Request for Bid

Fixed-Price Defined Scope of Work For Additional Site Characterization

Solicitor

Liberty Oil Company, Inc.

Liberty Oil Station 38 700 North Railroad Street Tamaqua, PA 18252

PADEP Facility ID #: 54-51586 PAUSTIF Claim #: 2008-0122(I)

Date of Issuance

April 17, 2019

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The Pennsylvania Underground Storage Tank Indemnification Fund (PAUSTIF), on behalf of the claimant who hereafter is referred to as the Client or Solicitor, is providing this Request for Bid (RFB) to prepare and submit a bid to complete the Scope of Work (SOW) for the referenced Site. The Solicitor is the current owner of the Site. PAUSTIF has determined that the claim reported by the Solicitor is eligible for coverage from the PAUSTIF subject to the applicable statutes and regulations. Reimbursement of Solicitor approved reasonable and necessary costs, not to exceed the claim aggregate limit, for the corrective action work described in this RFB will be provided by PAUSTIF subject to 0% proration. Solicitor is responsible to pay any applicable deductible and/or proration

Each bid response will be considered individually and consistent with the evaluation process described in the PAUSTIF Competitive Bidding Fact Sheet which can be downloaded from the PAUSTIF website https://ustif.pa.gov.

Calendar of Events

Activity	Date and Time
Notification of Intent to Attend Site Visit	May 1, 2019 by 5 p.m.
Mandatory Pre-Bid Site Visit	May 7, 2019 at 11 a.m.
Deadline to Submit Questions	May 14, 2019 by 5 p.m.
Bid Due Date and Time	May 23, 2019 by 3 p.m.

Contact Information

Technical Contact

Lawrence F. Roach, P.G. Groundwater Sciences Corporation 2601 Market Place Street, Suite 310 Harrisburg, PA 17110.

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 "Liberty Oil Station 38 – **PAUSTIF Claim 2008-0122(I)** – **RFB QUESTION**". Bidders must neither contact nor discuss this RFB with the Solicitor, PAUSTIF, the Pennsylvania Department of Environmental Protection (PADEP), or ICF unless approved by the Technical Contact. Bidders may discuss this RFB with subcontractors and vendors to the extent required for preparing the bid response.

Requirements

Mandatory Pre-Bid Site Meeting

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 Site and evaluate Site conditions. A notice of the bidder's intent to attend this meeting is requested to be provided to the Technical Contact via email by the date listed in the Calendar of Events with the subject "Liberty Oil Station 38 – PAUSTIF Claim 2008-0122(I)– 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

To be considered for selection, one (1) hard copy of the signed bid package and one (1) electronic copy (one (1) PDF file on a compact disk (CD) included with the hard copy) must be provided directly to the PAUSTIF's third party administrator, ICF, to the attention of the Contracts Administrator. The Contracts Administrator will be responsible for opening the bids and providing copies to the Technical Contact and the Solicitor. Bid responses will only be accepted from those companies that attended the Mandatory Pre-Bid Site Meeting. The ground address for overnight/next-day deliveries is ICF, 4000 Vine Street, Middletown, PA 17057, Attention: Contracts Administrator. The outside of the shipping package containing the bid must be clearly marked and labeled with "Bid – Claim # [insert claim number provided on cover page]". Please note that the use of U.S. Mail, FedEx, UPS, or other delivery method does not guarantee delivery to this address by the due date and time listed in the Calendar of Events for submission. Companies mailing bids should allow adequate delivery time to ensure timely receipt of their bid.

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

Bid Requirements

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

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

The Remediation Agreement fixed costs shall be based on unit prices for labor, equipment, materials, subcontractors/vendors, and other direct costs. The total cost quoted in the bid by the selected consultant will be the maximum amount to be paid by the Solicitor unless a change in scope is authorized and determined to be reasonable and necessary. There may be deviations from and modifications to this SOW during the project. The Remediation Agreement states that any significant changes to the SOW will require approval by the Solicitor, PAUSTIF, and PADEP. NOTE: Any request for PAUSTIF reimbursement of the reasonable costs to repair or replace a well will be considered on a case-by-case basis.

The bidder shall provide its bid cost using the Bid Cost Spreadsheet (included as Attachment 2) with descriptions for each task provided in the body of the bid document. Please note, if costs are provided within the text of the submitted bid and there is a discrepancy between costs listed in the Bid Cost Spreadsheet and in the text, the costs listed within the Bid Cost Spreadsheet will be used in the evaluation of the bid and in the Remediation Agreement with the selected consultant. Bidders are responsible to ensure spreadsheet calculations are accurate. The technical score for bids will be based solely on those tasks represented as milestones included in the Bid Cost Spreadsheet and the total bid cost. Any optional bidder-defined tasks,

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

In addition, the bidder shall provide:

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

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

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

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

Each bid response document must include at least the following:

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

explain groundwater purging/sampling methods, which guidance documents will be followed, what will be completed as part of the Site specific work scope/SCR/RAP implementation). Recommendations for changes/additions to the Scope of Work proposed in this RFB shall be discussed, quantified, and priced separately; however, failure to bid the SOW "as is" may result in a bid not being considered. Bids should include enough original language conveying bidder's thought such that the understanding of site conditions, closure approach (if applicable), and approach to addressing the scope of work can be evaluated. Since bidders are not prequalified, the bid response must provide the Bid Evaluation Committee and Solicitor enough information to complete a thorough review of the bid and bidder.

