COMPETITIVE BID SOLICITATION FOR THE COMPLETION OF A SITE CHARACTERIZATION REPORT AND A REMEDIAL ALTERNATIVES EVALUATION

Former Hess Oil Company Facility
203 Bunker Hill Avenue
Delta Borough, York County
Delta, PA 17314
PADEP FACILITY ID #67-60871
PAUSTIF CLAIM #99-390(M)

ICF International (ICF), on behalf of the Pennsylvania Underground Storage Tank Indemnification Fund (PAUSTIF) and the claimant for the above referenced claim, is soliciting bidders for a fixed price contract project. Specifically, this Request for Bid (RFB) is seeking qualified firms to prepare and submit a fixed price proposal to complete a Site Characterization Report (SCR) and a remedial alternatives evaluation for the Former Hess Oil Company facility (Site). A petroleum release to both soil and groundwater has been confirmed at the Site and the Pennsylvania Department of Environmental Protection (PADEP) SCR requirements have been met. However, a previously submitted Remedial Action Plan (RAP) was denied due to a lack of feasibility testing at the Site. The Solicitor has an open claim (Claim #1999-390(M)) with the PAUSTIF and the work outlined in this RFB will be completed under this aforementioned claim. Reimbursement of Solicitor-approved reasonable, necessary and appropriate costs (within claim limits) for the work described in this RFB will be provided by PAUSTIF.

While site characterization has been deemed by PADEP as complete, a review of the site data reveals that additional characterization activities are necessary to delineate the extent of petroleum impacted soil and groundwater both on and offsite. In addition feasibility testing efforts are needed before a comprehensive RAP can be submitted and an appropriate remedial strategy can be implemented. The previously submitted RAP proposed the use of multi-phase extraction system. Specifically, the previous consultant discussed the use of a two-phase extraction system at the Site; however PADEP requested to see results from feasibility testing before the RAP and proposed remedial strategy would be approved. The aforementioned RAP selected the residential used aquifer (<2,500 TDS) Statewide Health Standards (SHS) for the Site.

This RFB includes five (5) major components with subtasks presented in an outline format for cost analysis and implementation. The fixed costs proposed by the consultant bidder shall be based on the scope of work provided in the RFB. Expenses in excess of the quoted price for the contract shall be the consultant's responsibility. The scope and budget for any identified out of scope activities must be pre-approved to be eligible for payment. Any costs associated with deviations from the scope that did not receive prior approval from the solicitor and PAUSTIF, or its representatives, will not be reimbursed.

Specifically, this RFB seeks competitive bids from qualified consultants to complete additional characterization activities, prepare an appropriate SCR, evaluate potential remedial strategies, and facilitate progress towards site closure in a timely, efficient, and cost effective manner.

Should your company elect to respond to this RFB Solicitation, one (1) hard copy and one (1) electronic copy (on CD) of the signed bid package must be sent to the attention of the ICF Representative at the address provided in the RFB. **The signed response (electronic and hardcopy) to this RFB must be provided to the ICF Representative, at the address provided in the RFB, no later than close of business (5 p.m. EST) on June 22, 2011.** The electronic version of the bid submission must be in the form of a single PDF file containing the entire bid submission. In addition, the outside of the package must be clearly labeled with "Bid – Claim 99-390(M)". Please note that ICF and PAUSTIF will no longer be accepting the electronic version via email and that the signed bids (electronic and hardcopy) for this RFB must be received at the ICF office no later than close of business (5 p.m. EST) on the provided deadline for the submitted bid to be considered. **To reiterate, no bid responses should be emailed to the ICF representative. The electronic version (single PDF file) must be provided on CD and delivered with the hard copy to the ICF representative by the provided deadline.**

On behalf of ICF and PAUSTIF, the Technical Contact will assist the Solicitor in evaluating the bids but the Solicitor will ultimately choose with whom to negotiate the mutually agreeable contract. The bid evaluation will consider, among other factors, total bid cost, unit costs, schedule, qualifications, and contract terms and conditions (no priority or relative weighting is implied by the order of these factors). The Solicitor anticipates informing the selected consultant with an approval to proceed within twelve (12) weeks of the bid response deadline. Please note that when the contract is in place with the consultant selected by the Solicitor, all other firms submitting bid packages will be notified that the contract was awarded.

SOLICITOR AND TECHNICAL CONTACT INFORMATION

ICF Representative

Ms. Tracy Aubel
ICF International
4000 Vine Street
Middletown, PA 17057
Email: taubel@icfi.com

Technical Contact

Mr. Mark Bedle
B&B Diversified Enterprises, Inc.
PO Box 16
Barto, PA 19504
Telephone: (610) 845-0640
Fax: (610) 845-0650
Email: mbedle@bbde.com

NOTE: All questions regarding this RFB solicitation and the subject site conditions must be directed to the Technical Contact and submitted in writing with the understanding that all questions and answers will be provided to all bidders. If questions are to be submitted via email, please note the following in the subject line of the email: Hess Oil RFB Questions Claim No 99-390(M). Bidders must neither contact nor discuss this RFB Solicitation with the Solicitor, PAUSTIF, or ICF International unless approved by the Technical Contact. Bidders may discuss this RFB solicitation with subcontractors and vendors to the extent required for preparing the bid response.

NOTE: Submitted bid responses are subject to Pennsylvania's Right-to-Know Law.

SITE LOCATION, OPERATION, AND BACKGROUND INFORMATION

Site Address

Former Hess Oil Company Facility
203 Bunker Hill Avenue
Delta, PA 17314
Delta Borough, York County

Site Location and Operation Information

The Site is former bulk fuel storage facility and delivery business located at 203 Bunker Hill Avenue in Delta, Pennsylvania. The property is approximately 0.413 acres in size and contains a pole barn, garage, and residence/office building. Four (4) above ground storage tanks (ASTs) were formerly located in the north-northeastern portion of the Site (currently covered with pole building). A 550-gallon underground storage tank (UST) was formerly located west of the AST's. All fuel dispensing and storage equipment has been removed from the Site. A total of one (1) UST and 4 AST's have been removed from the Site since 1999. The Site is surrounded by a mixture of residential, commercial, vacant, and municipal properties. The Site and surrounding properties are provided with public water and sewer from the Delta Borough Municipal Authority. A Site Location Map is provided as Figure 1, a Surrounding Properties Map is provided as Figure 2, and a Site Plan is provided as Figure 3.

