities included as part of the base bid/contract price.

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. Bids should include enough original language conveying bidder's thought such that the understanding of site conditions, closure approach (if applicable), and approach to addressing the scope of work can be evaluated. Since bidders are not prequalified, the bid response must provide the Bid Evaluation

Committee and Solicitor enough information to complete a thorough review of the bid and bidder.

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. Does your company employ a Pennsylvania-licensed Professional Engineer? How many years of experience does this person have?
  - c. 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 10.
  - d. 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?
  - e. 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 service (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 SOW and indicate the timing of all proposed key milestone activities (e.g., 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”.
11. The name and contact information of the person who is to be contacted in the event the bid is selected by the Solicitor and/or a Right to Know request is received by PAUSTIF.

## **Bid Review, Scoring and Evaluation**

### **Bid Review and Scoring**

Bidders' submissions that are administratively qualified (attend the mandatory pre-bid site meeting, submission of the bid by the designated due date and time) will be evaluated.

#### Technical Scoring

Bids are evaluated for technical viability before cost is considered. Bids that have technical scores that fall within 75% of the highest technical score will advance to cost scoring. Bids with technical scores below 75% of the highest technical score are eliminated from further consideration.

Numerical values will be assigned for defined SOW bids for two categories:

- Understanding the problem and demonstrating knowledge of how to perform the work
- Qualifications and Experience

Numerical values will be assigned to three categories in those cases where there is a bid-to-result request:

- Understanding of the problem
- Technical and Regulatory Approach to Remediation
- Qualifications and Experience

#### Cost Scoring

Cost scores are determined by a cost formula. The bid(s) with the lowest total cost receives the maximum cost points available. The remaining bids are scored by applying the following cost formula:  $(1 - ((B - A) / A)) \times C = D$

A = the lowest bid cost

B = the bidder's cost being scored

C = the maximum number of cost points available

D = bidder's cost score (points)

If a bid cost is equal to, or greater than, twice the amount of the lowest bid cost, the formula calculation will result in a zero or negative number and the bid will be assigned zero cost points.

### **Evaluation of Bids**

A committee comprised of at least two members of the PAUSTIF staff, two members of ICF staff, and the TPR who assisted in developing the bid package will score all bids that are administratively qualified based on the above criteria. PAUSTIF recognizes that several bids

may be acceptable and receive similar numerical scores. At the conclusion of the scoring process, the claimant will receive those bids whose numerical scores place them in the category of meeting Reasonable and Necessary criteria and acceptable for PAUSTIF funding. The claimant may select any of the consulting firms that submitted a qualified bid package to implement the tasks described in the bid; however, PAUSTIF will only provide funding up to the highest fixed price of those bids determined to be Reasonable and Necessary for PAUSTIF funding.

## **General Site Background and Description**

Each bidder should carefully review the existing information and documentation provided in Attachment 3. The information and documentation have 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 Address**

East Penn Tire and Battery  
4094 Chestnut Street  
Emmaus, PA 18049  
Upper Milford Township, Lehigh County

### **Site Location and Operation Information**

The Site is located on the northwest corner of the intersection of Chestnut Street and Buckeye Road, Upper Milford Township, Lehigh County, Pennsylvania. The Site is approximately 1.0 acres and contains two site buildings, a storage shed, and a shed used for dispensing liquid propane (LP) gas. There is also a fuel dispenser canopy area with no existing fuel dispensers. Based on available information the Site has been historically operated as a retail fueling station and an automotive tire sales and repair station. Between May 20-25, 1993, four USTs (three gasoline and one kerosene) and all associated piping and dispensers were removed from the site. In late 1993, three 6,000-gallon steel USTs with fiberglass lines and two unleaded gasoline fuel dispensers were installed at the Site. The Site was purchased by United Tire Service (UTS) in 2001. On August 28, 2018, the three 6,000-gallon USTs containing unleaded gasoline, two fuel dispensers, and all associated piping were removed from the Site. Currently, there is one 275-gallon steel above ground storage tank (AST) located at the rear of the main Site building that is used for storage of waste oil and one 1,000-gallon AST located near the LP shed used to store propane. There are no underground storage tanks remaining at the Site. The former UST field is located in the northeast portion of the Site, adjacent to the main Site building.

Properties in the vicinity of the Site are light commercial and residential. The Site is bordered to the north by a commercial building that is currently leased to the PaDOT, to the south by the Buckeye Road and the Trivet Restaurant, to the east by Chestnut Street and V&C Accessories, and to the west by residential properties. The Site and surrounding properties utilize a mixture of potable wells and public water and sewer systems, with the Site and all adjacent properties utilizing potable wells.

The overburden at the Site consists of tan silt and clay with some gravel. Bedrock has not been encountered to date during borehole and monitoring well installations to depths of approximately 75 feet below grade (ftbg). Groundwater is present at the Site at depths ranging from

approximately 47 to 60 ftbg. Groundwater flow direction at the Site is inconsistent, with documented flow to the north, west and south. There appears to be some groundwater mounding in the area of monitoring well MW-5.

### **Site Background Information**

According to available records, the Site was originally built as an automobile service station between 1955 and 1962. The Site was vacant farmland before its development. The Site operated as an automobile repair and fueling station from 1982 to August 2018. Since August 2018 the Site has been operated as an automobile service station.

Between May 20 - 25, 1993, four steel USTs, including one 10,000-gallon, one 6,000-gallon, and one 4,000-gallon unleaded gasoline USTs, and also one 550-gallon kerosene UST, along with all associated piping, were removed from the Site. Results from the UST Closure Report dated June 1993 indicated the presence of petroleum impacts in soil and confirmed that a petroleum release had occurred at the Site. Laboratory analytical results indicated the presence of target compounds in soil at concentrations above PADEP action levels. The UST Closure Report indicated that all petroleum impacted soil was excavated and removed from the Site for proper disposal. Post excavation soil samples did not indicate the presence of target compounds at concentrations above the PADEP action levels.

In late 1993, a new unleaded gasoline UST system was installed at the Site. The UST system included three 6,000-gallon USTs with fiberglass lines and two fuel dispensers.