- 3. A copy of an insurance certificate that shows the bidder's level of insurance consistent with the requirements of the Remediation Agreement. Note: The selected consultant shall submit evidence to the Solicitor before beginning work that they have procured and will maintain Workers Compensation, commercial general and contractual liability, commercial automobile liability, and professional liability insurance commensurate with the level stated in the Remediation Agreement and for the work to be performed.
- 4. The names and brief resumes/qualifications of the proposed project team including the proposed Professional Geologist and Professional Engineer (if applicable) who will be responsible for overseeing the work and applying a professional seal to the project deliverables (including any major subcontractor(s)).
- 5. Responses to the following specific questions:
 - a. Does your company employ a Pennsylvania-licensed Professional Geologist that is designated as the proposed project manager? How many years of experience does this person have?
 - b. How many Pennsylvania Chapter 245 projects is your company currently the consultant for in the PADEP Region where the Site is located? Please list up to 10.
 - c. How many Pennsylvania Chapter 245 Corrective Action projects involving an approved SCR, RAP, and RACR has your company and/or the Pennsylvanialicensed Professional Geologist closed (i.e., obtained Relief from Liability from the PADEP) using any standard?
 - d. Has your firm ever been a party to a terminated PAUSTIF-funded Fixed-Price (FP) or Pay-for-Performance (PFP) contract without attaining all of the milestones? If so, please explain.
- 6. A description of subcontractor involvement by task. Identify and describe the involvement and provide actual cost quotations/bids/proposals from all significant specialized subcontracted service (e.g., drilling/well installations, laboratory, etc.). If a

bidder chooses to prepare its bid without securing bids for specialty subcontract services, it does so at its own risk. Added costs resulting from bid errors, omissions, or faulty assumptions will not be considered for PAUSTIF reimbursement.

- 7. A detailed schedule of activities for completing the proposed SOW including reasonable assumptions regarding the timing and duration of Solicitor reviews (if any) needed to complete the SOW. Each bid must provide a schedule that begins with execution of the Remediation Agreement with the Solicitor and ends with completion of the final milestone proposed in this RFB. Schedules must also indicate the approximate start and end date of each of the tasks/milestones specified in the 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, ICF, and the PAUSTIF will be kept informed as to project progress and developments and how the Solicitor (or designee) will be informed of and participate in evaluating technical issues that may arise during this project.
- A description of your approach to working with the PADEP. Describe how the PADEP would be involved proactively in the resolution of technical issues and how the PADEP case team will be kept informed of activities at the Site.
- 10. Key exceptions, assumptions, or special conditions applicable to the proposed SOW and/or used in formulating the proposed cost estimate. Please note that referencing extremely narrow or unreasonable assumptions, special conditions, and exceptions may result in the bid response being deemed "unresponsive".
- 11. The name and contact information of the person who is to be contacted in the event the bid is selected by the Solicitor and/or a Right to Know request is received by PAUSTIF.

Bid Review and Evaluation

1. Bid Review and Scoring

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

Technical Scoring

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

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

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

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

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

Cost Scoring

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

A = the lowest bid cost

- B = the bidder's cost being scored
- C = the maximum number of cost points available
- D = bidder's cost score (points)

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

2. Evaluation of Bids

A committee comprised of at least two members of the USTIF staff, two members of ICF staff, and the TPR who assisted in developing the bid package will score all bids that are administratively qualified based on the above criteria. USTIF 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 USTIF funding. The claimant may select any of the consulting firms that submitted a qualified bid package to implement the tasks described in the bid; however, USTIF will only provide funding up to the highest fixed price of those bids determined to be Reasonable and Necessary for USTIF funding.

General Site Background and Description

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

Site Address: 700 North Railroad Street Tamaqua, PA 18252 Tamaqua Borough, Schuylkill County

Site Description and Operation History

The former Liberty Oil Station 38 site is located in a residential and commercial mixed use area within the Borough of Tamaqua. Liberty Oil Company (Liberty Oil) reportedly purchased the property in 1992 and operated the site as a retail fueling station until the underground storage tanks (USTs) were taken out of service in 2002. The Site is currently operated as a used car dealership (Tamaqua 309 Auto Sales).

The site is generally triangular in shape with the western property boundary being adjacent to the Reading and Northern Railroad, the northeastern property boundary situated along the bank of the Little Schuylkill River, and the eastern property boundary located along North Railroad Street. The intersection of North Railroad Street and Pine Street is located immediately east of the site. A Site Location Map is presented as Figure 1 (in Attachment 3a) and a Site Detail Map is presented as Figure 2 (in Attachment 3a).

The site consists of one parcel of land, approximately 0.4 acres in size, with several structures situated on it. The structures include a slab-on-grade building used for storage, a modular office building, a storage trailer, and a pole barn garage with a car port. Potable water is supplied to the site property and surrounding properties by the Tamaqua Area Municipal Authority and the area is served by public sewer.

Site Geology

According to the Site Characterization Report / Remedial Action Plan (SCR/RAP) prepared by Center Point Tank Services (CPTS) in May 2018, the bedrock beneath the site is the Llewellyn Formation, described as "interbedded sandstone, siltstone, and conglomerate, which is medium to coarse grained and light gray to brown in color" and "contains coal and dark-gray to black shales". According to the logs included in the May 2018 SCR/RAP, bedrock was encountered

at a depth of 10 feet below grade (fbg) in the northern portion of the site (during the installation of MW-5 and MW-6). CPTS's May 2018 SCR/RAP is included as Attachment 3b.