Site Background Information

A 550 gallon steel unleaded gasoline UST system was removed from the Site during July 1999. Extensive contamination was found beneath the UST. Groundwater was encountered at a depth of 7.5 feet below grade (ftbg) and weathered bedrock was encountered at approximately 12 ftbg within the excavation. Petroleum impacted soil was removed and the excavation was extended to approximately 8 feet wide, and 14 feet long, and 16 feet deep. A total of eight (8) post excavation soil samples and one (1) groundwater sample were collected and submitted to a laboratory for analysis of unleaded gasoline target compounds. The soil analysis indicated concentrations of benzene and naphthalene above their respective SHSs. The groundwater sample analysis indicated concentrations of naphthalene and cumene above their respective SHSs. Additional site characterization was necessary because petroleum hydrocarbon concentrations exceeded residential SHSs.

A soil investigation was conducted at the Site on October 12, 1999 by the previous consultant. Nine (9) soil borings were advanced through the central and northern portion of the Site utilizing hydraulic push technology. Soil borings were advanced to refusal at depths ranging from 10 to 16 ftbg. Up to two (2) soil samples were collected from each boring and analyzed for unleaded gasoline target compounds. The soil sampling results indicate petroleum hydrocarbons were observed above the SHSs in the area of the former UST at depths ranging from 6 ftbg to 12 ftbg.

Monitoring wells MW-1, MW-2, and MW-3 were installed onsite on October 13, 1999 to total depths of 20 ftbg.

Groundwater samples were collected from monitoring wells MW-1, MW-2, and MW-3 on November 18, 1999 and February 23, 2000 and submitted for unleaded gasoline target compound analysis. Results of the groundwater sample analysis indicated the presence of unleaded gasoline target compounds above SHSs in MW-1 and MW-2.

In March 2000, the previous consultant submitted an SCR to PADEP summarizing the activities completed at the Site. The March 2000 SCR was followed up in June 2000 with a RAP for the Site. PADEP recommended that further site characterization was necessary. Following the RAP being denied by PADEP, the previous consultant prepared and submitted a Revised RAP for this Site in July 2000. The revised RAP recommended installing two (2) additional downgradient monitoring wells and a bio-sparging remediation system.

From August 2000 through December 2003, two (2) additional onsite monitoring wells (MW-4 and MW-5) and three (3) offsite monitoring wells (MW-6, MW-7, and MW-8) were installed.

A Revised RAP was submitted to the PADEP during November 2006 which summarized the supplemental site characterization activities completed at the Site and proposed dual phase extraction utilizing a liquid ring pump to remediate the Site to the residential used aquifer statewide health standard. However, the RAP was denied due to a lack of feasibility testing at the Site. PADEP wanted to see results from feasibility testing before the RAP and proposed remedial strategy would be approved.

On March 5 and 6, 2007, the previous consultant installed two (2) additional onsite monitoring wells (MW-9 and MW-10) and an onsite recovery well (RW-1) for the completion of the remediation system feasibility testing.

Groundwater sampling was conducted on a periodic basis from August 2000 through the present. The analytical data indicates the presence of benzene, ethylbenzene, MTBE, and naphthalene at concentrations above the applicable PADEP SHS. The data is summarized in the attached summary tables and a copy of the laboratory package has been included with this RFB. Groundwater contour and concentrations maps are provided as Figures 4 through 6.

Bidders are directed to the pertinent available documentation (including reports, figures, correspondence and analytical data) that has been provided in Attachment 1 for additional site background details.

PROPOSED SCOPE OF WORK

The scope of work has been prepared using the guidelines of Pennsylvania Code Title 25, Chapter 245 (The Storage Tank and Spill Prevention Program) and Chapter 250 (The Land Recycling Program). There are several key elements that must be completed in order for the approach outlined in this RFB to be successful. The critical elements include the following:

- Prepare the appropriate project guidance documents;
- Complete a full Sensitive Receptor Survey;
- Secure offsite access;
- Conduct a soil boring investigation;
- Conduct soil gas sampling;
- Install additional shallow groundwater monitoring wells;
- Install one bedrock monitoring well;
- Complete aquifer testing on the monitoring well network;
- Conduct groundwater monitoring and sampling events;
- Complete a site survey, map the important features of the Site and evaluate groundwater flow (A digital version of the map is available and will be provided to the winning consultant);
- Complete fate and transport modeling to assess soil, groundwater, and vapor intrusion media pathways to determine if and the extent to which dissolved phase hydrocarbons have or may be expected to migrate beyond the property boundary now or in the future;
- Prepare and submit a Site Characterization Report;
- Complete a risk assessment evaluation using the applicable guidance documents in an effort to appropriately evaluate exposure pathways;
- Remedial Alternatives Analysis should be completed for the Site to compare cleanup alternatives and evaluate which remedial action is most appropriate for the Site; and
- Prepare a Risk Assessment and Feasible Remedial Alternatives Analysis Report for the Site.

In addition to the above base Scope of Work, the following ***Optional Cost Adders*** need to be addressed in your bid response. These costs adders will not be part of your initially approved contract. 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. More details regarding the work scope for each of these ***Optional Cost Adders*** is provided at the end of the RFB Scope of Work.

- ***Optional Cost Adder #1 –*** Provide a Unit Cost to complete an additional groundwater monitoring and sampling event. The scope of work for this cost adder should follow Task 3.0. The cost provided should be to complete only one (1) event with all wells in the network being sampled.

- ***Optional Cost Adder #2 –*** Provide a Unit Cost to Prepare a Summary Progress Report for submittal to the PADEP. The Progress Report should detail the observations documented during the event, summarize the analytical results, map the groundwater flow direction for the Site, provide iso-concentration maps for compounds exceeding the SWHS, provide hydro-graphs, discuss the interim remediation efforts (if any), and provide additional scheduling details for upcoming events. Once the report is approved by the Solicitor, the report can be finalized and submitted to the PADEP. The progress reports discussed are being proposed to meet the PADEP obligation on progress reporting before RAP approval.

