Request for Bid

Fixed-Price Defined Scope of Work

To Complete Site Characterization

Solicitor

Finch Petroleum LLC

Finch Petro

610 York Road Warminster, PA 18974

PADEP Facility ID #: 09-30778 PAUSTIF Claim #: 20180142(F)

Date of Issuance

May 11, 2022

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The Pennsylvania Underground Storage Tank Indemnification Fund (PAUSTIF), on behalf of the claimant who hereafter is referred to as the Client or Solicitor, is providing this Request for Bid (RFB) to prepare and submit a bid to complete the Scope of Work (SOW) for the referenced Site. The Solicitor is the current owner/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. Solicitor is responsible to pay any applicable deductible and/or proration. The deductible has been met and no proration is applicable to the Scope of Work. 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	May 25, 2022 by 5 p.m.
Mandatory Pre-Bid Site Visit	May 26, 2022 at 10:00 a.m.
Deadline to Submit Questions	June 9, 2022 by 5 p.m.
Bid Due Date and Time	June 24, 2022 by 3 p.m.

Contact Information

Technical Contact

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 "Finch Petro – PAUSTIF Claim #: 20180142(F) – 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. Questions and their respective answers will become part of the RFB, which in turn, will become part of the final contract. 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 listed in the Calendar of Events to conduct a Site tour for one (1) participant per bidding company. The Technical Contact may answer questions at the Site meeting or may collect questions and respond via email. All questions and answers will be provided via email to all attendees. This meeting is mandatory for all bidders, no exceptions. This meeting will allow each bidding company to inspect the Site and evaluate Site conditions. Due to the circumstances surrounding the COVID-19 pandemic, all attendees should follow CDC safety guidelines. 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 "Finch Petro - PAUSTIF Claim #: 20180142(F) - 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 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 will be rejected.

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 deadline for submission may be extended. 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 might be subject to disclosure pursuant to the Pennsylvania Right-to-Know Law.

Bid Requirements

The Bid Submission Coversheet included as Attachment 1 to this RFB must be completed, signed by an authorized representative of the company, and included as the first page of the Bid Submission. Bids that are not signed may be rejected. 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 must be listed on the Bid Submission Coversheet.

The Solicitor wishes to execute a mutually agreeable contract with the selected consultant ("Remediation Agreement"). The Remediation Agreement is included as Attachment 2 to this RFB. The bidder must indicate if the Remediation Agreement is accepted with no changes. If changes are proposed, bidder must identify and document proposed modifications to the Remediation Agreement language 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 must be listed on the Required Responses Submission Form (Attachment 3), including, but 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 and will need to be agreed upon by both the Solicitor and PAUSTIF (for funding).

The selected consultant will be provided an electronic copy 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 must complete and include in their bid response the Required Responses Submission Form, included as Attachment 3 to this RFB.

The bidder shall provide its bid cost only in the Bid Cost Submission Form (included as Attachment 4) with descriptions for each task provided in the body of the bid document. No cost information should be provided in the technical submittal. 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; the Bid Cost Submission Form must be signed by an authorized representative of the company. In addition, bidders are required to include, as backup for the Bid Cost Submission Form, a list of bid labor rates and a detailed breakdown of each milestone fixed-cost including, but not limited to, labor, subcontractor costs and mark-up, direct costs, and equipment. Copies of subcontractor quotes and/or estimates should be included as part of the cost submittal backup. 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. 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.

Each bid will be assumed to be valid for a period of up to 180 days after receipt unless otherwise noted. The costs quoted in the Bid Cost Submission Form 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.

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:

- Completed Bid Submission Coversheet (Attachment 1), Required Responses Submission Form (Attachment 3) and Bid Cost Submission Form (Attachment 4 and must include supporting documentation).
- 2. Demonstration of the bidder's understanding of the Site information provided in this RFB, standard industry practices, and objectives of the project.

