

Request for Bid

Fixed-Price Defined Scope of Work

Complete Site Characterization

Solicitor

Archdiocese of Philadelphia for

Conwell Egan Catholic High School

611 Wistar Road, Fairless Hills, Bucks County, Pennsylvania 19030-4105

PADEP Facility ID #: 09-44265 PAUSTIF Claim #: 20240041(W)

Date of Issuance

July 23, 2025

Table of Contents

Calendar of Events	2
Contact Information	3
Requirements	4
Mandatory Pre-Bid Site Meeting	4
Submission of Bids.....	4
Bid Requirements.....	5
General Site Background and Description	8
Site Address.....	8
Site Location and Operation Information	8
Site Background Information	9
Scope of Work (SOW)	9
Objective.....	10
Constituents of Concern (COCs)	10
General SOW Requirements.....	11
Site-Specific Guidelines	12
Site-Specific Milestones	14
Additional Information.....	27
List of Attachments	28

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 Conwell Egan Catholic High School (Facility) located at 611 Wistar Road, Fairless Hills, Pennsylvania 19030-4105, Bucks County. The Solicitor is the current owner/operator of the Facility. 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.

The Solicitor wishes to execute a mutually agreeable contract ("Remediation Agreement") with the selected consultant. The selected consultant will be provided an electronic copy of the draft Remediation Agreement (Attachment 1) in Microsoft Word format. The selected consultant shall complete the agreement-specific portions of the draft Remediation Agreement and return the document to the Technical Contact (also known as TPR) within 10 business days from date of receipt. The Remediation Agreement fixed costs shall be consistent with bidder's costs presented in the Bid Cost Submission Form. 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 in accordance with the terms and conditions in the executed Remediation Agreement and determined to be reasonable and necessary for PAUSTIF funding. There may be deviations from and modifications to the SOW during the project; changes to the SOW will require approval by the Solicitor, PAUSTIF (for funding), and PADEP; and, must be agreed upon in writing by both parties to the agreement in accordance with the terms and conditions of the executed Remediation Agreement. Added costs resulting from bid errors, omissions, or faulty assumptions will not be considered for PAUSTIF reimbursement.

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>.

Each bid is assumed valid for a period of up to 180 days after receipt unless otherwise noted.

Calendar of Events

Activity	Date and Time
Notification of Intent to Attend Site Visit	August 13, 2025 by 5 p.m.
Mandatory Pre-Bid Site Visit	August 14, 2025 at 10:00 a.m.
Deadline to Submit Questions	August 28, 2025 by 5 p.m.
Bid Due Date and Time	September 15, 2025 by 3 p.m.

Contact Information

Technical Contact
<p>Carl Bastian, P.G. B&B Diversified Enterprises, Inc. cbastian@bbde.com</p>

All questions regarding this RFB and the subject Facility 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 “[insert Facility name and claim number provided on cover page] – RFB QUESTION”. Bidders must neither contact nor discuss this RFB with the Solicitor, PAUSTIF, PAUSTIF’s third party administrator (TPA), or the Pennsylvania Department of Environmental Protection (PADEP), unless approved by the Technical Contact. Bidders may discuss this RFB with subcontractors and vendors to the extent required for preparing the bid response. Questions and their respective answers will become part of the RFB, which in turn, will become part of the Remediation Agreement. Bidders are responsible to monitor questions and answers and address any changes, modifications or clarifications made to the RFB as a result of the questions and answers.

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. The Technical Contact will 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 Facility 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 "[insert Site name and claim number provided on cover page] – SITE MEETING ATTENDANCE NOTIFICATION". The name and contact information of the company participant should be included in the body of the email. Notification of intent to attend is appreciated; however, it is not required. Attendance at the Pre-Bid Site Meeting is mandatory. 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

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 TPA file share service. Reply messages will be sent to acknowledge receipt of emails. Bid responses will only be accepted from those companies that attended the Mandatory Pre-Bid Site Meeting. Bids attempted to be submitted through ground services such as USPS, UPS, Fed-Ex, etc. or hand delivery will not be considered for selection. PAUSTIF, in its discretion, reserves the right to reject or allow correction to bid submissions that are substantively deficient in some manner, but any late submission shall be rejected.