Underground Storage Tank Closure and Site Characterization

In August 2008, the four known registered USTs, reportedly installed in 1989, along with four unleaded gasoline dispensers (located on three islands) and one diesel dispenser (located on its own island) were closed by removal by CPTS. The USTs closed by removal included UST 001 (3,000-gallon diesel fuel tank), UST 002 (3,000-gallon unleaded gasoline tank), UST 003 (6,000-gallon unleaded gasoline tank), and UST 004 (5,000-gallon unleaded gasoline tank). The approximate locations of the UST systems are shown on Figure 2 in Attachment 3a.

According to the October 17, 2008 UST Closure Report, the USTs and product piping were constructed of single-wall bare steel. Corrosion holes were reportedly observed in USTs 001 and 002 and throughout the entire piping system. CPTS collected soil samples as part of the UST closure process to be analyzed for the substances on the PADEP's shortlists for unleaded gasoline, leaded gasoline, and/or diesel fuel. Concentrations of analyzed substances were reported above the Pennsylvania Department of Environmental Protection (PADEP) Statewide Health Standard (SHS) Medium Specific Concentration (MSCs) in several samples. On August 20, 2008, a Notification of Contamination was reported to the PADEP. The approximate locations of the UST closure samples are shown on Figure 3 in Attachment 3a.

Between 2009 and 2018, CPTS performed soil, groundwater, and surface water investigation activities that included drilling soil borings, completing groundwater monitoring wells, and collecting soil, groundwater, and surface water samples. In January 2009, 23 soil samples were collected from 35 soil borings (GP-1 through GP-35, Figure 4 in Attachment 3a); in January 2010, 23 soil samples were collected from 19 soil borings (LO-1 through LO-19, Figure 5 in Attachment 3a); in March 2016, 9 soil samples were collected from 8 soil borings (SB-1 through SB-8, Figure 6 in Attachment 3a); and in January 2018, 5 soil samples were collected from 4 soil borings (SB-9 through SB-12, Figure 7 in Attachment 3a). All soil samples were analyzed for the substances on the PADEP's shortlists for unleaded and leaded gasoline.

Between January 2009 and January 2010, eight groundwater monitoring wells (MW-1 through MW-8) were drilled on the property. In January 2012, Liberty Oil executed a Right of Entry Agreement with the Pennsylvania Department of Transportation (PennDOT) to allow access to their triangular-shaped undeveloped property located at the intersection of North Railroad Street and Pine Street (to the east of the Site). A copy of the expired access agreement is included as Attachment 3c. In April 2012, two groundwater monitoring wells (MW-9 and MW-10) were drilled in the PennDOT property. In January 2018, two groundwater monitoring wells (MW-12 and MW-13) were installed in the off-site property located to the southeast of the site that is operated as Thorn's Cycle and ATV. During the installation of monitoring wells MW-12 and MW-13 soil samples were collected and analyzed for the substances on the PADEP's shortlists

for unleaded and leaded gasoline. The locations of the groundwater monitoring wells are shown on Figure 2 in Attachment 3a.

Since their installation, the groundwater monitoring wells have generally been sampled on a quarterly basis and the samples have been analyzed for the substances on the PADEP's shortlists for unleaded and leaded gasoline. Depths to water in the groundwater monitoring well network generally range from less than 5 fbg (off-site monitoring well MW-13 installed on the Thorn's Cycle and ATV property) to greater than 14 fbg (off-site monitoring well MW-9 installed in the PennDOT property). The general direction of groundwater flow beneath the site and surrounding properties is to the east/northeast (towards the Little Schuylkill River).

In addition to measuring depths to water in groundwater monitoring wells and collecting groundwater samples, CPTS collected elevation measurements and surface water samples from the Little Schuylkill River. River elevations were measured from an upstream location generally quarterly between 2010 and 2018 and from a downstream location quarterly in 2014 and once in 2015. Surface samples were collected from the river quarterly in 2014 and once in 2015 from the upstream and downstream locations. The surface water samples were analyzed for the substances listed on the PADEP's shortlists for unleaded and leaded gasoline. As a result of no reported concentrations of any analyzed substance in the surface water samples the PADEP reportedly approved the discontinuation of surface water sampling. The approximate locations of the upstream (Bridge US) and downstream (Bridge DS) gauging and sampling locations are shown on Figure 2 in Attachment 3a.

Soil Excavation

In May 2011, CPTS excavated 205.85 tons of soil from the vicinity of the former dispenser island. The approximate location of the excavation is shown on Figure 5 of Attachment 3a. The purpose of the soil excavation was to remove contaminated soil identified during the UST closure. Upon completion of the excavation, CPTS collected five soil samples (EX1 through EX5) from the open excavation for the analysis of the substances on the PADEP's shortlists for unleaded and leaded gasoline. The approximate locations of the excavation and the post-excavation soil samples are shown on Figure 5 of Attachment 3a.

Presence and Removal of Separate Phase Liquid

Separate phase liquid (SPL) has been measured in several on-site monitoring wells on several occasions. Measureable SPL has been reported in groundwater monitoring wells MW-3, MW-4, MW-7, and MW-8. According to data tables included in CPTS's November 20, 2018 Site Status Report, measureable SPL (generally defined as 0.01 feet or greater) has not been reported in any monitoring well since December 11, 2015 and measurable SPL has never been recorded in any off-site monitoring well. The data tables indicate that a "sheen" has been reportedly observed in groundwater monitoring wells MW-3, MW-7, and MW-8, which appear to have prevented CPTS from collecting groundwater samples during groundwater sampling events. The November 20, 2018 Site Status Report is included as Attachment 3d.