- ***Optional Cost Adder #3 –*** Provide a Unit Cost to extend the Pump test for four (4) additional hours at the Site. The pump test would be extended if stabilization does not occur by the end of the eight (8) hour pump test.

- ***Optional Cost Adder #4 –*** Provide a Unit Cost to install one (1) shallow groundwater monitoring well. The scope of work for this cost adder is to install the well to a total estimated depth of 20 feet below grade (ftbg) with approximately 5 feet of four-inch diameter, schedule 40 PVC flush threaded casing and approximately 15 feet of four-inch diameter, schedule 40 PVC flush threaded 0.010 slot size screening. The wells should be drilled and constructed in accordance with generally accepted practices as outlined in the PADEP Groundwater Monitoring Guidance Manual, dated January 1, 1999 (Document # 383-3000-001). Based on anticipated drilling conditions, a Pennsylvania-licensed driller should install the wells using air-rotary methods. This cost should be all inclusive for well installation, development, survey, and waste disposal.

- ***Optional Cost Adder #5 –*** Provide a Unit Cost to install 2-inch PVC screen and casing within the bedrock monitoring well if necessary. The scope of work for this cost adder is to construct a 2-inch diameter PVC well within the open rock bedrock monitoring well to a total estimated depth of 45 feet below grade (ftbg) with approximately 25 feet of two-inch diameter, schedule 40 PVC flush threaded casing and approximately 20 feet of two-inch diameter, schedule 40 PVC flush threaded 0.010 slot size screening. The annular space around and two feet above the screen should be filled with well grade sand and the casing should be sealed accordingly. The wells should be drilled and constructed in accordance with generally accepted practices as outlined in the PADEP Groundwater Monitoring Guidance Manual, dated January 1, 1999 (Document # 383-3000-001).

- ***Optional Cost Adder #6 –*** Provide a Unit Cost to install one (1) bedrock groundwater monitoring well. The scope of work for this cost adder is to install the well to a total estimated depth of 45 feet below grade (ftbg) with approximately 25 feet of six-inch diameter, steel casing and approximately 20 feet of six-inch diameter, open bedrock

borehole. The wells should be drilled and constructed in accordance with generally accepted practices as outlined in the PADEP Groundwater Monitoring Guidance Manual, dated January 1, 1999 (Document # 383-3000-001). Based on anticipated drilling conditions, a Pennsylvania-licensed driller should install the wells using air-rotary methods. This cost should be all inclusive for well installation, development, survey, and waste disposal.

- ***Optional Cost Adder #7 –*** Provide a Unit Cost to update the Site's survey to include any necessary additional well location(s) not included in the base scope of work. This is a fixed price unit cost per well. The scope of work for this cost adder should follow Task 2.4.

- ***Optional Cost Adder #8 –*** Provide a Unit Cost to prepare a combined SCR/RAP for submittal to the PADEP instead of a SCR. The RAP portion of the report would propose eight (8) quarters of groundwater attainment monitoring. The costs included in this optional cost adder would just be the additional costs needed to write the SCR/RAP above and beyond the costs included in the bid response to write the SCR.

The bid package should follow the task format outlined below. A cost summary sheet to be attached to your proposal is included as Attachment 2. Proposals should also include a detailed description of the anticipated costs for each task including labor rates, time requirements, and equipment costs as broken out in the detailed cost sheet included as Attachment 3. The scope of work that we are requesting is provided below:

Task 1.0 Project Planning / Management:

Task 1.1 Preparation of Project Guidance Documents – Proposed documents to be prepared include a site specific health and safety plan, a field sampling and analysis plan, and a quality assurance/quality control plan. Where applicable, the pertinent project guidance documents should be prepared in accordance with Chapter 245.

Task 1.2 Project Management – The successful bidder shall complete necessary, reasonable, and appropriate project management activities for the duration of the contract period consistent with release investigation projects. Such activities would be expected to include client communications / updates, meetings, permitting, record keeping, subcontracting, personnel and subcontractor management, quality assurance / quality control, scheduling and other activities.

Task 1.3 Sensitive Receptor Survey – A Sensitive Receptor Survey (SRS) should be conducted for this Site. Sensitive receptors evaluated for this Site should include area water usage, surface water bodies, and subsurface underground utilities and basements. Submitted bids should specify what activities will be included in the SRS activities (i.e. review of tax maps and property assessment records; area canvass; PNDI search, etc.). A 1,000-foot radius water usage survey should be completed as part of the SRS in an effort to document the area water use. As part of the water usage survey, the selected consultant should complete the following:

1. Conduct a private and public well search by obtaining an area specific report;
2. Obtain and review tax maps for the area;
3. Contact the local municipality and water authority to confirm water usage in the area of the Site and any local restrictions on water usage;
4. Review of previously completed sensitive receptor surveys;
5. Review of county property assessment records;
6. Canvass of the area; and
7. Field verification of water supply to surrounding properties.

Results of the SRS are to be taken into consideration during the execution of the project and are to be summarized and included in the SCR to be submitted to PADEP.

- **Task 1.4 Off-Site Access –** The successful bidder shall secure offsite access to one (1) adjacent vacant property in an effort to install additional groundwater monitoring wells. The cost should cover the necessary time and materials needed to contact the off-site property owner, draft an access agreement, and obtain approval with one (1) draft revision to the access agreement. The cost does not include any legal fees, payments or permitting costs. Providing this Unit Cost does not commit the consultant to obtain the access agreement. If necessary, the cost should also cover the necessary time and material needed to provide the PADEP with the information they will require to facilitate access to the property.