The bid must be received by 3:00 p.m., on the due date shown in the Calendar of Events. Bids will be opened immediately after the 3:00 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 deadline for submission may be extended, the PAUSTIF's TPA may notify all companies that attended the Mandatory Pre-Bid Site Meeting of an extended due date. The 3:00 p.m. hour for submission of bids shall remain the same.

Bid Requirements

Each bid must include at least the following in the order listed below. These bid requirements will be considered during the administrative evaluation of the bid consistent with the PAUSTIF Competitive Bid Fact Sheet.

1. Bid Submission Coversheet
 - a. The Bid Submission Coversheet (Attachment 2) must be completed, signed by an authorized representative of the company, and included as the first page of the bid.
 - b. The name and contact information of the person who is to be contacted in the event clarification is required and/or the bid is selected by the Solicitor must be listed on the Bid Submission Coversheet.
2. A technical submittal that includes:
 - a. Demonstration of the bidder's understanding of the information provided in this RFB, standard industry practices, and objectives of the project.
 - b. A clear description, including specific details and original language of how the SOW will be completed for each milestone. The bid should address each milestone and specifically discuss all tasks to be completed under the Remediation Agreement (e.g., explain groundwater purging/sampling methods, which guidance documents will be followed, what will be completed as part of the site specific SOW/SCR/RAP implementation). Bidders must bid the SOW as requested in this RFB. Recommendations for changes/additions to the SOW shall be emailed to the Technical Contact prior to the deadline to submit questions in the Calendar of Events. Failure to bid the SOW "as is", including any changes or additions communicated by the Technical Contact (see Contact Information on page 3), will ultimately result in a lower technical score or may be rejected altogether. Bids should include enough original language conveying bidder's thought so that the understanding of site conditions, closure approach (if applicable), and approach to addressing the SOW can be evaluated. This includes discussion on bidder's understanding of the conceptual site model and potential issues or challenges that may be encountered. 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. Bids that simply mimic the RFB language will receive a lower technical score.
 - c. A description of subcontractor involvement by task.
 - d. A detailed schedule of activities for completing the SOW including reasonable assumptions regarding the timing and duration of Solicitor and/or PAUSTIF reviews (if any) needed to complete the SOW. Each bid must include a schedule that begins with execution of the Remediation Agreement with the Solicitor and ends with completion of the final milestone identified 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 base milestone activities (e.g., within 30 days of the contract being executed).

- e. A description of how the Solicitor, and the PAUSTIF (through their TPA) 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.
- f. A description of bidder's approach to working with the PADEP. Describe how the PADEP would be involved proactively in the resolution of technical issues and how the PADEP will be kept informed of activities at the Facility.
- g. Do not include in the technical submittal any costs or assumptions that would modify the costs provided on the Bid Cost Submission Form or Remediation Agreement.

3. Required Responses Submission Form

- a. The bidder must indicate on the Required Responses Submission Form (Attachment 3) if the draft Remediation Agreement is accepted with no changes. If changes or assumptions are proposed, the bidder must identify and document proposed modifications to the draft Remediation Agreement language other than obvious modifications to fit this RFB (e.g., names, dates, and descriptions of milestones). Key exceptions, assumptions, or special conditions applicable to the SOW and/or used in formulating the cost estimate that the bidder proposes as modifications to the draft Remediation Agreement must be identified and listed on the Required Responses Submission Form. The number and scope of any modifications to the draft Remediation Agreement language must be listed on the Required Responses Submission Form. Proposed modifications may include, but are not limited to, terms and conditions, Exhibits A and B, Site-Specific Assumptions and Provisions; and, will be one of the criteria used to evaluate the bid. Proposed modifications determined to be acceptable by both the Solicitor and PAUSTIF (for funding) will be incorporated into the final Remediation Agreement with the selected consultant.
- b. Provide detailed responses to each item under Qualifications and Experience.
- c. The names and brief resumes of the proposed project team including the licensed Professional Geologist and/or licensed Professional Engineer (as applicable) who will be responsible for overseeing the work and applying a professional seal to the project deliverables. Resumes should directly follow the Required Responses Submission Form.
- d. The names and addresses of all subcontractors.
- e. Bidding company's statement of qualifications.
- f. Bidding company's standard operating procedures for all tasks included in the SOW.