SPL has been recovered from on-site groundwater monitoring wells using petroleum absorbent socks and vacuum extraction (vac out) events. According to CPTS's November 20, 2018 Site Status Report, "oil absorbent socks have been maintained in each [SPL] bearing monitoring well since March of 2012 except when monitoring for [SPL] recharge". Vac out events were performed at the site on May 25, 2012, November 9, 2014, and November 13, 2015. During each vac out event, a high vacuum was applied to monitoring wells MW3, MW-4, MW-7, and MW-8 to remove SPL and groundwater. The three vac out events resulted in the removal of 1,126 gallons, 1,432 gallons, and 1,038 gallons of fluid, respectively.

Off-Site Abandoned Underground Storage Tanks

Prior to the installation of monitoring wells MW-12 and MW-13, on January 9, 2018, a geophysical survey identified two abandoned USTs in the parking lot of the Thorn's Cycle and ATV property. According to the geophysical report, included as Attachment 3e, one UST is approximately 1,000-gallons in size and the other UST is approximately 2,000 gallons in size. Although the history and condition of the abandoned USTs is unknown, the PADEP stated in an email correspondence to the PAUSTIF that "The two USTs reportedly encountered by CPTS during the geophysical evaluation of Thorne's property are not an issue unless soil and/or groundwater data indicates there are separate and distinct impacts". The approximate locations of the abandoned USTs are shown on Figure 2 in Attachment 3a.

Corrective Action Reporting

In May 2018, CPTS submitted an SCR/RAP that presented the results of the characterization work performed on and beyond the site property (discussed above) and indicated that the site-specific standard was the selected remedial goal for the site. The SCR/RAP also requested to "discontinue sampling soil and water for leaded gasoline constituents". The SCR/RAP, which includes soil and groundwater chemistry data tables, the UST closure report, and monitoring well and soil boring logs, is included as Attachment 3b. In correspondence dated October 15, 2018, the PADEP did not approve the SCR/RAP. In the denial letter, the PADEP stated that "the Department concurs that sampling in groundwater for EDB, EDC, and lead may be discontinued, as these constituents do not appear to be of concern in groundwater". A copy of the PADEP's SCR/RAP denial letter is included as Attachment 3f. In correspondence dated January 3, 2019, the PADEP approved Liberty Oil's request for an alternative time frame for submitting a complete SCR and established an April 30, 2019 due date for the SCR. The PADEP's January 3, 2019 correspondence is included as Attachment 3g.

Soil Characterization Summary

The results of the soil sampling performed by CPTS are presented in data tables included in CPTS' SCR/RAP included as Attachment 3b. To evaluate the distribution and concentrations of analyzed substances relative to the PADEP's SHS MSCs, GSC first compared the depth of each sample to the deepest measured depth-to-water in the nearest groundwater monitoring well(s) to determine if the soil sample was permanently saturated (i.e., collected below the seasonally low groundwater table). Following the permanently saturated soil evaluation, GSC

compared the concentrations of each analyzed substance in soil samples that were collected above the seasonally low groundwater table to the corresponding PADEP SHS MSC. The concentrations of analyzed substances in soil samples determined to be permanently saturated were not compared to the PADEP's SHS as the PADEP has determined that concentrations of analyzed substances collected from permanently saturated soil is a groundwater issue, not a soil issue.

Following the data evaluation described above, GSC prepared Soil Sampling Location Maps (Figures 3 through 7 in Attachment 3a) that illustrate soil samples that 1) contained one or more analyzed substance greater the SHS (pink), 2) contained all analyzed substances below the SHS (green), 3) were determined to be permanently saturated (blue), 4) were not collected (gray), and 5) were excavated during the May 2011 soil excavation (orange). A Soil Characterization Summary Figure (Figure 8 in Attachment 3a) was also created to summarize the soil data evaluation. Figure 8 excludes the soil borings that were not sampled and the soil borings that only contained samples that were determined to be permanently saturated. As shown on Figure 8, concentrations of analyzed substances are not delineated to the east LO-16 and to the west of LO-17.

Groundwater Characterization Summary

The historical results of groundwater sampling performed by CPTS through the third quarter 2018 are presented in data tables included in CPTS's November 20, 2018 Site Status Report included as Attachment 3d. To evaluate the distribution of dissolved-phase substances, GSC created concentration contour maps for each substance that was reported in one or more groundwater monitoring wells above the respective SHS MSC during the September 2018 groundwater sampling event. The concentration contour maps are presented in Attachment 3a as Figures 9, 10, and 11. As shown on Figures 9, 10, and 11, dissolved-phase plumes are 1) present in site groundwater above the PADEP's SHS MSC, 2) migrating beyond the down-gradient property boundary, and 3) not delineated in the down-gradient, cross-gradient, and up-gradient directions.

Scope of Work (SOW)

This RFB seeks competitive bids from qualified contractors to perform the activities in the SOW specified herein. The PADEP reviewed this RFB and provided comments which have been incorporated.

Objective

The objective of this RFB is to execute the defined SOW that will gather soil quality data, groundwater quality data, and other subsurface information necessary to evaluate site conditions that will enable the submission of a complete Site Characterization Report (SCR). Following the completion of the SOW specified in this RFB, the remaining corrective action activities necessary for the Solicitor to obtain relief from liability will either be competitively bid or the consultant selected for this RFB may be invited to continue work under a fixed-price contract.

