

COMPETITIVE BID SOLICITATION TO COMPLETE EXCAVATION OF CONTAMINATED SOILS AND ASSOCIATED TASKS

Buffalo Valley Supply Corp.
660 Saint Mary Street, Lewisburg, PA
PaDEP Facility ID# is 60-10959
PaUSTIF Claim Number 96-102(M)

ICFI, on behalf of USTIF is providing this Request for Bid (RFB) solicitation to prepare and submit a fixed-price proposal to complete tasks including the excavation, transportation and disposal of an estimated 3,000 tons (more or less) of unleaded gasoline impacted soils with appropriate backfilling using materials/procedures suitable for loading dock area truck traffic (current usage) adjacent to the Buffalo Valley Supply Corp. (BVSC) commercial plumbing, heating, and HVAC supplies facility warehouse (Site). The BVSC warehouse assigned address is 600 Saint Mary Street, Lewisburg, PA but it is more descriptively located at the end of Blueberry Alley, offset by ~200 feet from St. Mary Street behind a building owned by Central Builders Supply. The 660 St. Mary Street address also found in the files is the claimant's mailing address at the nearby BVSC/Silvertip, Inc. office building.

The Solicitor has an open claim (Claim #96-102(M)) with the Pennsylvania Underground Storage Tank Indemnification Fund (PAUSTIF) and the work outlined in the 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.

This RFB includes Eight (8) major components with subtasks presented in an outline format for cost analysis and implementation. The fixed costs proposed by 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 bidder'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 remove the remaining hydrocarbon mass at the Site via excavation to the extent practical quickly, efficiently, and in a manner that minimizes disruption to the claimant's business, and to complete associated tasks to facilitate progress towards site closure in a timely, efficient, and cost effective manner.

Austin James Associates, Inc. (AJA) on behalf of the PAUSTIF and ICF International (ICFI), will serve as the technical contact for this RFB solicitation process. As such, any questions related to the Site or the bid should be submitted to the technical contact in writing via email with the understanding that all questions and answers will be provided to all bidders. Bidders must not discuss this RFB Solicitation directly with the Solicitor, PaDEP, PAUSTIF, or ICFI unless approved by the Technical Contact. Questions for any of these parties should also be submitted via email to the technical contact who will seek the answers and relay the results to all bidders (typically via email). In addition, as technical contact, AJA will be facilitating a mandatory pre-bid Site **meeting on Thursday, September 10, 2009 at 1 PM**

and assisting the Solicitor in evaluating the received bid responses. The Site meeting is mandatory and if not attended, then a received bid response will not be considered.

While not mandatory, AJA respectfully requests that you send an email to ajaeric@epix.net indicating whether your firm expects to attend the meeting and how many representatives from your firm are expected. Please limit the number of representatives to no more than two (2) per bidding firm.

The attached RFB package provides the information needed to complete an appropriate bid response. The successful bidder will be expected to sign a contract with the Solicitor which is very similar to one in **the Draft Example provided.**

It is expected that the selected consultant's approach to completing the bid tasks will be in accordance with generally accepted industry standards / practices and all applicable federal, state, and local rules and regulations, including the requirements of the Storage Tank and Spill Prevention Act (Act 32 of 1989, as amended) and Pa. Code, Title 25, Chapter 245, the Land Recycling and Environmental Remediation Standards Act (Act 2 of 1995) and Pa. Code, Chapter 250 (Administration of Land Recycling Program). Any modification to the selected consultant's authorized SOW will require prior written approval by the Solicitor and PAUSTIF through its third-party administrator.

It is currently anticipated that the successful bidder will be directly reimbursed by PAUSTIF for approved, reasonable, necessary, and appropriate costs (up to the limits of the claim). The Solicitor, USTIF/ICFI Technical Contact, and ICFI Representative information is provided below.

On behalf of ICF and PAUSTIF, the Technical Contact will assist the Solicitor in evaluating the bids, 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 bidder with an approval to proceed within four (4) weeks of the bid response deadline.

ICFI REPRESENTATIVE AND TECHNICAL CONTACT INFORMATION

ICFI Representative

Ms. Jennifer Goodyear
ICF International
4000 Vine Street
Middletown, PA 17057
Email: jgoodyear@icfi.com

Technical Contact

Eric Henry
Austin James Associates, Inc.
P.O. Box U
Pocono Pines, PA 18350
Telephone: (570) 646-5431
Fax: (570) 646-1484
Email: ajaeric@epix.net

All completed bid responses are due to the specified ICFI representative no later than **Friday, October 9, 2009 at 5 PM.** Any bid responses not received by this time will not be considered. Please note that each bidder will need to submit one (1) hard copy and one electronic copy on CD to the ICF representative at the contact information provided in the

package. The outside of the package must be clearly labeled "Bid – Claim #96-102(M)". The received bids will be opened and evaluated after the aforementioned deadline expires and the solicitor anticipates contacting the winning bidder within four (4) weeks.