- 4. A copy of an insurance certificate that shows the bidder's level of insurance consistent with the requirements of the draft Remediation Agreement. Note: The selected consultant shall submit evidence to the Solicitor before beginning work that they have procured and

will maintain insurance coverage commensurate with the level stated in the draft Remediation Agreement and for the SOW.

5. Bid Cost Submission Form

- a. An authorized representative of the bidding company must sign the Bid Cost Submission Form (Attachment 4).
- b. The bidder shall provide its bid cost only in the Bid Cost Submission Form with descriptions for each task provided in the body of the bid technical document. No cost information should be provided in the technical submittal.
- c. Bidders are responsible to ensure all costs are provided in the Bid Cost Submission Form, and calculations (including, but not limited to the total bid cost) are accurate. Added costs resulting from bid errors, omissions, or faulty assumptions will not be considered for PAUSTIF reimbursement.
- d. The technical score for bids will be based solely on those tasks represented as milestones included in the Bid Cost Submission Form and the total bid cost.
- e. The costs quoted in the Bid Cost Submission Form will be assumed to be valid for the duration of the Remediation Agreement executed with the selected consultant.
- f. 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.
- g. 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 the bid should be developed using bidder's 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.
- h. Bidders are required to include, as backup for the Bid Cost Submission Form the following items:
 - i. A detailed breakdown of each milestone fixed cost including, but not limited to, labor rates and hours, subcontractor costs and mark-up, direct costs, and equipment; and
 - ii. Actual cost quotations/bids/proposals from all significant specialized subcontracted service providers (e.g., drilling/well installations, laboratory, etc.).

General Site Background and Description

Each bidder should carefully review the existing information and documentation provided in Attachment 5. The information and documentation has not been independently verified. Bidders may wish to seek out other appropriate sources of public 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 5, the bidder should defer to the source documents.

Site Address

Conwell Egan Catholic High School
611 Wistar Road
Fairless Hills, PA 19030-4105
Bucks County, Pennsylvania

Site Location and Operation Information

The Site is located on the northern side of Wistar Road, near the intersection with South Queen Anne Drive in Fairless Hills, Bucks County, Pennsylvania. The Site is approximately 25.12 acres and contains the centrally located three story high school building, numerous sport fields, parking areas and support buildings.

Currently, there is one (20,000 gallon) steel No. 2 fuel oil underground storage tank at the Site that was closed in place. Based on available information the Site has been historically operated as a school since the late 1950s. In 1957, the fuel oil UST was installed at the Site and used to heat the school building. The heating source consists of a boiler located in the basement of the school building.

Properties in the vicinity of the Site are commercial, residential and educational. The Site is bordered to the north by South Queen Anne Drive and residential properties, to the south by Wistar Road and Bucks County Technical School, to the east by commercial properties, and to the west by South Queen Anne Drive and residential properties. The Site and immediately adjacent properties are served by public water and sewer systems. The main school building contains a basement and basements were noted in adjacent residential properties.

The overburden at the Site consists of silty clay with some trace sand to approximately 20 feet below grade (ftbg). Saprolite schist bedrock has been encountered at the Site during the previous investigations. Groundwater is present at the Site in the shallow overburden aquifer. Depths to groundwater in the shallow overburden aquifer are anticipated to be approximately 15 to 20 ftbg. Groundwater flow direction has not been determined but is expected to be towards the southeast in the direction of Mill Creek.