Between August 27 - 29, 2018, the three 6,000-gallon unleaded gasoline USTs, two fuel dispensers, and all associated piping were removed from the Site. Laboratory analytical results from water samples collected from the UST cavity indicated the presence of compounds of concern (COCs) in perched water at concentrations above the PADEP statewide health standards (SHS). The water present in the UST cavity at the time of the closure activities is perched and appears to be limited to the cavity constraints. COCs were not detected in an UST closure soil samples at concentrations above the PADEP SHS. No obvious leaks or evidence of contamination were detected during the UST system removal activities and historical records do not indicate a known release from the UST system that was removed.

On September 18, 2018, the PADEP, in response to the reported gasoline release, issued correspondence to the Solicitor, directing them to complete corrective actions at the Site.

From April 2019 through June 2020 the current consultant conducted multiple soil and groundwater investigations within and surrounding the source area in order to complete site characterization. The intent was to characterize the source area on the Site and delineate soil and groundwater impacts on and off-site in response to the contamination discovered during UST removal activities in August 2018. Investigation activities performed by the consultants included the completion of a sensitive receptor survey (SRS), advancement of 21 soil borings, installation of 15 monitoring wells, groundwater monitoring and sampling, private supply well assessment, point of entry treatment (POET) system installations, POET sampling & maintenance, and a vapor

intrusion evaluation. Soil, groundwater, and potable supply well samples were collected throughout the characterization process for laboratory analyses. The results of these activities are summarized in the multiple characterization progress reports that have been submitted to the PADEP and are attached to this RFB. An environmental data package is attached to this RFB and contains a surveyed site plan, various data summary tables, soil boring logs and well construction diagrams, and laboratory data packages for all soil and groundwater samples collected at the Site.

A site characterization update letter dated September 21, 2020, contained an Amended SCR deadline extension request until May 1, 2021. This was submitted to and approved by the PADEP on September 21, 2020. Additional interim remedial actions, including quarterly sampling and maintenance of POET systems installed on impacted private potable wells and the public supply well located at 4042 Chestnut Street (Yocco's Hot Dog King), will be completed by the current consultant until a new consultant is selected.

## **Scope of Work**

This RFB seeks competitive bids from qualified contractors to perform the activities in the SOW specified herein. The PADEP reviewed and commented on the SOW and those comments have been taken into consideration in developing this SOW.

### **Objective**

This RFB is seeking qualified firms to prepare and submit a fixed price proposal to complete a Defined SOW. Specifically, this RFB seeks competitive bids to complete additional characterization activities, prepare an appropriate SCR, evaluate potential remedial strategies, and facilitate progress towards site closure in a timely, efficient, and cost effective manner. A petroleum release has been confirmed at the Site in soil and groundwater.

These work scope elements are intended to include all tasks leading to the completion of site characterization. The SOW contained in this RFB has been developed and structured as a defined work scope-type solicitation. Therefore, in reviewing the quality of bids submitted under this type of solicitation, there is a greater emphasis placed on cost over technical approach (as compared to bids offered in response to "Bid to Result" RFBs). Nevertheless, technical detail, accuracy, and completeness remain important and are evaluated against the SOW requirements.

### **Constituents of Concern**

The list of constituents of Concern (COCs) for this Site include the following:

- Benzene
- Toluene

- Ethylbenzene
- Total Xylenes
- MTBE (Methyl tert-butyl ether)
- Naphthalene
- Cumene (Isopropylbenzene)
- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene.

### **General SOW Requirements**

The Milestones presented below are separated into two categories; Base Scope of Work Milestones and Optional Milestones. The Base Scope of Work Milestones (Milestones A through N) represent the level of effort deemed reasonable to successfully complete site characterization process. The Optional Cost Adder Milestones (Milestones O through Z) capture unit costs to adjust the reimbursement for Base Scope of Work Milestones when deemed reasonable or necessary and/or represent additional activities that may be reasonable and necessary to achieve the objective of the SOW. **The initiation of any of the Optional Cost Adder Milestones will require approval from the Solicitor and PAUSTIF for funding.**

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 shall:<sup>1</sup>

- 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 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 (IDW), including purge water, shall be disposed 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. All investigation and remediation derived wastes shall be handled and disposed per PADEP's Regional Office guidance. It is the selected consultant's responsibility to conform with current PADEP Regional Office guidance requirements in the region where the Site is located.
- 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.

### **Project-Specific Guidelines**

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

---

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



- **Scheduling:** As part of this RFB, bidders must provide a schedule as to when each of the milestones will be completed. All on-site work should be completed during the normal working days of Monday through Friday and between the hours of 8 am to 5 pm. The selected consultant should discuss with the Solicitor (or off-site property owner) any notifications required to complete on-site (or off-site) work.
- **Field Activities:** The selected bidder shall provide a 72-hour notification of all pending on-site work to the Solicitor and a 72-hour notification of all pending off-site work to off-site property owners.
- **Responsibility:** Upon execution of the Remediation Agreement, 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 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:** Please bid the SOW as provided in the RFB. Bidders are welcome to propose or suggest a change in the SOW; however, the bidder should 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. This should include any compelling rationale for the suggested change(s).
- **Selected Standards:** The Solicitor has selected to remediate the Site to the PADEP Residential SHSs for Used Aquifers for all COCs in soil and groundwater.
- **Complete Characterization:** Please note that the selected consultant should not proceed with preparing the SCR if the Site is not fully characterized or additional data collection is necessary to develop a remedial plan. Following the completion of the characterization milestones, the selected consultant will evaluate whether the Site is fully delineated or if additional data is needed to develop an appropriate remedial strategy. The selected consultant will provide the Solicitor and PAUSTIF with an update indicating that the Site is either fully delineated and additional data is not needed or recommend additional delineation or data collection with discussions as to why the additional activities are needed. The SCR should not include language that recommends additional delineation is needed.
- **Off-site Access:** Due to access being required to multiple off-site properties to complete the proposed SOW, a series of timeframes have been established with regards to this project. The selected consultant should initiate Milestone B (Obtain Off-site Access) within 10 days of contract execution. If after 30 days of the first attempt; access is not secured or about to be secured; then the selected consultant should request assistance in obtaining access from the PADEP.