Additional Bid Response Requirements

This RFB primarily involves a large-scale soil excavation with dewatering, soil segregation decision-making, presumed-clean fill piles construction, offsite disposal coordination, confirmatory soil sampling, coordination with PADEP, USTIF/ICFI personnel, the claimant (property owner), technical contact and reporting of results (not all inclusive).

Bidders are required to provide a summary of the petroleum impacted soil excavation related experience that they expect bring to the project. This especially includes personnel expected to in responsible charge (PG or PE) but should also include field personnel experience. In the event that use of a subcontractor(s) is planned, the subcontractors experience may be relayed as well. Information regarding the nature and extent of experience with work similar to the work being bid should be highlighted. This may include experience with large excavations, excavations requiring dewatering, construction of large onsite soil piles (presumed-clean fill piles, bio-piles, etc.). Bidders are also encouraged to describe either their specific plans or general plans/technique for managing excavation dewatering which they feel will document their experience or capabilities for the type of work proposed. Bidders may obtain and relay this type of information from qualified subcontractors as appropriate.

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 use the subject header: "**BUFFALO VALLEY 96-102(M) - QUESTION**". Bidders must neither contact nor discuss this RFB Solicitation with the Solicitor, PAUSTIF, or ICFI 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, AND OPERATIONAL INFORMATION BACKGROUND INFORMATION

Site Address

Buffalo Valley Supply Corp. Warehouse
600 Saint Mary Street
Lewisburg, PA 17837

Claimant's Office

Buffalo Valley Supply/Silvertip, Inc.
660 Saint Mary Street
Lewisburg, PA 17837

Site Location and Operational Information

The Site property consists of an active commercial plumbing, heating, and HVAC supplies warehouse which takes up ~40% of the 0.83 acre property area. Following the 1996 removal of the 10,000-gallon unleaded gasoline tank, line and dispenser, there has been no petroleum UST storage or dispensing at the Site. Warehouse operations are managed from the claimant's office building on an adjacent property. The Site property is bordered on two sides by the Central Builders Supply (concrete production facility) property and several Site wells are located on that property. The line (apparent source of the release) from the former gasoline tank to the former dispenser at the north corner of the warehouse passed next to the warehouse's sole loading dock and hydrocarbon impacted soils are present throughout this area. Minimizing the time that the loading dock is out of service will be a critical aspect of the work.

SITE BACKGROUND INFORMATION

1996 Release

The impacted soils resulted from a release discovered during the 1996 removal of a 10,000 gallon unleaded gasoline UST system (tank, line and dispenser). This system has not been replaced and there have been no additional USTs on the Site since that time. The Site property size is about 0.83 acres with roughly 40% of this space occupied by the warehouse building.

Remedial Activities to Date

In 2000 a remedial system attempt was made by the original consultant using a system designed to slurp contaminated shallow groundwater, SPL and air from the six (6) shallow Site monitoring wells (MW1-MW6) which were later renamed RWF, RWE, RWD, RWB, RWC, and RWA, respectively. These wells were cased below the typical water table with piping to a common area near the north corner of the warehouse where they connected to a trailer mounted system including an extraction unit and vapor and liquid phase GAC units.

The system operated for one hour after startup before the three liquid phase GAC canisters/drums were overwhelmed by separate phase liquid (SPL) hydrocarbons and had to be rebedded with fresh carbon. Following breakthrough of this second and then a third batch carbon (half and hour of runtime each) operations were discontinued. Various attempts to upgrade and/or repair the system including addition of an oil/water separator were also unsuccessful and the equipment was eventually removed from the Site by the original consultant in April of 2002. A new consultant had been retained beginning in September 2001.

Subsequent remedial activities consisted of SPL recovery using passive skimming devices installed by the new consultant (in April 2002) in former slurping wells with SPL (RWA – RWD). This was relatively unsuccessful due at least in part to the configuration of the slurping wells, which are cased below the typical water table.

Additional borings (GF1-GF8) were completed in June 2002 with GF1-GF3 completed as monitoring wells. Monitoring wells GF9-GF11 were installed in April 2003 with substantial product evident in GF9 (near the original consultants slurping well MW3 renamed RWD which had 1.5' of SPL the month after the April 2000 system startup attempt). A geophysical survey in August 2003 was followed by completion of additional geoprobe soil borings (B-1 to B-19) in February 2004. These borings documented SPL to the NW, W, SW and SE of GF9 and led to the installation of wells GF12-GF15 (surrounding GF9 within a 20' to 35' radius) in August 2004. Each of these four wells has manifested SPL though not consistently in GF12).

In October 2006 a large number of wells and borings were replaced/installed/completed. GF1A-GF3A replaced GF1-GF3 which had slightly or sometimes drowned screens. GF4 was installed to get valid data near the drowned slurping well RWF, and GF16-GF25 were installed along with 40 soil borings (SB1-SB40) to improve characterization of the adsorbed phase and dissolved phase plumes and the extent of SPL manifestations. Since this time, SPL has manifested consistently in GF9 and GF13-GF16 and occasional in GF12.