Site Background Information

According to available records, the Site was originally built as a school in the late 1950s. The main building has increased in size since its initial construction. Prior to development as a school, the property consisted of farmland.

An initial release was identified by onsite representatives on October 17, 2022, when a leaking product piping supply line was observed where the product piping enters the basement. The product piping was replaced in October 2022. A second release (subject of the PAUSTIF claim) was discovered on February 6, 2024, when free-phase product and water was observed at the base of the exterior stairway leading from the parking lot to the boiler room entrance and within the boiler room dewatering sump, by school maintenance employees. Additionally, oil was observed to be seeping directly into the boiler room sump from the sub-surface. The 20,000 gallon UST was subsequently taken out of service following the identification of this release.

The laboratory data from soil and groundwater samples collected at the Site during an initial investigation documented a petroleum release had occurred at the Site. Laboratory analytical results indicated the presence of benzene in soils and benzene and 124-TMB in groundwater at concentrations above the PADEP action levels. Furthermore, free-phase product has manifested in the basement of the school building and accumulated in the boiler room sump located in the basement. The sump is active and currently discharges to a storm sewer system located on the site. The discharge of the sump is also currently treated with granular activated carbon and monitored under a NPDES permit.

From March 2024 through January 2025, the previous consultant conducted multiple soil investigations, a limited groundwater investigation and soil vapor intrusion investigation at the site, in an effort to complete site characterization. The intent was to characterize the source area on the Site and determine the best location for permanent groundwater monitoring wells. Groundwater monitoring wells have not been installed at the site. The sump discharge treatment system is still in operation at the site and is being maintained by another consultant. The results of the soil and groundwater investigations were summarized in letters dated June 11, 2024 and June 19, 2024, and are attached to this RFB. The results of the soil vapor intrusion investigation is summarized in a letter dated January 24, 2025. Additional documentation provided by the previous consultant has also been attached to this RFB.

Scope of Work (SOW)

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.

This site is considered a Non-Regulated Underground Storage Tank with the PADEP and as such the remediation of the Site is governed under the Act 1995-2 (the Land Recycling and

Environmental Remediation Standard Act - Act 1995-2) and Pa Code Title 25 §250 (Administration of Land Recycling Program). It should also be noted that the Solicitor has decided to pursue closure under statewide health standards and therefore no reports are required until characterization and remediation (if necessary) are completed, and the applicable standards have been met. Once the aforementioned is completed, then the Final Report would be submitted with the applicable PADEP review fee.

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 Site Summary Report, 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 (COCs)

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

- Benzene
- Toluene
- Ethylbenzene
- 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 M) represent the level of effort deemed reasonable to successfully complete site characterization process. The Optional Cost Adder Milestones (Milestones N through U) 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, Title 25, Chapter 250 - Administration of Land Recycling Program; and
- The PADEP Land Recycling Program Technical Guidance Manual dated March 27, 2021 (Technical Guidance Document 261-0300-101); 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, the selected consultant shall:¹

- Conduct necessary, reasonable, and appropriate project planning and management activities. 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). 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. Planning and management shall include identifying and taking appropriate safety precautions to not disturb Site utilities

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

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, 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-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.

Site-Specific Guidelines

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

- **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). Costs may not be included in the technical response; they should be presented separately as part of the bid cost submission.
- **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 Site Summary Report 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 Site Summary Report should not include language that recommends additional delineation is needed.
- **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 Investigation-Derived Waste (IDW) should be stored, handled, and disposed of per the instructions included in the "General SOW Requirements" section of the RFB. Bidders will be responsible for arranging any offsite IDW disposal (if required) and including costs in their bid response to cover the handling, transportation, and disposal of all potential IDW related to the milestones included in the SOW unless the RFB or Remediation Agreement specifies otherwise. PAUSTIF will not entertain any assumptions in the Remediation Agreement concerning a volume of IDW (e.g. 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 to cover the handling, transportation, and disposal of all potential IDW related to the milestones included in the SOW. Bidders should estimate the volume or mass, as appropriate, of IDW using their professional opinion, experience, and the data provided. If

the bid proposes to dispose of IDW under a permit, then the bid needs to address the potential situation of a permit not being approved. Invoices submitted to cover additional costs on IDW generated as part of the SOW will not be reimbursed.