- **Safety Measures:** Each bidder 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 additional safety measures other than or beyond what is required in the SOW (i.e. utility clearance and/or air knifing before trenching/drilling), the cost should be included in their proposal and costs. More importantly, if a bidder 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:** All IDW should 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. 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. If your bid proposes to dispose of waste under a permit, then your bid needs to address the potential situation of a permit not being approved. Bids need to specifically indicate that your bid costs include the costs to dispose of the waste even if a permit is not approved. As indicated in the bid, there should be no assumptions on waste and assuming that a permit will be approved is still making an assumption on waste.
- **Standard Operating Procedures:** Please include in the bid as an attachment, your firm’s standard operating procedures for all major field tasks proposed in the SOW.
- **Base Scope of Work Milestones Requiring Approval Prior to Initiation:** For consideration of PAUSTIF reimbursement, PAUSTIF approval must be obtained prior to completing the following Base Scope of Work Milestones. The request for approval to proceed with these milestones is being done in an effort to determine whether the milestone in question is warranted based on the data collected during the investigation.
  - Milestone B2 – Obtain Off-site Access for Group 3 Properties
  - Milestone J2 - Installation of Soil Vapor Points and Sampling

- Milestone M – Preparation of a Site Characterization Report
- Milestone N – Feasible Remedial Alternative Analysis
- **Optional Cost Adder Milestones Requiring Approval Prior to Initiation:** For consideration of PAUSTIF reimbursement, Solicitor and PAUSTIF approval must be obtained prior to completing any Optional Cost Adder Milestones. Milestone A through Milestone N represents the base SOW for this RFB solicitation. In addition to the above base SOW, the Optional Cost Adder Milestones (Milestone O through Milestone Z) need to be addressed in your bid response. These cost adders will not be part of your initially approved base contract price. However, if it becomes necessary to complete any of these activities, they will be completed under the Remediation Agreement signed as part of this project.
- **Milestones with Multiple Events:** Several Base Scope of Work Milestones and Optional Cost Adder Milestones include multiple events. For those milestones, PAUSTIF will only reimburse the selected consultant for the actual number of events conducted (i.e. if a bidder includes the costs to complete two events, but only one event is conducted, then the bidder will only be paid for the one event completed).
- **4042 Chestnut Street – Yocco’s Hot Dog King:** The potable well located on this property has been impacted by a petroleum release. Under current PADEP regulation, the potable well is classified as a transient public water supply (PWS). A permit was obtained from the PADEP for the transient PWS and a treatment system has been installed on the well. At this point in time, Suburban Water Technology in Gilbertsville, PA is the licensed operator of the PWS and will perform any necessary inspections, data reviews and PADEP submittals. As such, if the selected consultant has to complete any work on this property, it will be handled under the cost adder milestones in the Remediation Agreement or outside of the Remediation Agreement.

**Base Scope of Work Milestones** - The following Base Scope of Work Milestones are to be included in bid responses:

**Milestone A – Sensitive Receptor Survey Update:** A significant amount of sensitive receptor survey work has been completed for this site. It has been determined that all commercial properties and most of the surrounding residential properties within a 1,000-foot radius of the Site obtain potable water from private onsite supply wells (see attached Figure 1). A review of the completed SRS work should be conducted and updated if it is determined to be necessary. Verification of the currently identified sensitive receptors should include a review of area water usage, surface water bodies, and subsurface underground utilities and basements. Submitted bids should specify what activities will be included in the SRS verification activities (i.e. review of tax maps and property assessment records; area canvass; PNDI search, etc.).

Results of the SRS are to be taken into consideration during the execution of the project and shall be documented and reported in the SCR.

**Milestone B – Obtain Off-Site Access:** Provide a cost to secure off-site access on multiple commercial and residential properties in an effort to complete potable well sampling, POET maintenance, monitoring well installation, soil borings, surveying, and/or routine groundwater monitoring and sampling. The cost should cover the necessary time and materials needed to contact each property owner, draft an access agreement for the property, and obtain approval with one draft revision to the access agreement. Providing this cost does not commit the consultant to obtain the access agreements. The selected consultant should initiate Milestone B within 10 days of contract execution. If after 30 days of the first attempt; access is not secured or about to be secured; then the selected consultant should request assistance in obtaining access from the PADEP. The cost should also cover the required time and material needed to provide the PADEP with the information they will require to facilitate access to the property. This milestone will be broken down into the following two sub-milestones:

**Milestone B1 – Obtain Off-Site Access for Groups 1 & 2 Properties:** Group 1 Properties consist of properties that have POET systems installed on their potable wells. Group 2 consist of properties with potable wells where sampling has occurred. Groups 1 & 2 properties are listed in the attached Tables 1 & 2 and shown on Figure 1. Access to these properties has been granted to the current consultant and it is assumed that access will also be granted to the selected consultant. The following property in Group 1 will also require an access agreement to allow for the surveying and monitoring of two existing groundwater monitoring wells:

- 4054 Chestnut Street – MRF Real Estate LLC

The following properties in Group 2 will also require an access agreement to allow for the installation, surveying and monitoring of three of the proposed soil borings / groundwater monitoring wells:

- 4102 Chestnut Street – Trivet Restaurant
- 4095 Chestnut Street – V&C Accessories

**Milestone B2 – Obtain Off-site Access for Group 3 Properties:** Group 3 Properties consist of other off-site properties with un-sampled potable wells located within the immediate vicinity of the Site. Group 3 properties are listed in the attached Table 3 and shown on Figure 1. Access to these properties has not been granted to the current consultant or has not been requested. It is unknown if access to all Group 3 properties will be granted to the selected consultant.

Group 4 properties (Table 4, Figure 1) consist of the remaining properties with un-sampled potable wells located within a 1,000-foot radius of the Site, or properties with potable wells that have been previously sampled and are located at a distance greater than 1,000 feet

from the Site. Optional Cost Adder Milestone O will be used in the event that it is determined that access is needed to one or more of these properties to complete potable well sampling.

**Milestone C – Private Utility Markout:** Prior to any intrusive investigation work at the Site (i.e. soil borings, monitoring well drilling), a private markout is to be conducted at the Site (and/or off-site locations where intrusive activities will be conducted) to confirm the location of any obstruction or underground utility present in the vicinity of the proposed intrusive activity locations. The locations of the identified features should be marked with white paint on the asphalt areas and flags in grassy areas. A report shall be provided with an explanation of the identified features. The identified features should be included in the site survey.

**Milestone D – Geophysical Survey:** Prior to any intrusive investigation work at the Site, a geophysical survey is to be completed at the Site. The purpose of the geophysical survey is to locate any preferential pathways that may exist at the Site, former UST locations, as well as assist with the identification and depths of any subsurface utilities. A report shall be provided with an explanation of the identified features. If the selected consultant chooses to do so, the report required for this milestone can be combined with the report required for Milestone C. The identified features should be included in the site survey.

