COMPETITIVE BID SOLICITATION FOR
THE COMPLETION OF REMEDIATION AND CLOSURE ACTIVITIES

Middletown Borough Highway Maintenance Facility
Wilson and Grant Streets
Middletown, PA 17057
PADEP FACILITY ID #22-60473
PAUSTIF CLAIM #1997-402(F)

ICF International (ICF), on behalf of 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 the remediation and closure requirements for the Middletown Borough Highway Maintenance (Middletown Boro) Facility (Site). A petroleum release to both soil and groundwater has been confirmed at the Site and the Pennsylvania Department of Environmental Protection (PADEP) characterization 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 #1997-402(F)) with the Pennsylvania Underground Storage Tank Indemnification Fund (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, additional 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 chemical oxidation remediation techniques. Specifically, the previous consultant discussed the use of an ozone/air-sparging system at the Site; however PADEP wanted to see results from feasibility testing before the RAP and proposed remedial strategy would be approved. The aforementioned RAP also discussed that the selected standards for this Site would be set to Statewide Health Standards (SHS) at all point of compliance wells and either SHS for the remaining site wells or a Site Specific Standard (SSS) based on pathway elimination.

This RFB includes four (4) major components with subtasks presented in an outline format for cost analysis and implementation. The fixed costs proposed by the bidders 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 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 PAUSTIF or its representatives will not be reimbursed.

Specifically, this RFB seeks competitive bids from qualified consultants to complete an appropriate feasibility study, discuss the findings of the study in a RAP that is acceptable to the

PADEP, implementation of the remedial strategy, 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 no later than close of business (5 p.m. EST) on October 29, 2009**. In addition, the outside of the package must be clearly labeled with "Bid – Claim 97-402(F)". 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 by the ICF Representative 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 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 bid but the Solicitor will ultimately choose 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 once a consultant is selected by the Solicitor, all other firms submitting bid packages will be notified that the contract was awarded via email.

SOLICITOR AND TECHNICAL CONTACT INFORMATION

ICF Representative

Ms. Jennifer Goodyear
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Technical Contact

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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: Middletown Borough RFB Questions Claim No 1997-0402(F). 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.

SITE LOCATION, OPERATION, AND BACKGROUND INFORMATION

Site Address

Middletown Borough Highway Maintenance Facility
Wilson and Grant Streets
Middletown, PA 17057
Middletown Borough, Dauphin County

Site Location and Operation Information

The Site is an active highway maintenance facility for Middletown Borough located at the intersection of Wilson Street and Grant Street in Middletown, Pennsylvania. The property is approximately one (1) acre in size and contains a maintenance garage and two (2) maintenance sheds. The former underground storage tank (UST) field was located in the northeastern portion of the Site near the two (2) aforementioned sheds. All fuel dispensing and storage equipment has been removed from the Site. A total of three (3) USTs were removed at the Site since 1994. The surrounding properties are a mix of residential and commercial properties. The Site and surrounding properties are provided with public water from the Middletown Water and Sewer Authority. The neighboring Harrisburg International Airport (HIA) property has been confirmed to be using groundwater from a network of wells located at the HIA property. Due to an open case at the HIA property, the extracted groundwater is treated. It has been estimated that wells on average pump a total of 400 gallons to 600 gallons of water per minute and are estimated to be at least 1200 feet west-northwest of the Site.

Site Background Information

A 550 gallon diesel UST was removed from the Site in August 1994. The UST was documented as having holes, but the over excavation of soil and clean post-excavation soil samples lead to a no further action determination from PADEP.

Two (2) additional USTs (one (1) unleaded gasoline UST and one (1) diesel UST) were removed in October 1997. UST closure activities conducted in 1997 documented the presence of holes in both USTs and extensive contamination that required characterization. Both of the USTs were taken out of service in 1996, but not removed until October 1997. The release from the diesel UST removed in 1997 was localized and available documentation indicates that all impacted soil was removed from the subsurface. The unleaded gasoline UST was found to have ¼“ diameter holes in the bottom of the UST, approximately 43 gallons of water in the UST, and extensive contamination leading from the UST. Following removal of the USTs, approximately 220 tons of contaminated soil in the area of the former gasoline UST was excavated. The excavation extended to competent bedrock located at an approximate depth of 17 ftbg. The excavated soil was properly disposed and the excavation was backfilled with clean aggregate. In addition,

during the activities, an underground PVC network was installed for future soil remediation efforts.