- **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 I2 – Air Sampling Events
 - Milestone L – Preparation of a Site Summary Report
 - Milestone M – 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 M represents the base SOW for this RFB solicitation. In addition to the above base SOW, the Optional Cost Adder Milestones (Milestone N through Milestone U) 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 reasonable and necessary 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).

Site-Specific Milestones

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: Some sensitive receptor survey (SRS) work has been completed for this site. A review of the completed SRS work should be conducted, and an updated SRS be completed for the Site. 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 Site Summary Report.

Milestone B – 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 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 C – 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 B. The identified features should be included in the site survey and Site Summary Report.

Milestone D – Soil Boring Investigation: In an effort to fully investigate the potential impact to the soil media, a series of on-site soil borings is being proposed. Specifically, the activities include the completion of five soil borings (SB-1 through SB-5) utilizing an appropriate drilling method. Specifics on the proposed investigation are provided below:

- The proposed locations of the five soil borings are provided on the attached Figure 1. 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 Solicitor and PAUSTIF through their third-party administrator, discuss the need for the changes, and provide a revised soil boring location map.
- In accordance with Milestones B and C, 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. In addition, due to the presence of numerous subsurface utilities at the site, hole clearing to 5 feet below grade must be completed at all soil boring locations referenced in this milestone. 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 approximately 20 feet below grade. 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.

- A total of 10 soil samples (two 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.) and one sample collected from the interval directly above the observed water table in that location of the site. In no case should any soil samples be collected from permanently saturated soils. Based on these specifications, there may be instances where field data indicates only one sample needs to be collected. In those cases, the second sample should still be collected from the soil boring. The sample should be collected to assist with vertical delineation and its depth shall be based on field observations.
- Soil samples shall be collected using either Encore Samplers (or equivalent) or 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 located outside of the known source area and at a depth just above the seasonal high 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 the Solicitor and PAUSTIF 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 Site Summary Report.

- All IDW should be disposed of per the instructions included in the “General SOW Requirements” and “Base Scope of Work Milestones” section of the RFB.
- In the event that offsite access is not granted within a reasonable timeframe, the consultant must contact the Solicitor and PAUSTIF’s third-party administrator to obtain authorization to proceed with only the onsite soil borings. Optional Cost Adder Milestone O1 will be used as a cost reducer for this milestone’s payment in the event a soil boring(s) cannot be completed due to refused offsite access.

Milestone E – Installation of Monitoring Wells: A total of five overburden monitoring wells (MW-1 through MW-5) are proposed for installation to delineate groundwater at the Site. The proposed locations of the monitoring wells are provided on the attached Figure 1. As part of the installation of the wells, the selected consultant should consider the following:

- All 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 figure, then the selected consultant will be required to contact the Solicitor and the PAUSTIF through their third-party administrator, discuss the need for the changes, and provide a revised monitoring well location map.
- In accordance with Milestones B and C, 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. In addition, due to the presence of numerous subsurface utilities at the site, hole clearing to 5 feet below grade must be completed at all well locations referenced in this milestone. 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 20 feet below grade, and a monitoring well will be constructed using approximately 5 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.

- 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. Shallow refusal has been encountered at this site during use of a geoprobe direct push rig.
- 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 Site Summary Report.
- 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 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 Shallow Piezometers in Basement – A total of three shallow piezometers (P-1, P-2 and P-3) are proposed for installation to delineate groundwater impacts and detect the presence of SPH at the Site. The proposed approximate locations of the piezometers are provided on the attached Figure 1. As part of the installation of the piezometers, the selected consultant should consider the following:

- All piezometers 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 piezometers 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 piezometer location map.