**Milestone E – Soil Boring Investigation:** In an effort to fully investigate the impact to the soil media, a series of on and off-site soil borings is being proposed. Specifically, the activities include the completion of 20 soil borings (SB-15 through SB-30, MW-16 and MW-19 through MW-21) utilizing an appropriate drilling method. Specifics on the proposed investigation are provided below:

- The proposed locations of the 20 soil borings are provided on the attached Figure 2 and 3. All soil boring locations will be advanced in the locations proposed in the RFB, unless the presence of utilities, obstructions, or safety concerns requires a change in the location. If due to valid concerns the general locations of the proposed borings need to be altered more than four feet from the approximate locations provided on the attached figure, then the selected consultant will be required to contact the ICF and/or the Technical Contact, discuss the need for the changes, and provide the ICF and/or the Technical Contact with a revised soil boring location map.
- In accordance with Milestones C and D, prior to the advancement of the soil borings, the selected consultant will be required to complete the private markout / geophysical survey at the Site to identify the location of obstructions and underground utilities. If a bidder feels it is appropriate and necessary to complete hole-clearing activities before advancing the borings, the cost should be included in their proposal and costs. If a bidder includes the cost to complete hole-clearing, they should state it in their proposal and discuss why it is appropriate and necessary and provide the depth to which hole clearing will be completed. 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.

- Soil borings will be advanced to groundwater, bedrock, or refusal, whichever is encountered first. Soil samples will be collected and logged continuously by an on-site geologist for soil classification and structure, odor, soil moisture, soil texture, color, visual petroleum impacts and screened with an appropriate field-screening instrument. Soils should be described using the Unified Soil Classification System. Based on available information, the soil borings are anticipated to reach a maximum depth of approximately 65 feet (approximate depth to groundwater).
- A total of 80 soil samples (four soil samples per boring) shall be collected and submitted to an accredited laboratory for analysis. One sample from each boring should be collected from the soil interval exhibiting the highest field-screening reading or evidence of petroleum impacts (i.e., staining, free product, etc.) in each borehole. The second soil sample should be collected at the bedrock interface or just above groundwater in an effort to delineate the soil impacts. The two additional soil samples should be collected to further vertically delineate soil impacts at the borehole location (i.e., second highest PID reading, at depths corresponding to previously completed adjacent boring's soil samples with impacts above standards, etc.). Please note that if no elevated field-screening readings or other indicators of impact are observed, four soil samples should still be collected from each boring with one sample still being collected at the bedrock interface or just above groundwater and the other samples collected to complete vertical and horizontal delineation for adjacent borings.
- Soil samples shall be collected using Encore Samplers (or equivalent) and field-preserved in laboratory-provided glassware with the appropriate preservatives (e.g., methanol or sodium bisulfate) provided by the laboratory and in general accordance with USEPA Method 5035 and the PADEP guidance.
- Sampling equipment should be decontaminated (if necessary) prior to sample collection in accordance with generally accepted industry practices.
- In addition, one equipment blank sample (if necessary) will be collected and submitted per day of sampling.
- Soil samples collected during the event will be sent to an accredited laboratory to be analyzed for the above noted COCs. One soil sample will be analyzed for fraction of organic carbon, in addition to the COCs. This sample should be collected from one of the proposed onsite soil borings in the source area and at a depth just above the water table.
- Samples should be properly handled under chain of custody documentation

protocol and kept cold from sample collection until the samples are relinquished to the accredited laboratory.

- The laboratory to be utilized should be identified in the bid package.
- Following receipt of the laboratory analytical report for the soil samples, a determination will be made whether additional characterization efforts will be needed or if the completed efforts have fully characterized and delineated the soil impacts at the Site. The selected consultant will keep ICF updated on the progress of the investigation.
- The analytical data, field results, boring logs, and sampling map from the event will be summarized and included in a SCR.
- **All IDW waste** should be disposed of per the instructions included in the “General SOW Requirements” and “Base Scope of Work Milestones” section of the RFB.

**Milestone F – Installation of Monitoring Wells:** A total of six overburden monitoring wells (MW-16 through MW-21) and three bedrock monitoring wells (BMW-1 through BMW-3) are proposed for installation to delineate groundwater at the Site. The proposed locations of the monitoring wells are provided on the attached Figures 2 and 3. As part of the installation of the wells, the selected consultant should consider the following:

- All monitoring wells will be installed in the locations proposed in the RFB, unless the presence of utilities, obstructions, or safety concerns requires a change in the location. If due to valid concerns the general locations of the proposed wells need to be altered more than ten feet from the approximate locations provided on the attached figures, then the selected consultant will be required to contact the ICF and/or the Technical Contact, discuss the need for the changes, and provide the ICF and/or the Technical Contact with a revised monitoring well location map.
- In accordance with Milestones C and D, prior to the advancement of the monitoring wells, the selected consultant will be required to complete a private markout / geophysical survey at the Site to identify the location of obstructions and underground utilities. If a consultant feels it is appropriate and necessary to complete hole-clearing activities before advancing the borings, the cost should be included in their proposal and costs. If a consultant includes the cost to complete hole-clearing, they should state it in their proposal and discuss why it is appropriate and necessary. 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.
- The wells should be drilled and constructed in accordance with generally accepted practices as outlined in the PADEP Groundwater Monitoring Guidance Manual, (Appendix A of the PADEP Land Recycling Program Technical Guidance Manual, Document No. 261-0300-101, dated January 19, 2019).