In late 1999, a soil gas survey was completed and three (3) groundwater monitoring wells (MW-1, MW-2, and MW-3) were installed at the Site. The three (2) two-inch diameter monitoring wells were advanced to a total depth of 60 feet and had between 25 feet and 30 feet of PVC riser installed in the well. The soil gas survey was conducted in an effort to obtain information on the current distribution of subsurface contamination and to properly place monitoring wells at the Site.

In April 17, 2003, a total of nine (9) soil borings were advanced by hydraulic push technology in the area of the former gasoline UST and downgradient of the former UST. Seven (7) of the borings were advanced to depths ranging from 20 ftbg to 27.5 ftbg and continuous soil samples were collected, logged, and field screened from the borings. A total of 24 soil samples were collected from the borings and submitted to a laboratory for analysis. The aforementioned samples were analyzed for unleaded gasoline parameters. The results of the sampling event indicated that all 24 samples were below the applicable SHS for all unleaded gasoline constituents with the exception of one (1) sample (S-2 from B-1), which exceeded the naphthalene MSC of 25 mg/kg with a detected concentration of 25.2 mg/kg.

From June 2003 through October 2003; a total of eight (8) monitoring wells (MW-8 through MW-15) were installed as part of the investigational activities at this site.

On August 14, 2003, an Environmental Characterization Report (Phase I) was prepared. The report indicated that petroleum hydrocarbons and MTBE were detected in the soil and groundwater in the area and downgradient of the former unleaded gasoline UST system at the Site. The Phase I discussed the monitoring well installation activities, soil gas survey, groundwater monitoring and sampling activities, and the soil boring investigations conducted at the Site. The report also discussed the completion of well search and file review activities.

On October 8, 2003, the PADEP sent the claimant a correspondence discussing the Environmental Characterization Report dated August 14, 2003. The correspondence indicated that further characterization was warranted and that interim remedial actions may be required.

In March 2004, three (3) additional monitoring wells (MW-16, MW-17, and MW-18) were installed offsite to total depths ranging from 39 feet below grade (ftbg) to 40 ftbg.

On March 22, 2004, a Phase II Environmental Characterization Report (Phase II) was submitted to the PADEP on behalf of the claimant. The report and activities related to the Phase II assessment were completed in response to the findings from the first investigation, which was summarized in the Phase I dated August 14, 2003. The aforementioned The Phase II report detailed completed well search and canvassing activities; a vapor intrusion assessment; geologic and fracture trace assessments; and summarizes groundwater monitoring and quality data.

On May 6, 2004, a soil gas survey was conducted at the Site using EMFLUX passive soil gas technology. Specifically, a total of 44 EMFLUX sampling points were installed at the Site, in Wilson Street, near the apartment building located east of the Site, and near the church located to the south of the Site. The sampling points were installed to a total depth of three (3) feet in a grid pattern. The results of the survey were summarized in a Soil Gas Report included in the May 5, 2005 Interim Characterization Report. Conclusions and Findings from the survey activities were discussed in the May 5, 2005 Interim Characterization Report.

On June 24, 2004, the PADEP issued a Notice of Violation (NOV) for the Site based on information included in the March 23, 2004 Phase II Environmental Classification Report. The correspondence indicated that the unleaded gasoline impact to both soil and groundwater from the documented October 1997 release and as discussed in the aforementioned report was to have been characterized and discussed in a SCR within 180 days of the release confirmation date or within an alternative time frame approved by the PADEP. The NOV requested that proper delineation efforts be made, site characterization process be completed, a RAP be developed, and implementation schedule be provided to the PADEP.