- 3. 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). Bidders must bid the Scope of Work as requested in this RFB. Recommendations for changes/additions to the Scope of Work proposed in this RFB shall be discussed, quantified, and priced separately; however, failure to also bid the SOW "as is" may result in a low technical score. 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.
- 4. 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.
- 5. The names and brief resumes and statement of 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)). Resumes should directly follow the Required Responses Submission Form.
- 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.) as part of the bid cost submission back up. If a bidder chooses to prepare its bid without securing bids for specialty subcontract services, it does so at its own risk. Added costs resulting from bid errors, omissions, or faulty assumptions will not be considered for PAUSTIF reimbursement.
- 7. A detailed schedule of activities for completing the proposed SOW including reasonable assumptions regarding the timing and duration of Solicitor reviews (if any) needed to complete the SOW. Each bid must provide a schedule that begins with execution of the Remediation Agreement with the Solicitor and ends with completion of the final milestone proposed in this RFB. Schedules must also indicate the approximate start and end date

- of each of the tasks/milestones specified in the Scope of Work, and indicate the timing of all proposed key milestone activities (e.g., within 30 days of the contract being executed).
- 8. A description of how the Solicitor 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.
- 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. Key exceptions, assumptions, or special conditions that bidder proposes as modification to the Remediation Agreement must be identified and listed on the Required Responses Submission Form (Attachment 3). Please note that referencing extremely narrow or unreasonable assumptions, special conditions, and exceptions will be considered during bid evaluation and may negatively impact technical score.

Bid Review and Evaluation

1. Bid Review and Scoring

Bid submissions where the bidder was represented at the mandatory pre-bid site meeting and that were properly submitted by the designated due date and time will be accepted for review.

Clarification & Additional Information

After receipt of the bids, the PAUSTIF shall have the right to contact Bidders for the purpose of:

- Seeking clarification of the Bid which informs the PAUSTIF's understanding of statements or information in the Bid;
- As a result of clarification, determining whether the bidder seeks to withdraw their bid.

Administrative Evaluation

PAUSTIF will determine if a bid is administratively qualified based on certain criteria including, but not limited to acceptance of the Remediation Agreement, proposed modifications to the Remediation Agreement, history of terminated Remediation Agreements and demonstration of insurance requirements.

Technical Scoring

Bids that are considered administratively qualified are evaluated for technical viability before cost is considered. Bids that have technical scores that are equal to or greater than 70% of the highest technical score will advance to cost scoring. Bids with technical scores below 70% 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 double or greater than double the amount of the lowest bid cost the bid will be assigned zero cost points.

2. Evaluation of Bids

A committee comprised of at least two members of the PAUSTIF staff, two members of TPA staff, and the TPR who assisted in developing the RFB will score all bids that are administratively qualified based on the above criteria. PAUSTIF reserves the right to assign additional non-scoring members to the evaluation committee as needed. 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 had a technical score that allowed the bid to advance to cost scoring, 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 5. The information and documentation has not been independently verified. Bidders may wish to seek out other appropriate sources of information and documentation specific to this Site. If there is any conflict between the general Site background and description provided herein and the source documents within Attachment 5, the bidder should defer to the source documents.

Site Address

Finch Petroleum, LLC 610 York Road Warminster, PA 18974 Warminster Township, Bucks County

Site Location and Operation Information

The Site is located on the northwest corner of the intersection of York Road and Street Road, Warminster Township, Berks County, Pennsylvania. The Site is approximately 0.75 acres and contains one site building, and a trash enclosure. Currently, there are three 12,000-gallon fiberglass unleaded gasoline underground storage tanks (UST) with associated lines and two unleaded gasoline fuel dispenser islands, each with a canopy, in operation at the Site. Based on available information the Site has been historically operated as a retail fueling and automobile service station since the 1950s. In December 1983, three 12,000-gallon unleaded gasoline USTs with associated lines and four unleaded gasoline fuel dispensers were installed at the Site. The three 12,000-gallon unleaded gasoline USTs were replaced in 2019. On November 29, 1995, and February 27, 1996, seven USTs (four unleaded gasoline, two #2 fuel oil, and one used motor oil) and all associated piping were removed from the Site. The Site has been operating as a Sunoco retail gasoline station and convenience store since 1996.

Properties in the vicinity of the Site are commercial and residential. The Site is bordered to the north by an asphalt parking lot and commercial properties, to the south by West Street Road and an undeveloped grassy stormwater retention basin, to the east by York Road and Hatboro Federal Savings, and to the west by Street Road and commercial properties. The Site and immediately adjacent properties utilize public water and sewer systems.