- For the overburden monitoring wells, the borehole will be drilled to an anticipated maximum depth of approximately 80 feet below grade, and a monitoring well will be constructed using approximately 45 feet of schedule 40 PVC flush threaded casing and with schedule 40 PVC flush threaded 0.010 slot size screening to be installed in the remaining length of the well column. The total depth and screening interval provided are approximate and based on available information.
- For the bedrock monitoring wells, the borehole will be drilled to an anticipated maximum depth of approximately 140 feet below grade. However, because of the lack of bedrock information, it is possible that water bearing fractures may be present in the bedrock at shallower or deeper depths. As such, payment for this milestone will be adjusted to reflect actual well depths using the Optional Cost Adder Milestone R3. For the purposes of this RFB, bidders should assume a total bedrock well depth of 140 ftbg.
- The construction of the bedrock monitoring wells must be completed in a way that limits the potential for cross contamination by the overburden aquifer. Bidders are required to provide in their bid response the exact methods and construction specifications they plan to use to install the bedrock monitoring wells (i.e, drilling method, casing material and specifications, open or screened borehole, etc.).
- Drilling is to be conducted under the supervision of a Pennsylvania-licensed Professional Geologist and the final construction specifications will be determined by the Professional Geologist and dictated by actual site conditions (i.e. depth to bedrock, actual depth to groundwater, etc.). Careful consideration needs to be taken when installing the proposed monitoring wells. Specifically, the wells should not be over drilled, under screened, or screened across the multiple water bearing zones. Shallow refusal due to under scoping of equipment is not acceptable and will not be reimbursed. The selected consultant is responsible for appropriately installing each well.
- A flush-mounted manhole shall be cemented into place to complete the well at grade level. A locking, pressure fit, watertight cap will be used to prevent the infiltration of surface runoff and rainwater and to restrict access by unauthorized individuals.
- The newly installed monitoring wells should be developed to promote adequate hydraulic connection between the aquifer and the well. Depending on the depth and amount of sediment in the well, development should be completed via mechanical surging using either a bailer or an electric submersible pump, or by airlift techniques.
- The field results, boring logs and monitoring well construction diagrams from the event will be summarized and included in a SCR.



- Drilling should be conducted under the supervision of a Pennsylvania-licensed Professional Geologist, although a field supervisor may be used in the field on a day-to-day basis. The field supervisor should visually inspect subsurface materials encountered during drilling, screen cuttings with an appropriate field-screening instrument, and complete field well construction logs. When encountered, soils should be described using the Unified Soil Classification System. Bedrock should be described using USGS descriptive protocol, with the identification of the depth of and size of potential fractures and/or other subsurface anomalies.
- **All IDW waste** should be disposed of per the instructions included in the “General SOW Requirements” and “Base Scope of Work Milestones” section of the RFB.

**Milestone G – Site Survey:** Following the completion of Milestones A through F, a professional survey of the Site by a Pennsylvania-licensed surveyor including all current Site features, shall be completed. All onsite monitoring wells, soil borings, soil gas points, stormwater inlets and outlets and other important Site features are to be surveyed with the purpose of placing their horizontal coordinates on a scaled site map. The benchmark elevation shall be obtained by referencing the approximate ground surface elevation of the property or from an available benchmark from a USGS topographic map or benchmark elevation marker located at the Site. In conjunction with collecting depth to groundwater readings during sampling events and in an effort to establish groundwater flow at the Site, tops of casing for the existing monitoring wells are to be surveyed to facilitate the construction of a Site wide groundwater flow map.

**Milestone H – Groundwater Monitoring and Sampling:** Following the installation and development of the additional monitoring wells, the selected consultant will gauge and sample the entire expanded monitoring well network. For this RFB, please assume the total number of groundwater monitoring and sampling events that will be needed is two. The selected consultant should be prepared to conduct the first groundwater sampling event at the Site approximately two weeks after the installation/development of the proposed monitoring wells and conduct the second event approximately four weeks after the first event. Each event should include the following:

- The groundwater monitoring and sampling should be conducted in accordance with generally accepted practices as outlined in the PADEP Groundwater Monitoring Guidance Manual, (Appendix A of the PADEP Land Recycling Program Technical Guidance Manual, Document No. 261-0300-101, dated January 19, 2019).
- Collect water level readings from each of the monitoring wells using an interface probe capable of distinguishing water and/or the presence or absence of product to the nearest 0.01 feet.
- Prior to the collection of groundwater samples, the water column in each of the monitoring wells should be purged by either the removal of approximately three (3)

volumes of the water column, via EPA low flow sampling method or other PADEP acceptable method.

- Following purging activities, groundwater samples should be collected as quickly as practical from each of the wells into laboratory supplied bottle ware.
- Sampling equipment should be decontaminated (if necessary) prior to sample collection in accordance with generally accepted industry practices.
- In addition, one equipment blank sample (if necessary) will be collected and submitted per day of sampling
- Groundwater samples collected during each of the events will be sent to an accredited laboratory to be analyzed for the above noted COCs.
- Samples should be properly handled under chain of custody documentation protocol and kept cold from sample collection until the samples are relinquished to the accredited laboratory.
- The laboratory to be utilized should be identified in the bid package.
- Following receipt of the laboratory analytical report for the second round of groundwater monitoring and sampling data, a determination will be made whether additional characterization efforts will be needed or if the completed efforts have fully characterized and delineated the groundwater at the Site. The selected consultant will keep ICF updated on the progress of the investigation.
- The analytical data, field results, and sampling map from the event will be summarized and included in a SCR.
- **All IDW waste** should be disposed of per the instructions included in the “General SOW Requirements” and “Base Scope of Work Milestones” section of the RFB.

**Milestone I – Potable Well Sampling:** There is an on-site and multiple off-site potable supply wells / POETs that are to be sampled on either a quarterly or annual basis. This milestone is broken down into the following three sub-milestones.

**Milestone I1 – Group 1 Quarterly Potable Well Sampling:** The Group 1 potable wells are sampled on a quarterly basis (Table 1). A POET is installed on all Group 1 potable wells. Each POET system has an influent, mid-fluent, and effluent sample collection location.

**Milestone I2 – Group 2 Annual Potable Well Sampling:** The Group 2 potable wells are sampled on an annual basis (Table 2). The annual sampling needs to occur during the 1st quarter of each year.

**Milestone I3 – Group 3 Initial Potable Well Sampling:** The Group 3 potable wells (Table 3) will be initially sampled two times approximately 1 month apart.

Group 4 properties (Table 4) consist of the remaining properties with un-sampled potable wells located within a 1,000-foot radius of the site, or properties with potable wells that have been previously sampled and are located at a distance greater than 1,000 feet from the site. Optional Cost Adder Milestone W will be used in the event that it is determined that one or more of these properties will need to have their potable wells sampled.

In the event that the selected consultant is unable to collect samples from one or more of the properties listed in Groups 1 through 3 (Milestones I1 - 3), a deduction in the milestone payment will be made in the amount of Optional Cost Adder Milestone X.