- In accordance with Milestones B and C, prior to the advancement of the piezometers, 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. In addition, due to the presence of numerous subsurface utilities at the site, hole clearing to 5 feet below grade must be completed at all well locations referenced in this milestone. 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 piezometers should be 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 piezometers, the borehole will be cleared to an anticipated maximum depth of approximately 4 ftbg, and a piezometer will be constructed using approximately 0.5 foot of 4-inch schedule 40 PVC flush threaded casing and with schedule 40 PVC flush threaded 0.020 slot size screening to be installed in the remaining length of the column. The total depth and screening interval provided are approximate and based on available information. Groundwater has been previously documented beneath the basement floor at approximately 0.5 feet below floor surface.
- The piezometer installations are 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 water, depth to bedrock, etc.). The selected consultant is responsible for appropriately installing the piezometers.
- A flush-mounted manhole shall be cemented into place to complete the piezometer at basement floor level. A locking, pressure fit, watertight cap will be used to prevent the infiltration of surface runoff and to restrict access by unauthorized individuals.
- The newly installed piezometers should be developed to promote adequate hydraulic connection between the aquifer and the piezometers. Depending on the depth and amount of sediment in the piezometer, development should be completed via mechanical surging using either a bailer or an electric submersible

pump.

- The field results, boring logs and piezometer construction diagrams from the event will be summarized and included in the Site Summary Report.
- Boring 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.
- All IDW should be disposed of per the instructions included in the “General SOW Requirements” and “Site Specific 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. 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 all monitoring wells and piezometers 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 the entire monitoring well and piezometer network and sample the entire 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 and piezometers 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 Site Summary Report.
- All IDW should be disposed of per the instructions included in the “General SOW Requirements” and “Base Scope of Work Milestones” section of the RFB.

This milestone will be broken down into the following two sub-milestones:

- Milestone H1 – First Groundwater Monitoring and Sampling Event
- Milestone H2 - Second Groundwater Monitoring and Sampling Event

Milestone I – 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 March 27, 2021.

The milestone will be completed in two steps. Prior authorization from the Solicitor and PAUSTIF through their third-party administrator will be necessary before completing Milestone I2. Based on current data, it is anticipated that Milestone I2 will not be conducted at the Site.

- Milestone I1 will be to complete 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 2 will be completed. A summary of the initial investigation results should be provided to the Solicitor and PAUSTIF for their review. The investigation results will be summarized and presented in the Site Summary Report.
- Milestone I2 will be the collection of two indoor air samples and one background outdoor air sample. The indoor air samples should be collected from the basement. Bid responses should clearly discuss how these samples will be collected.

This sub-milestone will be broken down into the following two sub-milestones:

- Milestone I2a – First Air Sampling Event
- Milestone I2b - Second Air Sampling Event

For the purposes of this bid, the costs for Milestone I2 shall include the collection and analyses of three air samples during two separate sampling events appropriately spaced. The selected consultant should be prepared to conduct the first sampling event at the Site within two weeks of the installation piezometers. The selected consultant should conduct the second event at an appropriate timeframe after the first event. As part of the vapor investigation, the selected consultant should consider the following:

- Bid responses should specifically indicate how the consultant anticipates 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, and sampling map from the events will be summarized and included in a Site Summary Report.

Milestone J – 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 Site Summary Report.

Milestone K – 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 Site Summary Report.

Milestone L - Preparation of a Site Characterization Report: Please note that the selected consultant should not proceed with preparing the Site Summary Report 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.**

Following the completion of the activities proposed in Milestones A through Milestone K, and upon concluding that the Site has been fully characterized, the selected consultant will prepare a Site Summary Report for the Site. With the understanding that the site is not governed under 245 and as such a no SCR is required to be submitted to the PADEP, the requested Site Summary Report should still comply with the general requirements of a SCR as established under the Chapter 245 regulations. 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, ecological evaluation (including PNDI/NWI surveys), 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 report must include contaminant distribution maps for both soil and groundwater. The report also 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.