On November 9, 2004, a Phase Three Environmental Characterization Report (Phase III) was submitted for the Site. The report detailed the findings from an EPA file review on the neighboring Harrisburg International Airport Property, which has also been identified as the "Middletown Air Field Superfund Site" by EPA administrative Records. The discussion on the file review of the HIA property discusses the current case as well as provides details on current supply wells in use. The Phase III also discusses the May 6, 2004 soil gas sampling activities, groundwater monitoring and sampling events, and an exposure pathway evaluation. Proposed remedial activities discussed in the report for the Site include the removal and disposal of the remaining impacted soil present near the former gasoline UST and the use of in-situ remediation of the dissolved phase groundwater impact. The report discusses multiple technologies considered for this Site, concludes that "In-well air stripping and vapor extraction" and "Chemical oxidation using active ozone injection", and indicates that both of selected technologies will be tested for a four (4) week period at the Site and then subsequently evaluated for its performance and cost effectiveness. Conclusions and an approximate schedule were provided at the conclusion of the report.

On January 6, 2005, the PADEP sent the claimant a correspondence in response to the Phase III Report submitted in November of 2004. The PADEP indicated in the correspondence, that they concur with the proposed soil excavation event, pilot testing and plan to improve the well configuration. The letter also addressed concerns over the discussion and need of soil gas testing and the submittal of a RAP by February/March of 2005.

In April 2005, an Interim SCR was submitted to the PADEP on behalf of the claimant. The report detailed recent investigations and discussed future proposed events. The report indicated that additional activities were planned and that the events would be summarized in a Final SCR which was anticipated to be submitted by June 15, 2005.

On November 22, 2005, the previous consultant submitted a SCR on behalf of the claimant. The SCR detailed the history of the site, release information, investigations completed, and discussed proposed remediation efforts that are detailed in a RAP also submitted to the PADEP on November 22, 2005. The SCR indicates that the PADEP statewide health standards have been selected for soil and that site specific standards have been selected for groundwater at the Site. The SCR summarizes the data collected during the investigation, provides figures with sampling locations, and details preliminary predictive modeling efforts for the Site. A copy of the correspondence is included in Appendix F.

On November 22, 2005, the previous consultant submitted a RAP on behalf of the claimant. The RAP summarized the site characterization activities and findings and detailed a proposed remedial strategy for the Site. The remedial strategy presented in the RAP indicated that the previous consultant intended to use an ozone/air-sparging system to address the impact to groundwater quality at the Site. Initially, the prior consultant was anticipating the completion of a feasibility study of the technology at the Site and than following evaluation and adjustments of the technology would be expanded across a wider treatment area. The RAP also established that the intended endpoint of remediation at the Site was the following:

> "No applicable Non-residential and Residential Used Aquifer SHS MSCs will be exceeded in the Point of Compliance (POC) groundwater monitoring wells (identified as MW-4, MW-5, MW-9, MW-11, MW-14, MW-16, MW-17, MW-18, MW-19, MW-20, MW-21, and MW-22) for eight consecutive quarters. Attainment of the SHS MSCs for the identified COCs in the POC wells will take into account the statistical method presented in §250.707 (b)(2)(i)(A) and (B) which states, "Seventy-five percent of all samples collected within each monitoring well over time shall be equal to or less than the Statewide Health Standard or the limit related to PQLs with no individual sample exceeding both of the following: ten times the Statewide health standard on the property or two times the Statewide health standard beyond the property boundary."

The PADEP responded to the November 22, 2005 SCR in a correspondence dated January 20, 2006. The correspondence indicated that the Department generally concurs with the site characterization (delineation) aspects of this submission and then goes on to offer some general comments. A copy of the correspondence is included in Appendix F.

On January 20, 2006, the PADEP responded to the November 22, 2005 RAP submitted for the Site. The PADEP correspondence indicated the following:

> "The Department concurs that the proposed, conceptual air sparging and chemical oxidation plan is potentially viable. However, as the technology has not yet been pilot tested onsite, we are unable to formally approve the plan at this time. Therefore, an exacting summarization of a pilot study that establishes the dual concept's workability, as well as the specific details of its application onsite, should be provided in due course."