Bid responses should note the following:

- For this milestone, the total number of potable well quarterly sampling events (Milestone I1) that will be needed per well is two. The total number of potable well annual sampling events (Milestone I2) that will be needed per well is one. Bid responses as well as the Bid Cost Spreadsheet should clearly indicate the number of events that are included in the cost for sub-milestones I1 and I2. If additional potable well sampling events are necessary, they will be completed using Optional Cost Adder Milestones W.
- The potable well sampling should be conducted in accordance with generally accepted practices as outlined in the PADEP Groundwater Monitoring Guidance Manual, (Appendix A of the PADEP Land Recycling Program Technical Guidance Manual, Document No. 261-0300-101, dated January 19, 2019).
- Prior to the collection of potable well samples, the potable well should be purged for a minimum of 15 minutes.
- Following purging activities, potable samples should be collected as quickly as practical from each of the wells into laboratory supplied bottle ware.
- Groundwater samples collected during each of the events will be sent to an accredited laboratory to be analyzed for the above noted COCs. For the potable well with a POET, influent and mid-fluent samples should be analyzed via EPA Method 8260B and the effluent samples analyzed via EPA Method 524.2. The on-site and other off-site potable wells do not have POET systems and a single sample should be collected from each well and analyzed via EPA Method 524.2.
- Samples should be properly handled under chain of custody documentation protocol and kept cold from sample collection until the samples are relinquished to a PADEP accredited laboratory.
- The laboratory to be utilized should be identified in the bid package.

- Upon receipt of the laboratory analytical report the bidder shall prepare and submit a letter format report to the individual property owners, with copies provided to the Solicitor, PADEP, and PAUSTIF. The results of the potable well sampling activated should also be summarized in the quarterly RAPRs.
- **All IDW waste** should be disposed of per the instructions included in the “General SOW Requirements” and “Base Scope of Work Milestones” section of the RFB.

**Milestone J – Vapor Intrusion Evaluation:** The vapor intrusion evaluation is to be completed in accordance with the Land Recycling Technical Guidance Manual – Section IV.A.4 Vapor Intrusion Into Buildings from Groundwater and Soil under the Act 2 Statewide Health Standards, Document 261-0300-101, dated January 18, 2017.

The milestone will be completed in two steps. Prior authorization from the Solicitor and ICF will be necessary before completing Milestone J2. Based on current data, it is anticipated that Milestone J2 will not be conducted at the site.

- Milestone J1 will be completing the initial vapor intrusion screening evaluation for the Site. If the results of the initial vapor intrusion screening evaluation indicate a potential unacceptable risk to the occupants of the onsite building or any offsite buildings, Milestone J2 will be completed. A summary of the initial investigation results should be provided to the Solicitor and ICF for their review. The investigation results will be summarized and presented in the SCR.
- Milestone J2 will be the installation of soil vapor points (SVPs) and soil vapor sampling. The SVPs should be constructed to near source sample depths. Bid responses should clearly discuss how points will be constructed and where they will be installed.

For the purposes of this bid, the costs for Milestone J2 shall include the installation and sampling of two SVPs. Samples are to be collected from each of the proposed SVPs during two separate sampling events appropriately spaced. The selected consultant should be prepared to conduct the first soil gas sampling event at the Site within two weeks of the installation of the SVPs. The selected consultant should conduct the second event at an appropriate timeframe after the first event. As part of the soil gas investigation, the selected consultant should consider the following:

- Soil Vapor Points will be advanced in appropriate locations, based on available site data. The proposed locations should be provided in the bidder’s response.
- Sampling should be performed using a tracer gas to confirm that ambient air is not short-circuiting and mixing with the soil gas samples. Photo documentation of the tracer gas procedure should be part of the documentation required for this milestone.
- Bid responses should specifically indicate how the consultant anticipates

constructing the proposed soil gas point and completing the proposed sampling events.

- Soil gas samples should be collected in laboratory provided Summa canisters equipped with laboratory calibrated flow regulators.
- Soil gas samples collected during the event will be sent to an accredited laboratory to be analyzed for the above noted COCs.
- The laboratory to be utilized should be identified in the bid package.
- The analytical data, field results, boring logs, and sampling map from the events will be summarized and included in a SCR.

**Milestone K – Aquifer Testing:** Rising head slug testing will be conducted on three (3) of the overburden monitoring wells at the Site. A PVC slug will be used to displace the static water level in the well while a transducer will record water levels before the slug is placed in the well, during the recovery of the water level back to the original static water level and following the removal of the slug. Transducers should be used to monitor the water levels in the wells during each of the slug tests. Based on the data collected by the transducer during the slug tests, the selected consultant will calculate Site-specific hydrogeologic values including permeability. All of the calculated values will allow for the modeling activities to be conducted with Site specific data rather than using published values.

Aquifer Testing activities completed under this Milestone shall be documented and reported in the SCR.

**Milestone L – Plume Stability Analyses and Fate & Transport Modeling:** A plume stability analyses and fate and transport modeling shall be completed and consistent with Act 2 guidance documents in order to assess the potential for contaminant migration. This evaluation should take into consideration both the groundwater and soil exceedances at the Site. Each firm should evaluate the data and site-specific information provided and determine the most applicable model or models needed to complete appropriate fate and transport modeling for the Site. Please specify which modeling software will be used to predict fate and transport of the COCs exceeding the PADEP SHSs in groundwater at the release location and its applicability to the Site.

Plume stability analyses and fate & transport modeling activities completed under this Milestone shall be documented and reported in the SCR.

**Milestone M - Preparation of a Site Characterization Report:** Please note that the selected consultant should not proceed with preparing the SCR if the Site is not fully characterized or additional data collection is necessary to develop a remedial plan. Following the completion of the characterization milestones, the selected consultant will evaluate whether the Site is fully delineated or if additional data is needed to develop an appropriate remedial strategy. **The selected consultant will provide the Solicitor and PAUSTIF with an update indicating that the Site is either fully delineated and**

**additional data is not needed or recommend additional delineation or data collection with discussions as to why the additional activities are needed.**

Prior authorization from the Solicitor and ICF will be necessary before completing Milestone M.