Constituents of Concern (COCs)

The COCs for this site are the substances identified on the unleaded gasoline parameter short list provided in the PADEP's December 15, 2012 Technical Document (Technical Guidance Number 263-4500-601) *Closure Requirements for Underground Storage Tank Systems.* Specifically, the COCs are benzene, toluene, ethylbenzene, total xylenes, cumene (isopropylbenzene), methyl tert-butyl ether (MTBE), naphthalene, 1,2,4-trimethylbenzene, and 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 F) represent the level of effort deemed reasonable to successfully characterize the site based on the characterization data available for the site. The Optional Milestones (Optional Milestones G through K) represent additional activities that may be necessary to characterize the site. All bidders shall note that the initiation of any of the Optional Milestones will require prior approval from ICF/PAUSTIF.

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

• The Storage Tank and Spill Prevention Act (Act 32 of 1989, as amended);

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

During completion of the milestone objectives specified below and throughout implementation of the project, the selected consultant shall:¹

- Conduct necessary, reasonable, and appropriate project planning and management activities until the project (i.e., Remediation Agreement) is completed. Such activities may include Solicitor communications/updates, meetings, record keeping, subcontracting, personnel and subcontractor management, guality assurance/guality control, scheduling, and other activities (e.g., utility location). Project planning and management activities will also include preparing and implementing plans for health and safety, waste management, field sampling/analysis, and/or other plans that are necessary and appropriate to complete the SOW, and shall also include activities related to establishing any necessary access agreements. Project planning and management shall include identifying and taking appropriate safety precautions to not disturb Site utilities including, but not limited to, contacting Pennsylvania One Call as required prior to any ground-invasive work. As appropriate, project management costs shall be included in each bidder's pricing to complete the milestones specified below.
- Be responsible for coordinating, managing, and completing the proper management, characterization, handling, treatment, and/or disposal of all impacted soils, water, and derivative wastes generated during the implementation of this SOW. The investigation-derived wastes, 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.

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

 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 bidder shall consider the following site-specific guidelines.

Scheduling

- The selected bidder shall provide a schedule for which each milestone is expected to be completed (i.e., within 30 days from the execution of the Remediation Agreement).
- The selected bidder shall provide a 72-hour notification of all pending on-site work to the Solicitor.

Responsibility

 Upon execution of the Remediation Agreement, the selected bidder shall become the consultant of record for the Site and the Solicitor. It shall be expected that the selected bidder will represent the interest of the Solicitor and ICF/PAUSTIF during the execution of all aspects of the project associate with this RFB.

Milestones Requiring Approval Prior to Initiation

- The SOW contained within this RFB includes optional milestones that may not be reasonable and necessary for characterizing the site based on information gathered by the selected bidder upon completion of the base scope of work milestones. For this reason, the selected bidder shall be required to obtain approval from the Solicitor, ICF/PAUSTIF, and/or the Technical Contact prior to initiating the optional milestones (listed below) and any sub-milestone to the optional milestones. The optional milestones are:
 - Milestone G Off-Site Access for Properties not Previously Accessed
 - Milestone H Supplemental Groundwater Monitoring Well Installation and Development
 - Milestone I Supplemental Groundwater Sampling
 - Milestone J Supplemental Soil Sampling
 - Milestone K Professional Land Survey Update

Site-Specific Milestones

Milestone A – Secure Access Agreements

All bidders are required to provide in Attachment 2 all reasonable and necessary costs to secure access agreements with PennDOT, for access to the triangular piece of undeveloped property located at the intersection of Pine Street and North Railroad Street, and the owner of the Thorn's Cycle and ATV property. The access agreements would allow the bidder to access these two parcels for the purposes of intrusive investigative work. For the purpose of this RFB, all bidders shall assume that PennDOT will waive all fees associated with securing access to the triangular piece of undeveloped property located at the intersection of Pine Street and North Railroad Street.

Milestone B – Engineering Evaluation of Underground Utilities

All bidders are required to provide in Attachment 2 the cost to perform an evaluation of the underground utilities beneath the site, the triangular piece of undeveloped property owned by PennDOT located at the intersection of Pine Street and North Railroad Street, and the Thorn's Cycle and ATV property. The evaluation shall be performed by a Professional Engineer licensed in the Commonwealth and shall be performed after the appropriate access agreements are secured and prior to the intrusive characterization activities described within this SOW.

The purpose of the underground utility evaluation is to locate utilities prior to intrusive investigation activities so that they can proceed in a safe and effective manner and allow for the investigation of possible contaminant migratory pathways. The evaluation should include (but not be limited to) the location, construction, and depth of storm sewers, sanitary sewers, water lines, and natural gas lines beneath the properties. The survey shall include the areas shown on Figure 12 in Attachment 3a and include any on-site laterals to these utilities which may have served or currently serve as preferential migration pathways for petroleum impacted water, potential SPL, and/or vapor. This evaluation should include a review of available municipal and authority plans of the utilities beneath Pine Street and North Railroad Street.

Milestone C – Soil Boring Installation and Sampling

All bidders are required to provide in Attachment 2 all reasonable and necessary costs to perform a soil investigation on the site property and the triangular-shaped undeveloped PennDOT property located at the intersection of Pine Street and North Railroad Street. The costs included in Attachment 2 shall include, but not be limited to, all mobilizations, subcontractors, labor, equipment, waste, etc. The selected bidder shall perform the soil investigation to characterize the lateral and vertical extent of petroleum impacts to soil beyond soil boring LO-16 to the east and beyond LO-17 to the west. The locations of LO-16 and LO-17 are shown on Figure 8 in Attachment 3a. One soil boring (SB-101) is proposed to delineate the soil contamination beyond the site's property boundary to the east (beyond LO-16) and one soil boring (SB-102) is proposed to delineate the soil

contamination beyond the contamination in soil boring LO-17 to the west. The approximate locations of SB-101 and SB-102 are shown on Figure 12 in Attachment 3a.