Task 2.0 Additional Site Characterization and Interim Remedial Activities:

Task 2.1 Soil Boring Investigation – In an effort to fully investigate (vertically and horizontally) the impact to the soil media from the confirmed UST release, a series of soil borings is being proposed. Specifically, the activities include the completion of 13 additional soil borings downgradient from the former UST system. Please note that groundwater has been encountered at depths of 5 to 9 feet below grade in the vicinity of the proposed borings. Consultants need to take care to select appropriate sample depths representative of unsaturated soil conditions. Boring investigations noting sample collection depths below the water table will not be reimbursed. Consultant should review the available monitoring well logs included in Attachment A in order to determine the appropriate equipment needed to complete the investigation. Specifics on the proposed investigation are provided below:

- All soil boring locations will be advanced in the locations proposed in the RFB, unless the presence of utilities, obstructions, or safety concerns requires a change in the location. The proposed locations of the soil borings are provided on the Site Plan (Figure 7) included in Attachment 1.

- Soil borings shall be advanced to groundwater, bedrock, or refusal, whichever is encountered first (total boring depth is anticipated to be 10 feet or less);

- Soil samples shall be collected continuously and will be logged by an on-site geologist (or under direct supervision of a geologist) for soil classification and structure, odor, soil moisture, soil texture, color, and screened with a PID. Soils should be described using the Unified Soil Classification System.

- A total of one (1) to two (2) soil samples from each of the 13 soil borings will be collected and submitted to an accredited laboratory. One (1) sample from each boring should be collected for submittal to a laboratory for analysis from the soil interval exhibiting the highest PID reading in each borehole. If the highest PID readings are collected above the bedrock and/or groundwater interface then a second sample should be collected at the bedrock interface or just above groundwater (if encountered) in an effort to delineate the soil sample with the highest PID reading.

- A total of 26 soil samples (two (2) soil samples per boring) shall be collected as part of this investigation. Soil samples shall be collected using Encore Samplers (or equivalent) and field-preserved in laboratory-provided glassware with the appropriate preservatives (e.g., methanol or sodium bisulfate) provided by the laboratory in general accordance with USEPA Method 5035 and the PADEP guidance;

- In addition, one (1) duplicate sample and one (1) equipment blank sample will be collected and submitted per day of sampling;

- 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;

- Soil samples shall be collected and analyzed for benzene, toluene, ethylbenzene, total xylenes, MTBE, naphthalene, and cumene using laboratory EPA method 8260B in accordance with Pennsylvania's Storage Tank Regulation procedures and cleanup standard criteria as specified in Pennsylvania's Act 2. One (1) soil sample should also be analyzed for fraction of organic carbon and porosity to facilitate modeling efforts;

- The laboratory to be utilized should be identified in the bid package. Upon receipt of the results, the consultant should forward a copy of the analytical data to the Solicitor and PAUSTIF (or its designated representative); and

- Compile the field findings and laboratory data into a summary table and comprehensive soil boring logs.

Task 2.2 Soil Gas Sampling – For this RFB, please assume the total number of soil gas sampling events that will be needed is two (2) events and that samples will be collected from each of the three (3) soil gas sampling points proposed. Please note that USTIF will

only pay the winning firm for the actual number of events conducted (i.e. if a firm includes the costs to complete 2 events, but only 1 events are conducted; then the firm will only be paid for the 1 event completed). The selected consultant should be prepared to conduct the first soil gas sampling event at the Site within two (2) weeks of the execution of the contract and conduct the second event approximately six (6) weeks after the first event. As part of the soil gas investigation, the selected consultant should consider the following:

- All soil gas points will be advanced in the locations proposed in the RFB, unless the presence of utilities, obstructions, or safety concerns requires a change in the location. The proposed locations of the soil gas points are provided on the attached Figure 7 of Attachment 1.

- The vapor intrusion investigation should be completed in a manner consistent 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 253-0330-100, dated January 24, 2004.

- Samples should be collected in laboratory provided Summa canisters equipped with laboratory calibrated flow regulators and analyzed for the PADEP Constituents list for unleaded gasoline via TO-15.

- The laboratory to be utilized should be identified in the bid package. Upon receipt of the results, the consultant should forward a copy of the analytical data to the solicitor and PAUSTIF (or its designated representative).

Task 2.3 Shallow Monitoring Well Installation – In order to fully characterize the dissolved phase plume in the overburden aquifer and obtain the data necessary to evaluate exposure pathways for the risk assessment, a total of three (3) additional monitoring wells (MW-11 through MW-13) are to be installed at the Site. The proposed locations of the overburden monitoring wells are provided on Figure 7. Consultant should review the available monitoring well logs included in Attachment 1 in order to determine the appropriate equipment needed to complete the investigation. As part of the installation of the wells, the selected consultant should consider the following:

- All monitoring wells will be advanced in the locations proposed in the RFB, unless the presence of utilities, obstructions, or safety concerns requires a change in the location. The proposed locations of the monitoring wells are provided on Figure 7;

- For the three (3) overburden monitoring wells, the borehole will be drilled to the completed depth of approximately 20 ftbg, and a monitoring well will be constructed using approximately five (5) feet of four-inch diameter, schedule 40 PVC flush threaded casing and approximately 15 feet of four-inch diameter, schedule 40 PVC flush threaded 0.020 slot size screening. The total depth and

screening interval provided are approximated. The selected consultant will install the shallow wells to an appropriate depth based on actual site conditions that will allow for an adequate column of groundwater but not extend more than five (5) feet into competent bedrock. The shallow wells will be cased for the first five (5) feet with screening extending from the bottom of the casing to the well completion depth. In addition, the estimated construction specifications provided above may need to be altered during drilling as dictated by actual site conditions (i.e. actual depth to bedrock, actual depth to groundwater, etc.);

- The wells should be drilled and constructed in accordance with generally accepted practices as outlined in the PADEP Groundwater Monitoring Guidance Manual, dated January 1, 1999 (Document # 383-3000-001).