As discussed, the Site Summary Report will be completed following the guidelines specified in Pennsylvania Code, Title 25, Chapter 245 and the Land Recycling Program (Act 2) Technical Guidance Manual for a Site Characterization Report. The selected consultant will also present significant conclusions and make recommendations for future work at the Site in the Site Summary Report. Although not being submitted to the PADEP, the report will still need to be appropriately signed and sealed by a licensed Professional Geologist.

A draft Site Summary Report 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 Site Summary Report. Once the selected consultant has addressed comments on the draft, the selected consultant shall finalize and issue the report to all parties. The final report is to be submitted no later than the date specified in the schedule presented by the selected consultant.

Prior authorization from the Solicitor and PAUSTIF will be necessary before completing Milestone L.

This milestone will be broken down into the following two sub-milestones:

- Milestone L1 – Submission of the Draft Site Summary Report - 75% Payment of Milestone L's Total Cost
- Milestone L2 – Submission of the Final Site Summary Report - 25% Payment of Milestone L's Total Cost

Milestone M - 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 Site Summary Report. 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 PAUSTIF for their review. The PAUSTIF reserves the right to request a final review of the revised report, prior to submittal to the PADEP.

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

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

Milestone N – Installation and Sampling 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 D (Soil Boring Investigation). The provided cost would be to cover all labor, equipment, subcontractors, waste, etc. Please provide costs for the following:

- **Milestone N1** – Installation of one additional soil boring during a separate mobilization event. This milestone may also be used as a cost reducer in the event a soil boring(s) cannot be completed due to refused offsite access.
- **Milestone N2** - Installation of one additional soil boring as an add-on to a drilling

investigation where mobilization cost has already been included.

Milestone O – 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 E (Installation of Monitoring Wells). The provided cost would be to cover all labor, equipment, subcontractors, waste, etc. Please provide costs for the following:

- **Milestone O1** - Installation of one additional overburden monitoring well during a separate mobilization event.
- **Milestone O2** - Installation of one additional overburden monitoring well as an add-on to a drilling investigation where mobilization cost has already been included.

Milestone P – Additional Monitoring Well Depth: Provide a cost to extend the depth of the proposed monitoring wells by 1 foot. The scope of work for this cost adder should follow the scope of Milestone E (Installation of Monitoring Wells). The provided cost would be to cover all labor, equipment, subcontractors, waste, etc., per additional foot.

Milestone Q – 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 R – 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 S – Groundwater Monitoring Well Sampling Add-On - Provide a cost to collect and analyze one groundwater sample from an additional overburden 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). This milestone may also be used as a cost reducer in the event a monitoring well(s) cannot be sampled due to an obstruction, dry well, or another unforeseeable event.

Milestone T – Air Sampling Location Add-On - Provide a cost to collect and analyze one air sample from an additional location during a routine air sampling event. The scope of work for this cost adder should follow the scope of Milestone I (Vapor Intrusion). This milestone may also be used as a cost reducer in the event an air sample cannot be collected due to unforeseeable event.

Milestone U – 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, as applicable), 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.

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 all parties. This milestone may be utilized more than one time, if necessary.

Additional Information

To facilitate PAUSTIF's review and reimbursement of invoices submitted under this claim, the Solicitor requires that costs are 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.

List of Attachments

1. Remediation Agreement
2. Bid Submission Coversheet
3. Required Responses Submission Form
4. Bid Cost Submission Form
5. Site Information/Historic Documents
 - a. Figure 1 – Proposed Soil Boring, Monitoring Well & Piezometer Location Map
 - b. Basement Stairwell - Soil and Groundwater Investigation Letter - June 11, 2024
 - c. Soil Investigation Letter - June 19, 2024
 - d. Indoor Air Sampling Letter – January 24, 2025
 - e. Soil, Groundwater & Sump Laboratory Data Reports
 - f. Treatment System Laboratory Data Reports