In the event that the prescribed soil boring location is to be modified significantly, the selected bidder shall notify ICF/PAUSTIF.

Each soil boring shall be drilled using hollow stem auger technology. Soil boring SB-101 shall be drilled to a total depth of 15 fbg while soil boring SB-102 shall be drilled to a total depth of 8 fbg. Soil samples, collected from split spoons advanced ahead of the augers, shall be screened at two-foot intervals with a photoionization detector (PID) (using headspace measurements).

For the purpose of this RFB, the selected bidder shall assume that two soil samples will be collected from each of the two soil borings. With regard to SB-101, the first soil sample should be collected from the highest PID headspace measurement from the 5 to 9 fbg interval and the second soil sample should be collected from the highest PID headspace measurement from the 9 to 13 fbg interval. In the absence of PID measurements, soil samples shall be collected from SB-101 from approximately 6 fbg and 12 fbg. With regard to SB-102, the first soil sample should be collected from the highest PID headspace measurement from the 2 to 4 fbg interval and the second soil sample should be collected from the 4 to 6 fbg interval. In the absence of PID measurements, soil sample should be collected from the highest PID headspace measurement from the 2 to 4 fbg interval and the second soil sample should be collected from the highest PID headspace measurement from the 4 to 6 fbg interval. In the absence of PID measurements, soil samples shall be collected from the highest PID headspace measurement from the 4 to 6 fbg interval. In the absence of PID measurements, soil samples shall be collected from the highest PID headspace measurement from the 4 to 6 fbg interval. In the absence of PID measurements, soil samples shall be collected from the highest PID headspace measurement from the 4 to 6 fbg interval. In the absence of PID measurements, soil samples shall be collected from the highest PID headspace measurement from the 4 to 6 fbg interval. In the absence of PID measurements, soil samples shall be collected from the highest PID headspace measurement from the 4 to 6 fbg interval. In the absence of PID measurements, soil samples shall be collected from the 4 to 6 fbg interval.

All soil samples shall be collected in laboratory-provided containers and analyzed by EPA Method 8260B for the substances listed in the COC section of this RFB.

In addition to the petroleum analytical samples, three discrete soil samples of representative soil types shall be collected from soil boring SB-101 and conveyed to a laboratory for grain size analysis, including quantification of silt and clay content and fraction organic carbon.

Continuous geological logs shall be prepared by a Professional Geologist licensed in the Commonwealth for each boring using a standard and consistent classification system procedure (Modified Burmister or USCS).

Milestone D – Groundwater Monitoring Well Installation, Survey, Development, and Sampling

All bidders shall provide in Attachment 2 all reasonable and necessary costs to install, survey, and develop five groundwater monitoring wells. The costs included in Attachment 2 shall include, but not be limited to, all mobilizations, subcontractors, labor, equipment, waste, etc.

The five groundwater monitoring wells (MW-14 through MW-18) shall be installed by the selected bidder in the approximate locations shown on Figure 12 in Attachment 3a. In the event that the location of any of the prescribed groundwater monitoring well locations are to be modified significantly or the well construction details vary from the assumptions presented below, the selected bidder shall notify ICF/PAUSTIF.

The soil groundwater monitoring wells shall be installed using hollow stem auger drilling techniques. Each well shall be constructed of two-inch PVC materials with the screened interval straddling the water table. Although the monitoring wells should be constructed based on groundwater elevation data presented in the November 20, 2018 Site Status Report included as Attachment 3d and data obtained during drilling, for the purposes of this RFB, each bidder shall assume that the groundwater monitoring wells will be constructed as follows:

- MW-14: Total Depth of 12 feet, screened interval of 2 to 10 feet, 2 feet of riser.
- MW-15: Total Depth of 12 feet, screened interval of 2 to 12 feet, 2 feet of riser.
- MW-16: Total Depth of 13 feet, screened interval of 3 to 13 feet, 3 feet of riser.
- o MW-17: Total Depth of 20 feet, screened interval of 10 to 20 feet, 10 feet of riser.
- MW-18: Total Depth of 12 feet, screened interval of 2 to 10 feet, 2 feet of riser.

Well logs should be prepared by a Professional Geologist using the same consistent classification system procedure used in Milestone C. All soil groundwater monitoring wells shall be completed at the surface with a securable manhole, set in concrete flush with the ground surface. A locking, pressure fit, watertight cap shall be used to prevent the infiltration of surface runoff and rainwater and to restrict unauthorized access.

Subsequent to their installation, the tops of casings of the groundwater monitoring wells shall be located vertically and horizontally by a licensed surveyor relative to the monitoring well network that existed prior to the execution of the SOW included in this RFB.

Following the installation of the five groundwater monitoring wells, the selected bidder shall develop the five groundwater monitoring wells in accordance with generally-accepted practices as outlined in the PADEP's Groundwater Monitoring Guidance Manual, dated December 1, 2001 (Document #383-3000-01).

No sooner than two weeks following their development, the selected bidder shall perform a groundwater sampling event. The groundwater sampling event shall include the comprehensive measurement of depths-to-water (and depths-to-separate phase liquid if applicable) in the entire groundwater monitoring well network (monitoring wells MW-1 through MW-18) followed by the purging and sampling of the five groundwater monitoring wells installed as part of this milestone. The groundwater samples shall be collected in laboratory-provided containers and analyzed by EPA Method 8260B for the substances listed in the COC section of this RFB.