- A flush-mounted manhole shall be cemented into place to complete the well at grade level. A locking, pressure fit, watertight cap will be used to prevent the infiltration of surface runoff and rainwater and to restrict access by unauthorized individuals;

- The wells should be drilled and constructed in accordance with generally accepted practices as outlined in the PADEP Groundwater Monitoring Guidance Manual, dated January 1, 1999 (Document # 383-3000-001). Based on anticipated drilling conditions, a Pennsylvania-licensed driller should install the wells using hollow stem auger drilling methods;

- 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 a PID, 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;

- 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, and/or by airlift techniques. Please note that the management of the groundwater removed from the well during development shall be conducted in accordance with standard industry practices and applicable laws, regulations, guidance and Department directives;

- Soil/rock cuttings and liquids generated during the drilling activities should be managed in a manner consistent with the protocols set forth by the PADEP. Disposal of soil/rock cuttings, if necessary, should be arranged through a certified

waste disposal subcontractor. In an effort to eliminate or minimize the need for change orders on a fixed price contract, please include costs to dispose of all anticipated volumes of waste in your bid response. ICF and PAUSTIF will no longer entertain any assumptions on the contract with regards to a volume of waste (i.e. Project costs assume that no more than one (1) ton of soil cuttings will require disposal after the installation of the additional monitoring wells). Bidders will be responsible for including costs in their bid response to cover all potential waste related to the tasks 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;

- Compile the field findings into comprehensive monitoring well construction diagrams and logs.

Task 2.4 Bedrock Monitoring Well Installation – As part of the characterization activities, the installation of one (1) bedrock monitoring well is proposed to investigate the first bedrock aquifer. Specifically, one (1) bedrock monitoring well (MW-14) will be installed onsite. As part of the installation of the additional bedrock wells, the selected consultant should consider the following:

- All monitoring well locations will be advanced in the locations proposed in the RFB, unless the presence of utilities, obstructions, or safety concerns requires a change in the location. The proposed location of the monitoring wells is provided on Figure 8 of Attachment 1.

- The bedrock well will be advanced to a total estimated depth of 40 feet below grade (ftbg) with approximately 25 feet of six-inch diameter, steel casing and approximately 15 feet of six-inch diameter, open bedrock borehole. The upper 25 feet will be cased and the annular space will be sealed in an effort to prevent possible vertical movement through the borehole from the shallow to deeper water bearing zones. At a minimum, the casing for each bedrock well must penetrate competent bedrock five (5) feet. Please note that the estimated construction specifications provided above may need to be altered during drilling as dictated by actual site conditions.

- The annular space surrounding the steel casing will be filled using from bottom to top with neat cement grout utilizing the tremmie pipe method. The grout shall be given sufficient time to cure prior to advancement of the open rock borehole (minimum 24-hours).

- In the event there is insufficient bedrock stability to sustain an open rock borehole, a 2-inch diameter PVC well shall be constructed within the borehole as an optional cost adder (Optional Cost Adder #7).

- A flush-mounted manhole shall be cemented into place to complete the well at grade level. A locking, pressure fit, watertight cap will be used to prevent the infiltration of surface runoff and rainwater and to restrict access by unauthorized individuals.

- The wells should be drilled and constructed in accordance with generally accepted practices as outlined in the PADEP Groundwater Monitoring Guidance Manual, dated January 1, 1999 (Document # 383-3000-001). Based on anticipated drilling conditions, a Pennsylvania-licensed driller should install the wells using air-rotary methods.

- 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 a PID, 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.

- 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. Please note that the management of the groundwater removed from the well during development shall be conducted in accordance with standard industry practices and applicable laws, regulations, guidance and Department directives.

- Soil/rock cuttings and liquids generated during the drilling activities should be managed in a manner consistent with the protocols set forth by the PADEP. Disposal of soil/rock cuttings, if necessary, should be arranged through a certified waste disposal subcontractor. In an effort to eliminate or minimize the need for change orders on a fixed price contract, please include costs to dispose of all anticipated volumes of waste in your bid response. ICF and PAUSTIF will no longer entertain any assumptions on the contract with regards to a volume of waste (i.e. Project costs assume that no more than one (1) ton of soil cuttings will require disposal after the installation of the additional monitoring wells). Bidders will be responsible for including costs in their bid response to cover all potential waste related to the tasks 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.

- Compile the field findings into comprehensive monitoring well construction diagrams and logs.

Task 2.5 Aquifer testing – Slug tests, Step test and Pump test –

Task 2.5.1 Slug Tests – Rising head slug testing will be conducted on three (3) of the 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. 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 efforts and risk assessment activities to be conducted with Site specific data rather than using published values. In addition, the data collected during the slug testing of the monitoring wells will be evaluated to determine the appropriate monitoring well to be used for the step test and the eight (8) hour pump test. Results from the slug testing activities are to be summarized and included in the SCR to be submitted to PADEP.

Task 2.5.2 Step Test – The monitoring well demonstrating the highest permeability during the slug test will be used for the step test and the subsequent eight (8) hour pump test. The selected consultant will conduct a two-hour step test on the well determined by the slug test results to have the highest permeability. The data collected during the step drawdown test will be used to determine an optimal pumping rate and yield for the constant rate pumping test. Results from the step testing activities are to be summarized and included in the SCR to be submitted to PADEP.

Task 2.5.3 Pump Test – Once the pumping rate has been determined, an eight (8) hour constant rate pumping test will be conducted by the selected consultant on the selected monitoring well at the Site. Transducers will be used to monitor the resultant water levels in the pumping well and surrounding monitoring wells to be determined at a later date. Also, the remaining monitoring well network should be gauged periodically throughout the test to provide additional aquifer characterization data. Data collected during the constant rate pumping test will be analyzed and used to calculate Site specific aquifer values including hydraulic conductivity, transmissivity, storage capacity, and groundwater seepage velocity. All of the calculated values will allow for the modeling efforts and risk assessment activities to be conducted with Site specific data rather than using published values. Results from the pump testing activities are to be summarized and included in the SCR to be submitted to PADEP. The management of the groundwater extracted during the step test and pump test shall be conducted in accordance with standard industry practices and applicable laws, regulations, guidance and Department directives. In an effort to eliminate or minimize the need for change orders on a fixed price contract, please include costs to

dispose of all anticipated volumes of waste in your bid response. ICF and PAUSTIF will not entertain any assumptions on the contract with regards to a volume of waste (i.e. Project costs assume that no more than 1,000 gallons of groundwater will require disposal after the completion of the pump test). Bidders will be responsible for including costs in their bid response to cover the disposal of all potential waste related to the tasks 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. The groundwater may be temporarily stored on site, but should be removed from the Site in a timely manner.