Groundwater sampling was conducted on a periodic basis from March 2003 through August 2005. It is unclear as to whether the previous consultant did any additional events after the

August 2005 event and to date we have been unable to confirm any additional event information from the previous consultant or the PADEP (as no recent data was available in the PADEP file for the Site). In an effort to provide bidders with more recent data, a groundwater monitoring and sampling event was conducted in November 2007. The analytical data indicates the presence of benzene, toluene, ethylbenzene, MTBE, and naphthalene at concentrations above the applicable PADEP SHS in at least one (1) of the monitoring wells sampled. The data is summarized in the attached summary tables and a copy of the laboratory package has been included with this RFB.

Bidders are directed to the pertinent available documentation (including reports, figures, correspondence and analytical data) that has been provided in Attachment 1 (on the included CD) 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;
- Prepare and meet with the current PADEP case manager to discuss the feasibility testing option(s) proposed;
- Complete a full and updated Sensitive Receptor Survey;
- Conduct quarterly groundwater monitoring and sampling events (including attainment monitoring events required to meet regulatory restrictions);
- Survey and map the important features of the Site (Please note that a digital version of the map is not available and as such will not be provided to the winning consultant);
- Prepare and execute an appropriate feasibility study for the remedial application(s) selected;
- Prepare and submit a RAP addendum that documents and appropriately analyzes the completed feasibility efforts and details a remedial system design;
- Implement the selected remedial strategy;
- Prepare and submit quarterly progress reports to the PADEP;
- Assist the claimant on securing an appropriate deed restriction for the property;

- 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;

- Complete a risk assessment evaluation in an effort to appropriately develop Site Specific Standards through pathway elimination;

- Prepare and submit a Remedial Action Completion Report (RACR) proposing appropriate Site Specific Standards; and

- Properly abandon all wells in the monitoring well network and complete the required forms documenting the abandonment activities.

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 selected consultant 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 – An updated 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 RACR to be submitted to PADEP.

Task 1.4 PADEP Meeting – In an effort to involve the PADEP from the beginning of the project and expedite the regulatory process, the winning bidder should plan on meeting with the current PADEP case manager to discuss the proposed feasibility testing work plan and associated schedule of activities at the Site. Any comments provided by the PADEP case manager will be discussed with the claimant and USTIF (or its administrator) and if necessary, changes to the SOW will be made. For bidding purposes, please assume that the meeting will be held at the PADEP office in Harrisburg, PA.

Task 1.5 Site Survey and Mapping - A professional survey of the Site by a Pennsylvania-licensed surveyor including all current site features (e.g., buildings, property boundaries, monitoring wells, etc.) and where possible, the locations of the former UST field and dispenser island shall be conducted. Subsequent to investigation activities, the base map should be updated to include the surveyed groundwater monitoring wells, borings, features, and topography. Please note that a digital version of the current map is not available and as such will not be provided to the winning consultant.

Task 2.0 Remedial Feasibility Testing, System Design, Reporting and Implementation Activities:

Task 2.1 Feasibility Study - Based on the existing site specific data, including subsurface geologic conditions, hydrologic conditions, and contaminant physical properties, select an appropriate remedial technology and complete feasibility/pilot studies to enable the design of an effective and efficient remediation application. The feasibility study should be designed to ensure that sufficient data is collected to enable a full scale remediation system design. Please note that each bidder should consider all available technologies and not just that which was proposed by the previous consultant. Submitted bid packages must include the specific criteria in which the results from the feasibility testing will be evaluated and determined feasible or not. Criteria should be detailed with expected results range for the strategy to be considered feasible, specific levels where an evaluation would consider the strategy not to be appropriate for the site (i.e. – actual cut off numbers that would indicate that the technology is appropriate or not.) and should include performance criteria relevant to the technology (i.e. – pumping rates, radius of influence, vacuum recovery rates, measured drawdown, chemical or biological testing or conditions, etc.). It should be noted that if the feasibility test results

fall outside the selected consultant's pilot test criteria (as specified in the bid package), the selected consultant may seek to withdraw from the awarded contract. If the selected consultant elects to withdraw from the contract, then the selected consultant will only be paid for the milestones completed and actual number of groundwater sampling events completed.