The overburden at the Site consists of silt, sand, and clay to approximately seven feet below grade (ftbg). Bedrock at the Site consists of weathered shale encountered at approximately four to seven ftbg. Groundwater is present at the Site in both a shallow bedrock and deep bedrock aquifers. Depths to groundwater in the shallow bedrock aquifer range from approximately 7.8 to 18.19 ftbg. Depths to groundwater in the deep bedrock aquifer range from approximately 10.65 to 18.99 ftbg. Groundwater flow direction at the Site is inconsistent, with documented flow to the southwest, west-southwest, west-northwest, and east-northeast. A complex stormwater

management system is present onsite. Part of that system includes a subsurface stormwater infiltration galley. The approximate location of the stormwater infiltration gallery is shown on the attached Historical Site Plan. Based on available information, it appears that the infiltration gallery is influencing groundwater flow and contaminate migration at the Site.

Site Background Information

According to available records, the Site was originally built as a gasoline fueling and automobile service station between 1950 and 1958. The Site operated as a gasoline fueling and automobile service station until 1996. Since 1996 the Site has operated as a retail gasoline fueling station and convenience store.

In December 1983, a new unleaded gasoline UST system was installed at the Site. The UST system included three 12,000-gallon fiberglass unleaded gasoline USTs with associated lines and four unleaded gasoline fuel dispensers.

During Site excavation activities in November 1995 through February 1996, seven steel USTs, including three 3,000-gallon and one 4,000-gallon unleaded gasoline USTs, two 550-gallon fuel oil USTs, and one 550-gallon used motor oil UST, along with all associated piping, were removed from the Site. Based on localized soil contamination being noted in the UST excavation and beneath the eastern dispenser island a Notice of Reportable Release was submitted to the PADEP on February 28, 1996. Results from the UST Closure Report dated April 4, 1996, 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 benzene 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.

On April 8, 2010, a Site Characterization Report Addendum / Remedial Action Completion Report (SCRA/RACR) was submitted to the PADEP. The SCRA/RACR states that maintenance of an impermeable cap will not be included as an activity and use limitation for the property in the EC dated November 15, 2010. The SCRA/RACR was approved by the PADEP in a letter dated October 13, 2010. An Environmental Covenant (EC) dated November 15, 2010, was issued for the Site stating that attainment had been achieved using Site Specific Standards for benzene in groundwater and the investigation was closed.

On September 12, 2018, a Notice of Contamination was submitted to the PADEP indicating that tank 001 (12,000-gallon Ultra-grade UST) had been failing leak tests since it last passed a leak test on July 2, 2018. On September 27, 2018, tank 001 was emptied and removed from service.

On July 15, 2019, through July 18, 2019, tanks 001, 002, and 003 (all 12,000-gallon USTs) were emptied and removed from the site. During tank removal activities a hole was discovered in tank 001. Also, visible staining of the pea gravel and a sheen on the water in the bottom of the excavation were observed. Laboratory analytical results from water samples collected from the excavation indicated the presence of benzene, ethylbenzene, toluene, naphthalene, MTBE, total xylenes, 1,2,4-TMB, and 1,3,5-TMB above their respective non-residential Statewide Health

Standards (SHS). On July 24, 2019, a Notification of Reportable Release was submitted to the PADEP. During tanks removal activities 642.5 tons of petroleum impacted soil was excavated and removed from the Site for proper disposal. No obvious leaks or evidence of contamination were observed in tanks 002 and 003.

On August 12, 2019, a new fuel UST system was installed at the Site. The UST system included two 12,000-gallon unleaded gasoline USTs and one 12,000-gallon diesel fuel UST with fiberglass lines and dispensers.

On December 20, 2019, a UST Closure Report for tanks 001, 002, and 003 was submitted to the PADEP. The closure report indicated exceedances of SHSs for benzene, ethylbenzene, toluene, naphthalene, MTBE, total xylenes, 1,2,4-TMB, and 1,3,5-TMB in groundwater samples collected from the bottom of the excavation and no exceedances of SHSs in any soil samples collected from the excavation.

On January 31, 2020, a Site Characterization Report/Remedial Action Plan (SCR/RAP) was submitted to the PADEP. The SCR/RAP indicated that no residual contamination is present in soil above the selected SHSs. In a letter dated March 18, 2020, the PADEP disapproved the SCR/RAP.

On August 12, 2020, an amended SCR/RAP was submitted to the PADEP and approved in a letter dated October 14, 2020. The amended SCR/RAP states that site characterization activities include post excavation soil sample collection, multiple rounds of groundwater sample collection from a monitoring well network that was installed at the Site for a previous investigation, and several vacuum extraction events. The SCR/RAP also proposes the installation of two additional shallow down-gradient monitoring wells and In-Situ Chemical Oxidation as an additional remedial action.