Task 2.6 Site Survey – Following the advancement of the proposed soil borings, installation of the additional monitoring wells, and soil gas sampling points, a professional survey of the Site by a Pennsylvania-licensed surveyor including all current site features (e.g., buildings, property boundaries, monitoring wells, vapor sampling points, etc.) shall be completed. All monitoring wells, borings, groundwater seeps, the Site building, property boundaries, important Site features, and the proposed stream gauges are to be surveyed with the purpose of placing their horizontal coordinates on a scaled site map. As part of this task the consultant and or surveyor shall install or survey a minimum of two (2) stream gauges (1 upstream and 1 downstream) or other means or reproducible surface water measurement. 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. In addition, the presence of SPL (if detected) needs to be taken into consideration when calculating the static water levels in the wells and constructing a Site wide groundwater flow map. Groundwater elevation data collected following the installation of the additional monitoring wells along with data from the site survey will be utilized to produce a series of summary figures which will provide additional information as to the groundwater flow direction.

Task 3.0 Groundwater Monitoring and Sampling:

For this RFB, please assume the total number of groundwater monitoring and sampling events that will be needed is two (2) events. Please note that USTIF will only pay the winning firm for the actual number of events conducted (i.e. if a firm includes the costs to complete 2 events, but only 1 events are conducted; then the firm will only be paid for the 1 events completed). The selected consultant should be prepared to conduct the first groundwater sampling event at the Site approximately two (2) weeks after the installation of the proposed monitoring wells and conduct the second event approximately six (6) weeks after the first event.

Each event should include the following:

- Collect water level readings from each of the monitoring wells, groundwater seeps, and surface water points/gauges using an interface probe capable of distinguishing water and/or the presence or absence of product to the nearest 0.01 feet;

- Record the depth to water readings from the monitoring wells, groundwater seeps, and surface water points/gauges and then use the data to determine water level elevations such that groundwater flow direction can be confirmed;

- Groundwater sampling activities should be conducted in accordance with generally accepted practices as outlined in the final version of the PADEP Groundwater Monitoring Guidance Manual;

- 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 or via low flow sampling method;

- Sampling equipment should be decontaminated prior to sample collection in accordance with generally accepted industry practices;

- Following purging activities, groundwater samples should be collected as quickly as practical from each of the wells directly into laboratory supplied bottleware;

- The management of the groundwater removed from the well during purging shall be conducted in accordance with standard industry practices and applicable laws, regulations, guidance and Department directives;

- 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;

- Samples should be analyzed for the PADEP expanded Petroleum Hydrocarbon Constituents list for unleaded gasoline components using laboratory method 8260B in accordance with Pennsylvania's Storage Tank Regulation procedures and cleanup standard criteria as specified in Pennsylvania's Act 2 (benzene, toluene, ethylbenzene, and xylenes (BTEX); cumene; naphthalene; and methyl tert-butyl ether (MTBE).

- In addition to the samples collected from the monitoring wells, one (1) duplicate sample and one (1) equipment blank sample will be collected and submitted per day of sampling.

- The laboratory to be utilized should be identified in the bid package. Upon receipt of the results, the consultant should forward a copy of the analytical data to the solicitor and PAUSTIF (or its designated representative).

Task 4.0 Fate and Transport Modeling and Site Characterization Report:

Task 4.1 Fate and Transport Modeling – Fate and Transport evaluations shall be completed as appropriate 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 analysis for the Site. Please specify which modeling software will be used to predict fate and transport of the constituents of concern exceeding the PADEP statewide health standards in groundwater at the release location and its applicability to the Site.

Task 4.2 Preparation of a Site Characterization Report - Following the completion of the activities proposed in Task 1.0 and Task 2.0 as well as the two (2) groundwater sampling events from Task 3.0 and the Fate and Transport Modeling noted in Task 4.1, the selected consultant will prepare a SCR for the Site. The information gathered during the aforementioned tasks 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, and a series of summary tables, appendices, and figures illustrating the information provided in the report.

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

Within 120 days of contract execution, 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, aquifer testing and analysis, transducer survey results and analysis, and sensitive receptor information) shall be submitted electronically (in Adobe PDF format) and in hard copy to the Solicitor, ICF / USTIF and the Technical Contact for review / comment 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 draft report is to be submitted no later than the date specified in the schedule presented by the winning bidder.

Task 5.0 Risk Assessment and Feasible Remedial Alternatives Analysis:

Task 5.1 Risk Assessment Evaluation – A risk assessment evaluation shall be completed consistent with the guidelines provided in the Act 2 Guidance Manual (applicable portions of *Sections II.C.4 IV.G and IV.H*). These sections provide general information on risk assessment; developing appropriate site specific standards; discuss potential for pathway elimination; and guidance on site-specific human health assessment procedures. This guidance should be followed to conduct a risk assessment. Results of the risk assessment should be taken into consideration when developing a feasible remedial strategy and determining appropriate site specific standards for the Site. Results of the evaluation should be discussed in the Risk Assessment and Feasible Remedial Alternatives Analysis Report.

Task 5.2 – Remedial Alternatives Analysis - A Remedial Alternatives Analysis should be completed for the Site to compare cleanup alternatives and evaluate which remedial action is most appropriate for the Site and the developed site specific standards. The evaluation should specifically focus on eight (8) key considerations including 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 Risk Assessment and Feasible Remedial Alternatives Analysis Report. Information/data generated during the interim remedial activities conducted at the Site should be taken into consideration.

Task 5.3 – Risk Assessment and Feasible Remedial Alternatives Analysis Report - Following the completion of the proposed Risk Assessment Evaluation and Remedial Alternatives Analysis, a Risk Assessment and Feasible Remedial Alternatives Analysis Report should be prepared for the Site. The report should detail the procedures and findings from the completed baseline risk assessment 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 a proper closure strategy and remedial alternative for the Site. Information/data generated during the interim remedial activities conducted at the Site should be incorporated into this task.