Task 2.2 Preparation of RAP addendum report – Prepare and submit a RAP addendum report for the PADEP approval that will detail the methodology and results of the feasibility study completed for the remediation technology selected. Provide appropriate analysis and recommendations based on the testing conducted as part of Task 2.1. The information gathered during the activities completed as part of Task 1.0 and Task 2.0 will be incorporated into the RAP addendum and is to be taken into consideration when proposing a remedial strategy. The RAP addendum should present a clear discussion to the PADEP as to what testing has been completed, the results (lab and fields) collected, and a structured argument as to why the selected remedial strategy is appropriate and applicable for this Site. The RAP should also detail the feasibility testing procedures and results as well as provide the design and specifications of the remedial strategy to be implemented at the Site. Specifically, the selected consultant should include tables, figures, and attachments that detail the proposed remediation specifics, equipment specifications, operation parameters, and any applicable drawings or figures (i.e. P&IDs, remediation location figures, etc.) in the RAP addendum. The format and content of the report shall be generally consistent with 25 PA Code §245.309 and §245.310. The RAP addendum shall be sealed by a Professional Geologist registered in the State of Pennsylvania. A draft copy of the report shall be submitted electronically (in Adobe PDF format) and in hard copy to Solicitor and Technical Contact for review / comment prior to finalizing the RAP addendum. Once the selected consultant has addressed comments on the draft, the selected consultant shall finalize and issue the report to the PADEP. The report submission is to be submitted no later than the date specified in the schedule presented by the selected consultant. All AutoCAD maps / plans included in the report (e.g., site plan / base map, groundwater elevation maps, dissolved plume maps, soil contaminant distribution maps, feasibility result maps, etc.) and appendices (e.g., boring logs, tables, disposal documentation, feasibility testing and analysis, lab data, and sensitive receptor information) shall also be submitted electronically on CD to the Solicitor and Technical Contact.

Task 2.3 Implementation of the selected remedial strategy – Upon selection and PADEP approval of an appropriate remedial strategy, the selected consultant is to implement the strategy at the Site. In the bid package, firms are to specify how, where, and when the remediation strategy will be implemented. Descriptions and discussion on the execution of the strategy need to be clear and detailed. Specifically, the bid package should include maps, anticipated equipment lists, vendor/subcontractor information and laboratory information. If a bidder is proposing the feasibility testing of more than one type of technology in Task 2.1, then that bidder needs to provide a cost and description for each of the proposed technologies.

Task 3.0 Quarterly Monitoring, Sampling and Reporting:

Task 3.1 Groundwater Monitoring and Sampling – For this RFB, please discuss the total number of groundwater monitoring and sampling events that will be needed through closure of this project with PADEP. This includes any events needed to complete the PADEP's attainment monitoring requirements. Please note that PAUSTIF will only pay the winning firm for the actual number of events conducted (i.e. if a firm includes the costs to complete 16 events, but only 13 events are needed and conducted; than the firm will only be paid for the 13 event completed). It is also requested that firms consider proposing a reduction in the sampling frequency of non-key wells at the Site. Please specify in the bid or provide a proposed sampling schedule that details which wells will be sampled during each event and indicate which events are anticipated to be attainment monitoring events.