Milestone E – Comprehensive Groundwater Monitoring Well Sampling Event

All bidders shall provide in Attachment 2, the cost to perform one comprehensive groundwater sampling event that includes the entire groundwater monitoring well network (monitoring wells MW-1 through MW-18). The comprehensive groundwater sampling event shall be performed in the calendar quarter following the calendar quarter in which the five new wells are sampled as part of Milestone D, but no sooner than 30 days after the sampling event performed as part of Milestone D.

The comprehensive sampling event shall include the comprehensive measurement of depths-to-water (and depths-to-separate phase liquid if applicable) in each of the groundwater monitoring wells followed by the purging and sampling of each monitoring well. The soil groundwater samples shall be collected in laboratory-provided containers and analyzed by EPA Method 8260B for the substances listed in the COC section of this RFB.

Milestone F – Preparation of Site Characterization Report

All bidders shall provide in Attachment 2, the cost to prepare a Site Characterization Report (SCR) for PADEP approval. Upon completion of the activities described in this SOW, the selected bidder shall prepare the SCR in accordance with 25 Pa Co de §245.310 and indicate that the Solicitor has selected the site-specific standard as the selected remedial goal. The SCR must be a stand-alone document with all necessary comprehensive data tables, figures, data appendices, etc. Although the PADEP's January 3, 2019 alternative time frame submission approval letter (included as Attachment 3g) established a due date of April 30, 2019 for the SCR, the PADEP agreed to allow for an extension request, if necessary, following the claimant's selection of a consultant.

All files used in the preparation of this RFB will be made available to the successful bidder. The bidder may include by reference previous data in the bidder-prepared SCR. The selected bidder shall prepare the SCR in draft form for review and comment by the Solicitor and the PAUSTIF. The selected bidder's schedule shall provide two weeks for this review. Prior to submitting the SCR, the selected bidder shall address the comments received by the Solicitor and ICF/PAUSTIF as well as the comments identified in the PADEP's October 15, 2018 SCR/RAP Disapproval Letter (included as Attachment 3f).

All bidders shall include in this Milestone, the costs necessary to evaluate the potential for vapor intrusion into buildings using soil and groundwater chemistry data and other physical data collected from the site and surrounding properties. The purpose of the

vapor intrusion screening is to determine whether additional vapor intrusion investigation activities will be necessary. The vapor intrusion screening shall be conducted in accordance with the PADEP's revised technical guidance document (*Land Recycling Program Technical Guidance Manual for Vapor Intrusion into Buildings from Groundwater and Soil under Act 2*) which became effective on January 18, 2017 (PADEP VI TGM).

Tables, figures, and other attachments that support the text shall include but not be limited to the following:

- The results of the underground utility evaluation;
- An evaluation of vapor intrusion;
- A receptor survey for potential future remedial actions that include, but is not limited to:
 - A review of the PA Groundwater Information System (PAGWIS) records available from the PA Topographic and Geologic Survey website. This task shall include plotting all recorded wells within a ½-mile radius of the Site on a scaled map and including a copy of the database records for the search distance in an appendix to the SCR; and
 - 2. A review of the Pennsylvania Natural Diversity Inventory (PNDI) to evaluate for the presence of special concern species and resources.
- Comprehensive groundwater elevation data in table form;
- Comprehensive groundwater sampling results in table form;
- Comprehensive soil sampling results in table form;
- Scaled figures showing the location of monitoring wells and soil samples;
- Scaled figures for each round of groundwater elevation data showing groundwater elevations, groundwater elevation contours, and inferred direction(s) of groundwater flow;
- Scaled figures for each analyte found in groundwater to be above the Solicitorselected remedial goal for each round of groundwater sampling. Each figure should show analyte concentrations in each well and inferred dissolved-phase analyte plume contours;
- Laboratory reports, chains of custody, and field sampling documentation for all media sampled as part of characterization;
- Logs for all soil borings and monitoring wells including well construction logs;
- If necessary, clearly defined additional investigation work proposed for the characterization of the Site.

OPTIONAL MILESTONES

Optional Milestone G – Off-Site Access for Properties not Previously Accessed

All bidders shall provide in Attachment 2, the cost to secure a formal access agreement to one additional property in the vicinity of the site. The purpose of this optional milestone would be to allow for further soil and/or groundwater contamination delineation on a property where access had not been previously granted. The activation of this milestone is contingent upon the prior approval of ICF/PAUSTIF.

Optional Milestone H – Supplemental Groundwater Monitoring Well Installation and Development

In the event that one or more supplemental groundwater monitoring wells are necessary to characterize dissolved-phase concentrations of COCs at the site, all bidders are required to provide in Attachment 2 the cost to install and develop additional groundwater monitoring wells. All bidders shall assume that the additional groundwater monitoring well(s) would be installed, constructed, and developed in accordance with the methodology described in Milestone D and the specifications of monitoring well MW-17. In the event that it is reasonable and necessary to drill and construct an additional groundwater monitoring well to a total depth less than or greater than the assumed depth of 20 fbg, the reimbursement for Optional Milestones H1 and H2 would be adjusted based on the per foot cost provided in Attachment 2 (as part of Optional Milestone H3). The activation of Optional Milestones H1 and H2, described below, will require the prior approval of ICF/PAUSTIF and the selected bidder shall present the locations of all proposed groundwater monitoring wells to ICF/PAUSTIF for review and comment.