Following the completion of the activities proposed in Milestones A through Milestone L, and upon concluding that the Site has been fully characterized, the selected consultant will prepare a SCR for the Site. The information gathered during the aforementioned milestones should be incorporated into a comprehensive SCR that will be submitted to the PADEP and will facilitate the objective to complete regulatory requirements governing the SCR and gain PADEP approval for the report. Specifically, the report should summarize the results of the recent investigations, the findings of the previous investigations, a comprehensive Site history, sensitive receptor information, risk assessment, geologic data, results and analysis of the aquifer testing, discussion on the completed remediation efforts, summary of the predictive modeling efforts completed (if applicable), and a series of summary tables, appendices, and figures illustrating the information provided in the report. The SCR must include an appropriate number of geologic cross-sections and time-series hydrographs. At a minimum, two geologic cross-sections (including field screening and laboratory analytical results) should be prepared, each offset approximately 90 degrees. Hydrographs should only be prepared for wells that have enough data to show statistically relevant trends.

The Report will be completed following the guidelines specified in the Pennsylvania Code, Title 25, Chapter 245 and the Land Recycling Program (Act 2) Technical Guidance Manual with regards to a SCR. The selected consultant will also present significant conclusions and make recommendations for future work at the Site in the SCR. The report will be appropriately signed and sealed by a licensed Professional Geologist.

A draft SCR and all AutoCAD maps / plans included in the report (e.g., site plan / base map, groundwater elevation maps, dissolved plume maps, soil contaminant distribution maps, etc.) and appendices (e.g., boring logs, tables, waste disposal documentation, modeling results and analysis, and sensitive receptor information) shall be submitted electronically (in Adobe PDF format) to the Solicitor and PAUSTIF for review / comment at least 2 weeks prior to finalizing the SCR. Once the selected consultant has addressed comments on the draft, the selected consultant shall finalize and issue the report to the PADEP. The final report is to be submitted no later than the date specified in the schedule presented by the selected consultant.

**Milestone N - Feasible Remedial Alternatives Analysis/Report:** A Feasible Remedial Alternatives Analysis should be completed for the Site to compare cleanup alternatives and evaluate which remedial action is most appropriate for the Site. The evaluation should specifically focus on nine (9) key considerations, including:

- overall cost to closure,

- cost-effectiveness,
- proven performance,
- public and environment protectiveness,
- regulatory compliance,
- reliability,
- practical implementation,
- health & safety, and
- effects on public health and the environment.

The findings of the Remedial Alternatives Analysis will be summarized and presented as part of the Feasible Remedial Alternatives Analysis Report. Information/data generated during the interim remedial activities conducted at the Site should be taken into consideration.

Following the completion of the proposed Feasible Remedial Alternatives Analysis, a report should be prepared for the Site. The report should detail the procedures and findings from all activities completed at the Site and describe the calculations and resultant estimate of the amount of hydrocarbon mass present in the Site's subsurface. It should also take into consideration and summarize the assumption, parameters, and predictions from the predictive modeling scenarios included in the SCR. Figures and appendices supporting the findings of the report should be attached to further illustrate the current condition of the Site. The report should appropriately evaluate the Site and assess the risks as well as provide recommendations of potential remedial technologies for pilot testing and a proper closure strategy for the Site. Once complete, the report should be submitted to the Solicitor and ICF for their review.

Prior authorization from the Solicitor and ICF will be necessary before completing Milestone N.

**Optional Cost Adder Milestones** - The following Optional Cost Adder Milestones are to be included in bid responses:

**Milestone O – Obtain Additional Offsite Access** - Provide a cost to obtain off-site access to one additional property. The scope of work for this cost adder should follow the scope of Milestone B (Obtain Offsite Access).

**Milestone P – Installation of Additional Soil Boring:** Provide a cost to install one additional soil boring. The scope of work for this cost adder should follow the scope of Milestone E (Soil Boring Investigation). The provided cost would be to cover all labor, equipment, subcontractors, waste, etc. Please provide costs for the following:

- **Milestone P1** – Installation of one additional soil boring during a separate mobilization event.
- **Milestone P2** - Installation of one additional soil boring as an add-on to a drilling

investigation where mobilization cost has already been included.

**Milestone Q – Installation of Additional Overburden Monitoring Well:** Provide a cost to install one additional overburden monitoring well. The scope of work for this cost adder should follow the scope of Milestone F (Installation of Monitoring Wells). The provided cost would be to cover all labor, equipment, subcontractors, waste, etc. Please provide costs for the following:

- **Milestone Q1** - Installation of one additional overburden monitoring well during a separate mobilization event.
- **Milestone Q2** - Installation of one additional overburden monitoring well as an add-on to a drilling investigation where mobilization cost has already been included.

**Milestone R – Installation of Additional Bedrock Monitoring Well:** Provide a cost to install one additional bedrock monitoring well. The scope of work for this cost adder should follow the scope of Milestone F (Installation of Monitoring Wells). The provided cost would be to cover all labor, equipment, subcontractors, waste, etc. Please provide costs for the following:

- **Milestone R1** – Installation of one additional bedrock monitoring well during a separate mobilization event.
- **Milestone R2** - Installation of one additional bedrock monitoring well as an add-on to a drilling investigation where mobilization cost has already been included.
- **Milestone R3** - Per foot cost for drilling and constructing a bedrock monitoring well that is shallower or deeper than the estimated 140-foot depth assumed in Milestone F and Optional Cost Adder Milestones R1 and R2.

**Milestone S – Update Site Survey:** Provide a cost to update the Site's survey to include any additional soil boring(s) and monitoring well location(s). The scope of work for this cost adder should follow the Site Survey milestone.

**Milestone T – Additional Quarterly Groundwater Monitoring and Sampling -** Provide a cost to complete one additional groundwater monitoring and sampling event. The scope of work for this cost adder should follow the scope of Milestone H (Groundwater Monitoring and Sampling).

**Milestone U – Groundwater Monitoring Well Sampling Add-On -** Provide a cost to collect and analyze one groundwater sample from an additional overburden or bedrock groundwater monitoring well during a routine groundwater monitoring and sampling event. The scope of work for this cost adder should follow the scope of Milestone H (Groundwater Monitoring and Sampling).

**Milestone V – Preparation of Site Characterization Progress Report –** Provide a cost to prepare a Site Characterization Progress Report (SCPR). The SCPR should detail the observations documented at the Site, summarize the analytical results (soil, groundwater,



potable wells and POETs), map the groundwater flow direction for the Site, provide iso-concentration maps for compounds exceeding the SHS in both soil and groundwater, provide hydro-graphs, discuss the interim remediation efforts (if any), and provide additional scheduling details for upcoming characterization activities or sampling events. The SCPR may also be used to request regulatory approval for a revised SCR submittal date based on the need to complete additional characterization.