Scope of Work (SOW)

This RFB seeks competitive bids from qualified contractors to perform the activities in the SOW specified herein. The SOW presented in this RFB was provided to the PADEP for review and comment. The PADEP responded with no comments on the 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 a comprehensive 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.

Constituents of Concern (COCs)

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 M) represent the level of effort deemed reasonable to successfully complete the site characterization process. Optional Cost Adder Milestones (Milestones N through V) capture unit

costs to adjust PAUSTIF 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. **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 January 19, 2019 (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 mav 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 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

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

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 offsite 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 Non-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 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 I2 Installation of Soil Vapor Points and Sampling
 - Milestone L Preparation of a Site Characterization 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 W) 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).

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 work has been completed for this Site. It has been determined that most commercial properties and most of the surrounding residential properties within a 1,000-foot radius of the Site obtain potable water from a public water supplier. The previous consultants have identified 2 potable supply wells located within 1,000-foot radius of the Site. 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 properties in an effort to complete potable supply well sampling, monitoring well installation, 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. Offsite access is required for the following properties:

The following properties will require an access agreement to allow for the installation, surveying, and monitoring of four proposed groundwater monitoring wells:

- 739 West Street Road Provco Parts
- 836 West Street Road Center Point Place Associates, LP

The following properties will require an access agreement to allow for the sampling of two previously identified potable supply wells:

- 800 York Road Christ's Home Community Center
- 829 West Street Road Patriot Chevrolet

Optional Cost Adder Milestone N will be used in the event that it is determined that access is needed to one or more additional properties to complete any 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 survey should also include the identification of the aerial extent of the onsite stormwater infiltration gallery. 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, the stormwater infiltration gallery, 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 choses 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 – Installation of Monitoring Wells: A total of six shallow bedrock monitoring wells (PMW-13, PMW-15, PMW-18 – PMW-21) and three deep bedrock monitoring wells (PMW-14, PWM-16 and PM-17) are proposed for installation to delineate groundwater at the Site. This milestone also includes the over-drilling and abandonment of monitoring well MW-10. The proposed locations of the monitoring wells are provided on the attached Figures 1 and 2. As part of the installation / abandonment 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 PAUSTIF (via their third-party administrator) and/or the Technical Contact, discuss the need for the changes, and provide PAUSTIF 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 shallow bedrock monitoring wells, the borehole will be drilled to an anticipated maximum depth of approximately 25 feet below grade, and a monitoring well will be constructed using approximately 20 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 abandonment of monitoring well MW-10, the borehole will be over-drilled to remove the current 50 total depth casing and screen. The abandonment of monitoring well MW-10 must be completed in a way to limit the potential future infiltration of water from the stormwater infiltration gallery into the underlying aquifer. Bidders are required to provide in their bid response the exact methods they plan to use to abandon monitoring well MW-10. Emphasis should be placed on how not to damage the existing infiltration gallery during the abandonment process.
- For the bedrock monitoring wells, the borehole will be drilled to an anticipated maximum depth of approximately 100 feet below grade, and a monitoring well will be constructed using approximately 40 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.
- 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 wells 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.

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

- Milestone E1 Installation of on-site monitoring wells and abandonment of MW-10
- Milestone E2 Installation of off-site monitoring wells

Milestone F – Site Survey: Following the completion of Milestones A through E, 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 G – 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 PAUSTIF 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 H – Potable Well Sampling: There are two identified off-site potable supply wells that are to be sampled on a quarterly basis. In the event that the selected consultant is unable to collect samples from one or more of the potable supply wells, a deduction in the milestone payment will be made in the amount of Optional Cost Adder Milestone U.

Bid responses should note the following:

- For this milestone, the total number of potable well quarterly sampling events that will be needed per well is two. Bid responses as well as the Bid Cost Spreadsheet should clearly indicate the number of events that are included in the cost for this milestone. If additional potable well sampling events are necessary, they will be completed using Optional Cost Adder Milestones U.
- 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 off-site
 potable wells, 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 activities should also be summarized in the SCR and 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 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 January 18, 2017.

The milestone will be completed in two steps. <u>Prior authorization from the Solicitor and PAUSTIF through their third-party administrator will be necessary before completing Milestone I2</u>. Based on current data, it is anticipated that Milestone I2 will be conducted at the Site.