All AutoCAD maps / plans included in the report (e.g., site plan / base map, proposed remediation location map, dissolved plume maps, soil contaminant distribution maps, etc.) and appendices (e.g., boring logs, tables, remediation technology information, fate and transport modeling, risk assessment and sensitive receptor information) shall also be submitted electronically on CD and in hard copy to Solicitor and Technical Contact for

review / comment prior to finalizing it. Once the selected consultant has addressed comments on the draft, the selected consultant shall finalize and issue the report to the PADEP.

Optional Cost Adders:

Task 1.0 through Task 5.0 above represents the base Scope of Work for this RFB solicitation. These tasks have been specifically developed in an effort to complete the PADEP's site characterization requirements. In addition to the base Scope of Work tasks, ***Optional Cost Adders*** are being requested for the following tasks:

- ***Optional Cost Adder #1 –*** Provide a Unit Cost to complete an additional groundwater monitoring and sampling event. The scope of work for this cost adder should follow Task 3.0. The cost provided should be to complete only one (1) event with all wells in the network being sampled.

- ***Optional Cost Adder #2 –*** Provide a Unit Cost to Prepare a Summary Progress Report for submittal to the PADEP. The Progress Report should detail the observations documented during the event, summarize the analytical results, map the groundwater flow direction for the Site, provide iso-concentration maps for compounds exceeding the SWHS, provide hydro-graphs, discuss the interim remediation efforts (if any), and provide additional scheduling details for upcoming events. Once the report is approved by the Solicitor, the report can be finalized and submitted to the PADEP. The progress reports discussed are being proposed to meet the PADEP obligation on progress reporting before RAP approval.

- ***Optional Cost Adder #3 –*** Provide a Unit Cost to extend the Pump test for four (4) additional hours at the Site. The pump test would be extended if stabilization does not occur by the end of the eight (8) hour pump test.

- ***Optional Cost Adder #4 –*** Provide a Unit Cost to install one (1) shallow groundwater monitoring well. The scope of work for this cost adder is to install the well to a total estimated depth of 20 feet below grade (ftbg) with approximately 5 feet of four-inch diameter, schedule 40 PVC flush threaded casing and approximately 15 feet of four-inch diameter, schedule 40 PVC flush threaded 0.010 slot size screening. The wells should be drilled and constructed in accordance with generally accepted practices as outlined in the PADEP Groundwater Monitoring Guidance Manual, dated January 1, 1999 (Document # 383-3000-001). Based on anticipated drilling conditions, a Pennsylvania-licensed driller should install the wells using air-rotary methods. This cost should be all inclusive for well installation, development, survey, and waste disposal.

- ***Optional Cost Adder #5 –*** Provide a Unit Cost to install 2-inch PVC screen and casing within the bedrock monitoring well if necessary. The scope of work for this cost adder is to construct a 2-inch diameter PVC well within the open rock bedrock monitoring well to a total estimated depth of 45 feet below grade (ftbg) with approximately 25 feet of two-

inch diameter, schedule 40 PVC flush threaded casing and approximately 20 feet of two-inch diameter, schedule 40 PVC flush threaded 0.010 slot size screening. The annular space around and two feet above the screen should be filled with well grade sand and the casing should be sealed accordingly. The wells should be drilled and constructed in accordance with generally accepted practices as outlined in the PADEP Groundwater Monitoring Guidance Manual, dated January 1, 1999 (Document # 383-3000-001).

- ***Optional Cost Adder #6 –*** Provide a Unit Cost to install one (1) bedrock groundwater monitoring well. The scope of work for this cost adder is to install the well to a total estimated depth of 45 feet below grade (ftbg) with approximately 25 feet of six-inch diameter, steel casing and approximately 20 feet of six-inch diameter, open bedrock borehole. The wells should be drilled and constructed in accordance with generally accepted practices as outlined in the PADEP Groundwater Monitoring Guidance Manual, dated January 1, 1999 (Document # 383-3000-001). Based on anticipated drilling conditions, a Pennsylvania-licensed driller should install the wells using air-rotary methods. This cost should be all inclusive for well installation, development, survey, and waste disposal.

- ***Optional Cost Adder #7 –*** Provide a Unit Cost to update the Site's survey to include any necessary additional well location(s) not included in the base scope of work. This is a fixed price unit cost per well. The scope of work for this cost adder should follow Task 2.4.

- ***Optional Cost Adder #8 –*** Provide a Unit Cost to prepare a combined SCR/RAP for submittal to the PADEP instead of a SCR. The RAP portion of the report would propose eight (8) quarters of groundwater attainment monitoring. The costs included in this optional cost adder would just be the additional costs needed to write the SCR/RAP above and beyond the costs included in the bid response to write the SCR.

SCHEDULING

As part of this RFB, the selected consultant shall be prepared to install the new monitoring wells at the Site within 30 days of the project award date and submit the draft SCR to the Solicitor, ICF / USTIF and the Technical Contact within 120 days of the project award date. In addition, a detailed schedule indicating when specific activities and reports (soil investigation, aquifer testing, report submittal, groundwater sampling, well installation activities, etc.) will be completed needs to be prepared and included in the bid response. All on-site work should be completed during the normal working days and hours of 8 am to 5 pm from Monday through Friday.

RESPONSIBILITY

The selected consultant will be the consultant of record for the Site. They will be required to take ownership and responsibility for the project and will be responsible for representing the interests of the Solicitor and ICF/USTIF 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.

QUALIFICATION QUESTIONS

Proposals need to provide answers to the five (5) qualifications and experience questions provided below:

- Does your company employ the Pennsylvania licensed Professional Geologist (P.G.) that is designated as the proposed project manager? How many years of experience does this person have?

- How many Chapter 245 projects are your company currently consultant on record for in the South-central region and all regions of Pennsylvania?

- How many Chapter 245 projects have your company and/or the proposed Pennsylvania licensed P.G. worked on in the South-central region and all regions of Pennsylvania during the last five (5) years?

- How many Chapter 245 projects have your company and/or the Pennsylvania licensed P.G. closed (i.e., obtained relief from liability from the PADEP) using either the Statewide Health Standards or Site Specific Standards? Please list.