A draft SCPR shall be submitted electronically (in Adobe PDF format) to the Solicitor and PAUSTIF for review / comment. Once the selected consultant has addressed comments on the draft, the selected consultant shall finalize and issue the report to the PADEP. This milestone may be utilized more than one time, if necessary.

**Milestone W – Additional Potable Well Sampling:** Provide a cost to complete one potable well sampling event. The scope of work for this cost adder should follow the scope of Milestone I (Potable Well Sampling). The provided cost would be to cover all labor, equipment, subcontractors, waste, etc. Please provide costs for the following:

- **Milestone W1** – Provide a cost to complete one additional Group 1 (POETs) quarterly potable well sampling event.
- **Milestone W2** – Provide a cost to complete one additional Group 2 (No POETs) quarterly potable well sampling event.
- **Milestone W3** – Provide a cost to collect and analyze a single sample from a single potable well.

**Milestone X – Potable Well Sampling Add-on:** Provide a cost to add one additional potable well to a routine potable well sampling event. The scope of work for this cost adder should follow the scope of Milestone I (Potable Well Sampling). The provided cost would be to cover all labor, equipment, subcontractors, waste, etc. Please provide costs for the following:

- **Milestone X1** – Add one additional potable well to Group 1 (POETs) potable wells during a routine quarterly sampling event (Milestone I1).
- **Milestone X2** – Add or subtract one potable well to Group 2 (No POETs) potable wells during a routine annual sampling event (Milestone I2).
- **Milestone X3** – Add or subtract one potable well to Group 3 (No POETs) potable wells during the initial sampling event (Milestone I3).

**Milestone Y – POET System Installation and Initial Sampling:** Provide a cost to install a POET system on a supply well located on either a business or residential property. Assume that the supply well is readily accessible and of the size / type typically located on a residential property. The treatment system should consist of one pre-filter, two 75-pound granular activated carbon (GAC) vessels arranged in series, and a flow totalizer. Sample ports should be installed to facilitate collection of influent, mid-fluent and effluent samples. Upon completion of the installation, two confirmatory sampling events shall be

conducted two weeks apart to verify proper operation and treatment with influent and mid-fluent samples analyzed via EPA Method 8260B and the effluent samples analyzed via EPA Method 524.2. Upon completion of the 2<sup>nd</sup> sampling event, the selected consultant shall prepare a brief letter summarizing the POET installation and initial sampling, for submittal to the individual property owner with copies provided to the Solicitor, PADEP and PAUSTIF. This optional cost adder milestone is for the installation of a POET system on a single business/residence's potable well. However, this milestone may be utilized multiple times if necessary.

**Milestone Z – POET System Maintenance (Carbon Change Out):** Currently three off-site properties have POETs installed that still require maintenance based on historic sampling results. The POETs are sampled on a periodic basis as discussed in the Milestone I. The treatment systems consist of one pre-filter, two 75-pound GAC vessels arranged in series, and a flow totalizer. Should laboratory analytical results indicate it's necessary, both GAC vessels in the POET shall be changed out as soon as possible. The GAC will be replaced with virgin potable grade GAC suitable for treatment of the COC's and the spent carbon will be returned to the manufacturer for recycling and/or transported off-site for disposal. The pre-filter should also be changed at that time. Upon completion of the carbon change out, two confirmatory sampling events shall be conducted two weeks apart to verify proper operation and treatment with influent and mid-fluent samples analyzed via EPA Method 8260B and the effluent samples analyzed via EPA Method 524.2. Upon receipt of the laboratory analytical reports the bidder shall prepare a brief letter summarizing the sampling results, for submittal to the individual property owner with copies provided to the Solicitor, PADEP and PAUSTIF. This optional cost adder milestone is for the carbon change out on a POET system located at a single business/residence. However, this milestone may be utilized multiple times if necessary.

**Milestone AA – Public Supply Well Sampling:** Provide a cost to complete one quarterly public water supply treatment system sampling event at 4042 Chestnut Street (Yocco's Hot Dog King). The scope of work for this cost adder should follow the general scope of Milestone I (Potable Well Sampling). Influent, mid fluent and effluent samples will be collected from the treatment system's sampling ports. All samples will be analyzed for BTEX, MTBE, vinyl chloride, carbon tetrachloride, 1,2-dichloroethane, trichloroethylene, para-dichlorobenzene, 1,1-dichloroethylene, 1,1,1-trichloroethane, cis-1,2-dichloroethylene, 1,2-dichloropropane, monochlorobenzene, o-dichlorobenzene, styrene, tetrachloroethylene, trans-1,2-dichloroethylene, dichloromethane, 1,2,4-trichlorobenzene, and 1,1,2-trichloro-ethane, by EPA Method 524.2. The laboratory results will need to be provided to the property owner and licensed operator (Suburban Water Technology, Inc.). The provided cost would be to cover all labor, equipment, subcontractors, waste, etc. Please provide costs for the following:

- **Milestone AA1** - Complete one quarterly sampling event when the consultant is not already onsite and requires a separate mobilization to the site.
- **Milestone AA2 – Complete one quarterly sampling event when the consultant**

**is already onsite completing routine quarterly monitoring or other filed activities.**

Milestone AA may be utilized more than one time, if necessary.

**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. 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 (for funding consideration). PADEP approval may also be required.

## List of Attachments

1. Remediation Agreement
2. Bid Cost Spreadsheet
3. Site Information/Historic Documents
  - a. Tables 1 through 4 (Potable Well Group Tables)
  - b. Figures 1 through 3
  - c. UST Closure Report dated June 1993
  - d. UST Closure Report dated September 19, 2018
  - e. First Environmental Characterization Progress Report dated July 15, 2019
  - f. Second Environmental Characterization Progress Report dated October 4, 2019
  - g. Third Environmental Characterization Progress Report dated December 2, 2019
  - h. Fourth Environmental Characterization Progress Report dated February 26, 2020
  - i. Groundwater Lab Reports
  - j. Boring / Well Logs
  - k. Potable Well Lab Reports
  - l. Soil Lab Reports
  - m. Site Plan 1 (Survey)
  - n. Site Plan 2 (Survey)
  - o. Groundwater Data Table\*
  - p. Soil Data Table\*
  - q. Potable Well Summary Table\*
  - r. Potable Well Analytical Tables\*

\* QA/QC review of data tables should be conducted to verify accuracy.