- Milestone I1 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 I2 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 SCR.
- Milestone I2 will be the installation of two additional soil vapor points (SVPs) and soil vapor sampling. The SVPs should be constructed to <u>near source</u> 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 I2 shall include the installation of two SVPs and sampling of three SVPs. Samples are to be collected from each of the proposed SVPs and existing soil vapor point SG-1 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 vapor 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 J – Aquifer Testing: Rising head slug testing will be conducted on three (3) of the shallow bedrock 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 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 SCR.

Milestone L - 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.

<u>Prior authorization from the Solicitor and PAUSTIF will be necessary before completing</u> Milestone L.

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 comprehensive SCR for the Site. All previously completed characterization data, as well as 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 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 any 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 PAUSTIF for their review.

<u>Prior authorization from the Solicitor and PAUSTIF will be necessary before completing</u> Milestone M.

<u>Optional Cost Adder Milestones</u> - The following Optional Cost Adder Milestones are to be included in bid responses:

Milestone N – 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 O – Installation of Additional Shallow Bedrock Monitoring Well: Provide a cost to install one additional shallow bedrock 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:

- <u>Milestone O1</u> Installation of one additional shallow bedrock monitoring well during a separate mobilization event.
- <u>Milestone O2</u> Installation of one additional shallow bedrock monitoring well as an add-on to a drilling investigation where mobilization cost has already been included.

Milestone P – Installation of Additional Deep Bedrock Monitoring Well: Provide a cost to install one additional deep bedrock 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:

- <u>Milestone P1</u> Installation of one additional deep bedrock monitoring well during a separate mobilization event.
- <u>Milestone P2</u> Installation of one additional deep bedrock monitoring well as an add-on to a drilling investigation where mobilization cost has already been included.
- <u>Milestone P3</u> Per foot cost for drilling and constructing a bedrock monitoring well
 that is shallower or deeper than the estimated 100-foot depth assumed in
 Milestone E and Optional Cost Adder Milestones P1 and P2.

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 G (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 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 G (Groundwater Monitoring and Sampling).

Milestone T – 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, CVPs and potable wells), map the groundwater flow direction for the Site, provide isoconcentration 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 U – 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 H (Potable Well Sampling). The provided cost would be to cover all labor, equipment, subcontractors, waste, etc. Please provide costs for the following:

- <u>Milestone U1</u> Provide a cost to complete one additional quarterly potable well sampling event.
- <u>Milestone U2</u> Provide a cost to collect and analyze a single sample from a single potable well.

Milestone V – 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 H (Potable Well Sampling). The provided cost would be to cover all labor, equipment, subcontractors, waste, etc.

Milestone W – Product Recovery Efforts: The previous consultant has completed product recovery efforts at the Site in the past. The selected consultant should develop a plan on how to address the recovery of product present in monitoring wells at the Site. The plan should be detailed with the strategies to be employed, equipment to be used, and the frequency at which the efforts will be conducted. For purposes of preparing this bid, the bidders should assume that the only product to be recovered will be from a single monitoring well and should include enough product recovery events (conducted every two weeks) through the completion of the SCR noted in Milestone L. The events should be specifically noted in the schedule to be provided in each bidder's bid response. The provided cost would be to cover all labor, equipment, laboratory, waste, etc. Please note that PAUSTIF will only pay the selected firm for the actual number of events conducted (i.e. if a firm includes the costs to complete twelve events, but only six events are conducted; then the firm will only be paid for the six events completed). Regardless of the strategy employed, all waste will need to be disposed of appropriately and the costs to dispose of all wastes will need to be included in bids.

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 2, 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. Bid Submission Coversheet
- 2. Remediation Agreement
- 3. Required Responses Submission Form
- 4. Bid Cost Submission Form
- 5. Site Information/Historic Documents
 - a. Figures 1 and 2
 - b. UST Closure Report dated April 1996
 - c. UST Closure Report dated September 2019
 - d. Site Characterization Report / Remedial Action Plan dated December 2019
 - e. PADEP SCR / RAP Disapproval Letter dated March 18, 2020
 - f. Site Characterization Report / Remedial Action Plan dated August 2020
 - g. PADEP SCR / RAP Approval Letter dated October 14, 2020
 - h. 1st Quarter 2022 RAPR
 - i. Surveyed Site Plan
 - j. Historical Site Plan Showing Onsite Stormwater System