- Has your company ever walked away from a PAUSTIF Fixed Price Contract or Pay For Performance contract without attaining all of the Milestones? If so, please explain why the contract was not fulfilled?

CONTRACT INFORMATION AND BID INSTRUCTION

The Solicitor wishes to execute a mutually agreeable fixed price contract based on unit prices for labor, equipment, materials, subcontractors/vendors and other direct costs. The prices provided in the bid will remain in effect for the duration of the project (i.e. no escalation clause). The total fixed cost quoted by the selected consultant will be the maximum amount to be paid by the Solicitor unless a change of scope is authorized and determined to be reasonable, necessary, and appropriate. A copy of the proposed fixed price contract is included in Attachment 4.

The bidding firm will need to include the following in their proposal:

- A demonstration of the bidder's understanding of the objectives of the project and the bidders approach to achieving those objectives efficiently based on the existing site information provided in this RFB;

- Provide a clear description of how the proposed work scope will be completed. The bid package should specifically discuss all tasks that will be completed under the

fixed price contract and what is included (i.e. explain your groundwater sampling method, which guidance documents will be prepared, what will be completed as part of the SRS, etc.);

- A fixed price cost estimate for work through the completion of the characterization activities;

- Provide a detailed schedule of activities for completing the proposed scope of work inclusive of reasonable assumptions regarding the timing and duration of Solicitor reviews (if any) needed to complete the scope of work;

- Indication of whether the bidder accepts or seeks changes to the proposed contract / terms and conditions;

- The bidder's level of insurance;

- The bidder's proposed unit cost rates for each expected labor category, subcontractors, other direct costs and equipment;

- The bidder's proposed markup on other direct costs and subcontractors (if any);

- Identify and describe the involvement of subcontractors;

- Identify any exceptions, assumptions, or special conditions applicable to scope;

- Cost by task and total costs must be defined within the proposal text and on the cost spreadsheets (Attachment 2 and Attachment 3);

- The bidder's total cost by task consistent with the proposed scope of work identifying all level-of-effort and costing assumptions;

- A statement of qualifications including that of any major subcontractor(s);

- Describe your approach to working with the PADEP from project inception to submittal of the SCR. 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;

- Describe how the Solicitor and ICF/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;

- Answers to the qualification questions discussed in the RFB;

- Complete the provided Milestone Payment Schedules included as Exhibit B and Exhibit C in the contract included as Attachment 4; and

- Identify the names of the proposed project team for the key project staff, including the proposed Professional Geologist of Record who will be responsible for overseeing the work and applying a professional geologist's seal to the project deliverables.

The bidder shall provide its bid using the format identified in this RFB and will provide brief descriptions of each task in the body of the bid document. In addition, the bidder will complete both the cost summary sheet included as Attachment 2, and the detailed cost sheet included as Attachment 3. An electronic version of the cost spreadsheets included in Attachment 2 and Attachment 3 (in Microsoft Excel Format) have been provided.

In addition to the cost spreadsheets, each bidder should modify the Milestone / Proposed Payment Schedules included as Exhibit B and Exhibit C of the fixed price contract in Attachment 4 to reflect the bidder's anticipated time schedule. The detailed cost spreadsheet and the RFB SOW will be incorporated as attachments to the Fixed Price Contract (also included in Attachment 4). Actual milestone payments will occur after all tasks in the milestone (as documented in Exhibit B and Exhibit C in the Fixed Price Contract) have been successfully completed and results (reports, analytical data package, boring logs, etc.) have been provided to the Solicitor.

Please bid the scope of work as provided in the RFB. Consultants are welcome to propose or suggest a change in the SOW; however the consultant 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.

The scope of work, as described in this RFB, shall be conducted in accordance with industry standards / practices, and consistent with the PADEP requirements and guidelines. The selected consultant's work to complete the tasks discussed will be subject to ongoing review by the PAUSTIF or its representatives to assess whether the work actually completed and the associated incurred costs are reasonable, necessary, and appropriate.

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 tasks identified in the bid. The standard practice of tracking total cumulative costs by bid task will also be required to facilitate invoice review.

The bid responses must clearly and unambiguously accept the provided contract or must clearly cross reference any requested changes.

In an effort to eliminate or minimize the need for change orders on a fixed price contract, please include costs to dispose of all anticipated volumes of waste in your bid response. ICF and PAUSTIF will not entertain any assumptions on the contract with regards to a volume of waste (i.e. Project costs assume that no more than 500 gallons of groundwater will extracted during the aquifer testing and require disposal). Bidders will be responsible for including costs in their bid response to cover the disposal of all potential waste related to the tasks included in the SOW. All waste generated during the completion of tasks related to the SOW

may be temporarily stored on site, but must be disposed of offsite in a timely manner. 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.

Each bid package received will be assumed to be good for a period of 120 days after receipt unless otherwise noted. Please note that ICF, PAUSTIF, and B&B will treat the bids as confidential, but that limited general information may be released by the solicitor and/or B&B after the bid selection process is completed. In addition for your reference, a copy of the PAUSTIF Competitive Bidding Fact Sheet is provided in Attachment 5. The aforementioned guidance document can provide you with additional information of the bidding process.

MANDATORY SITE VISIT

On May 25, 2011, the Technical Contact (or designee) will be at the site at 10:00 am to answer questions and conduct a site tour for a limited number of participants per firm. Please inform the Technical Contact at least five (5) business days in advance of the aforementioned meeting date as to whether your firm will be in attendance. In order to accurately track meeting participants, the subject line of the email must state the following: Hess Oil Company Bid Walk Claim No. 99-390(M). **Any firm that does not attend the May 25, 2011 mandatory site visit will not be eligible to submit a bid response.**

ATTACHMENTS

Attachment 1 – Tables, Figures, Historical Documentation and Correspondence
Attachment 2 – Cost Summary Sheet
Attachment 3 – Detailed Cost Sheet
Attachment 4 – Fixed Price Contract with Milestone / Proposed Payment Schedules
Attachment 5 – USTIF Competitive Bidding Fact Sheet