Optional Milestone H1 – All bidders shall provide in Attachment 2 all reasonable and necessary costs to install and develop one supplemental groundwater monitoring well. The costs included in Attachment 2 shall include, but not be limited to, all mobilizations, subcontractors, labor, equipment, waste, etc.

Optional Milestone H2 – All bidders shall provide in Attachment 2 all reasonable and necessary costs to install and develop an additional groundwater monitoring well as an add-on to Milestone H1 (which accounts for mobilization costs). The costs included in Attachment 2 shall include, but not be limited to, all subcontractors, labor, equipment, waste, etc.

Optional Milestone H3 – All bidders shall provide in Attachment 2 the per foot cost to drill and construct the groundwater monitoring wells installed as part of Milestone D and Optional Milestones H1 and H2. The Optional Milestone H3 cost will be used to modify the reimbursement for Optional Milestones H1 and H2 and Milestone D in the event the wells are drilled and constructed shallower or deeper than the prescribed depths.

Optional Milestone I – Supplemental Groundwater Sampling

The purpose of this milestone is to allow for the performance of additional groundwater sampling events. All bidders shall assume that all monitoring wells will be sampled in accordance with the methodology described in Milestone E. The activation of Optional Milestones I1 and I2 (described below), will require the prior approval of ICF/PAUSTIF.

Optional Milestone 11 – All bidders shall provide in Attachment 2 the cost to complete one comprehensive sampling event that includes the eighteen groundwater monitoring wells (MW-1 through MW-18). The costs shall include, but not be limited to, mobilization, labor, equipment, subcontractors, waste, etc.

Optional Milestone 12 – All bidders shall provide in Attachment 2 the cost to collect one groundwater sample from one groundwater monitoring well as a modifier to Milestone E and F and Optional Milestone I1 (which account for mobilization costs). The costs shall include all subcontractors, labor, equipment, waste, etc. and will be used as necessary to modify the reimbursement for Milestones E and F and Optional Milestone I1 in the event more or less groundwater monitoring wells are sampled.

Optional Milestone J – Supplemental Soil Sampling

The purpose of this milestone is to allow for the collection of additional soil data in the event that Milestone C does not sufficiently delineate petroleum impacts to soil. The activation of this milestone will require the prior approval from ICF/PAUSTIF. For the purposes of this RFB, all bidders shall assume that the supplemental soil samples collected as part of this milestone shall be collected via direct-push soil borings advanced up to 15 fbg. All soil samples shall be collected in laboratory-provided containers and analyzed by EPA Method 8260B for the substances listed in the COC section of this RFB. Soil samples should be screened at two-foot intervals with a PID (using headspace measurements) and continuous geological logs shall be prepared by a Professional Geologist for each boring using the same consistent classification system procedure used in Milestone C.

Optional Milestone J1 – All bidders shall provide in Attachment 2 the cost to complete one direct push soil boring with the collection and analysis of one supplemental soil sample. The costs shall include, but not be limited to, mobilization, labor, equipment, subcontractors, waste, etc.

Optional Milestone J2 – All bidders shall provide in Attachment 2 the cost to advance an additional soil boring with the collection and analysis of one supplemental soil sample as an add-on to Milestone J1 (which accounts for mobilization costs). The costs shall include all subcontractors, labor, equipment, waste, etc. **Optional Milestone J3** – All bidders shall provide in Attachment 2 the cost for the collection and analysis of one additional soil sample from a soil boring accounted for in Milestone C and Optional Milestones J1 and J2 as a cost adder to Milestone C and Optional Milestones J1 and J2.

Optional Milestone K – Professional Land Survey Update

All bidders shall provide in Attachment 2 the cost to update the professional land survey. The update shall include, but not be limited to the vertical and horizontal locations of monitoring well casings installed as part of Optional Milestones. The activation of this milestone will require the prior approval from ICF/PAUSTIF.

Additional Information

In order to facilitate PAUSTIF's review and reimbursement of invoices submitted under this claim, the Solicitor requires that project costs be invoiced by the milestone identified in the executed Remediation Agreement. Actual milestone payments will occur only after successful and documented completion of the work defined for each milestone. The selected consultant will perform only those tasks/milestones that are necessary to reach the Objective identified in this RFB. Selected consultant will not perform, invoice, or be reimbursed for any unnecessary work completed under a milestone.

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

List of Attachments

- 1. Remediation Agreement
- 2. Bid Cost Spreadsheet
- 3. Site Information/Historic Documents
 - a. Figure 1 Site Location Map
 - Figure 2 Site Detail Map
 - Figure 3 UST Closure Soil Sampling Map (August 2008)
 - Figure 4 Soil Sampling Location Map (January 2009)
 - Figure 5 Soil Sampling Location Map (January 2010 and May 2011)
 - Figure 6 Soil Sampling Location Map (March 2016)
 - Figure 7 Soil Sampling Location Map (January 2018)
 - Figure 8 Soil Characterization Summary Map

Figure 9 – Dissolved Phase Benzene Concentration Contour Map (September 14, 2018)

Figure 10 – Dissolved Phase MTBE Concentration Contour Map (September 14, 2018)

Figure 11 – Dissolved Phase 1,2,4-Trimethylbenzene Concentration Contour Map (September 14, 2018)

Figure 12 – Map Showing Proposed Work Locations

- b. May 2018 SCR/RAP, CPTS
- c. Right of Entry Agreement
- d. November 20, 2018 Site Status Report, CPTS
- e. January 19, 2018 Geophysical Report
- f. SCR/RAP Denial Letter, PADEP
- g. Approval letter for SCR alternative time frame submission, PADEP