Based on the available information, the monitoring wells at the Site were installed to total depths ranging from 35 ftbg to 150 ftbg. Depth to groundwater is estimated to be between 21 ftbg and 37 ftbg, Each event should include the following:

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

- Record the depth to water readings 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, approximately three (3) volumes of the water column should be purged from each of the wells;

- 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 from a bailer into laboratory supplied bottleware;

- All liquids generated during the sampling events should be treated onsite with a portable GAC treatment system;

- 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 methods 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; methyl tert-butyl ether (MTBE); and

- 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 3.2 Preparation of Progress Reports – Following the completion of each sampling event and the receipt of the analytical data, a draft quarterly progress report summarizing the findings during the previous quarter is to be prepared and submitted to the claimant for review. The letter 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 SHS, provide hydro-graphs, discuss the progress of the remediation efforts, and provide additional scheduling details for upcoming events. Once the report is approved by the claimant, the report can be finalized and submitted to the PADEP. The progress reports discussed in Task 3.2 are being proposed to meet the PADEP obligation on progress reporting both before and after RAP approval.

Task 4.0 Site Closure Activities:

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 modeling 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 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 site-specific standards and pathway elimination, and guidance on site-specific human health assessment procedures. This guidance should be followed to conduct a risk assessment and to develop site-specific standards. If complete exposure pathways exist, the fate and transport analysis, which is part of the exposure assessment, should be documented in the risk assessment section of the RACR. Information/data generated during the remedial activities conducted at the site should be incorporated into this task.

Task 4.3 Preparation of RACR – Prepare and submit a RACR for the PADEP approval that will appropriately present an evaluation the current Site conditions and present significant conclusions and request closure from the PADEP. The information gathered during the activities completed as part of Task 1.0, Task 2.0, Task 3.0 and Task 4.0 should be incorporated into a comprehensive RACR that will be submitted to the PADEP and will facilitate the objective to complete regulatory requirements governing the RACR 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 Remedial Action Completion Report. The RACR shall be sealed by a Professional Geologist registered in the State of Pennsylvania. A draft RACR shall be submitted electronically (in Adobe PDF format) and in hard copy to Solicitor and Technical Contact for review / comment prior to finalizing the RACR. Once the selected consultant has addressed comments on the draft, the selected consultant shall finalize and issue the report to the PADEP. The report submission is to be submitted no later than the date specified in the schedule presented by the selected consultant. 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, disposal documentation, feasibility testing and analysis, 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.

Please assume for bidding purposes that an electronic version of the AutoCAD file and excel tables will be provided for the Site to the selected consultant.

Task 4.4 Uniform Environmental Covenant – The selected consultant would be assisting the solicitor with the preparation of the Site Uniform Environmental Covenant language by customizing the PADEP provided examples to the claimant's specific needs.

For bidding purposes, please assume that the claimant will be responsible for the final review, submission, and recording by an appropriate legal professional.

Task 4.5 Well Abandonment/Site Restoration – The selected consultant will abandon all of the monitoring wells in accordance with Pennsylvania Act 610 and the Groundwater Monitoring Guidance Manual dated February 29, 1996. Upon completion, a well abandonment report will be prepared and submitted to the DCNR on behalf of the claimant. Bidders should specify in the bid packages how the wells will be abandoned and the site restoration activities included in the specified costs.

SCHEDULING

As part of this RFB, the selected consultant shall be prepared to conduct the first groundwater sampling event at the Site within two (2) weeks of the project award date. In addition, a detailed schedule indicating when specific activities and reports (pilot testing, report submittal, groundwater sampling, remediation schedules, etc.) will be completed needs to be 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; with exception of any long term pilot study activities which may require additional on-site consecutive time.

QUALIFICATION QUESTIONS

In order for proposals to be considered administratively complete, the proposals need to provide answers to the six (6) 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 Southcentral 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 Southcentral 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?

- Has your company and/or the proposed Pennsylvania licensed P.G. previously completed pilot study activities and remediation design and employed remediation technologies similar to what is proposed in your bid package? Please provide a detailed response and case studies to support the previous experience.

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 work plan 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 RACR. 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;

- Clear definition (including specific criteria and values) of the performance criteria that will be used to evaluate whether the feasibility testing is appropriate for this Site or not;

- 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.

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 no longer 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 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.

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 October 1, 2009, the Technical Contact (or designee) will be at the site at 10 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: Middletown Borough Site Meeting Claim No 1997-0402(F). **Any firm that does not attend the October 1, 2009 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 – PAUSTIF Competitive Bidding Fact Sheet