Several vacuum truck slurping events and a large number of hand bailing events have been completed since installation of the SPL wells GF9 (installed in April 2003), GF12-GF15 (installed in August 2004), and GF16 (installed in October 2006) resulting in substantially improved reduction of the recoverable SPL mass although this mass was a small proportion of the expected total.

In a May 2007 report a bioslurping application was proposed by the new consultant to be pilot tested for the site based on an expectation of significant mass removal via extraction of SPL hydrocarbons. Evaluation of the hydrocarbon mass distribution and other site factors during a third party review evaluation resulted in a conclusion that pilot testing was not necessary to determine that a bioslurping application could not be expected to result in a favorable Site prognosis. This was due in part to the relatively low fraction of the hydrocarbon mass that was determined to be present/recoverable as SPL relative to the much larger mass adsorbed to Site soils both above and more importantly below the typical shallow water table. This evaluation also indicated that excavation might be the only viable option to remove the bulk of the substantial remaining hydrocarbon mass in a manner that could be reasonably expected to facilitate site closure within a reasonable period of time and at a reasonable cost. The new consultant discontinued work on the project in late 2007 and the claimant has opted to pursue the excavation option.

During 10 SPL bailing events from 3/5/08 to 6/2/09 (frequency managed to optimize recovery efficiency), recoverable SPL appears to have declined substantially with approximately 30.4 gallons total recovery but with only 5 of those gallons recovered during the last 4 events and with the recoverable SPL accumulation rate averaging only 0.11 gallons per week of accumulation time based on the last 3 events. This indicates that only 0.33 gallons would accumulate in the SPL wells in 3 weeks. Under a seemingly conservative assumption that an excavation pit would result in 100X the recent total well accumulation rate, about 33 gallons (about 231 lbs.) of SPL would be expected during a 3-week excavation.

The PaDEP case manager (Mr. Thomas Yannaccone, PG) has reviewed various reports, discussed the project with the third party review consultant and the solicitor, provided correspondence dated January 12, 2009 regarding the proposed excavation work which provides regulatory guidance including a list of comments/concerns that the successful

bidder will need to address, and has reviewed and offered comments on some early draft text outlining the bid opportunity. Mr. Yannaconne has indicated general support for the proposed work and specified that the successful bidder may use simple correspondence (No RAP required) to provide the additional information needed for his approval to move forward. Some of the comments and concerns in the January 12, 2009 correspondence have likely been addressed somewhat in this RFB and presumably in the successful bid response.

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). Your bid response should follow the task format outlined below the SOW Summary and discussion on minimizing business disruption. 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](#).

Scope of Work Summary

Along with the excavation, transportation and disposal of an estimated 3,000 tons of unleaded gasoline impacted soils with backfilling mentioned above, the Scope of Work also involves dewatering, pre-excavation soil sampling for pre-approval by the disposal facility, post excavation soil sampling for demonstration of attainment purposes, the installation of ~5 or 6 shallow monitoring wells and the installation of a network of ~6 shallow screened 2" horizontal vent lines (~20'-25' of screen each with ~3 feet unscreened between segments) to encompass ~150 linear feet of the building/loading dock perimeter. It also includes post excavation groundwater sampling and data collection and preparation of a comprehensive report documenting all of the RFB work and results.

Minimizing Business Disruption

Since the excavation work will prevent claimants use of the business-critical warehouse loading dock for some period of time, the Scope of Work includes close coordination with the claimant so that he has reasonable notice to make alternate shipping/receiving arrangements. RFB responses should be designed around a ~3 week timeframe (for continuous interruption of loading dock use) to prevent excessive additional disruption to the claimant's business. Shorter term interruptions (after the primary excavation is backfilled and the loading dock usable) such as a few hours to trench/pipe/and backfill the portion of the horizontal vent lines where they cross the loading dock entrance should be acceptable but will also require coordination with the claimant.

Task 1. Obtain any Permits, Approvals, and Authorizations Necessary to Initiate the Work and Complete Pre-Approval Soil Sampling.

Task 1.1 Permits, Approvals, Access, Discharge Authorization

This Task includes coordination with the PaDEP case manager (Mr. Thomas Yannaconne, PG) including correspondence with detail sufficient to gain approval for the

work considering the concerns raised in the January 12, 2009 PADEP correspondence. This task also includes costs for the consultant (and his contractors, etc.) to obtain any and all permits, contractor's licenses, etc. that may be required to implement the work. The Solicitor has indicated a good relationship with the adjacent (Central Builders) property owner. This task also includes obtaining and documenting approval to extend the BVSC excavation onto a small portion of the adjacent Central Builders property in the vicinity of monitoring well GF3A as shown on various figures in the attached reports.

Mr. Yannaccone has reviewed a draft of the bid opportunity email/letter text and has indicated general concurrence with the planned work. However, the successful bidder will need to provide additional details via correspondence sufficient to show (to the PaDEP's satisfaction) that the concerns raised in the PaDEP correspondence dated January 12, 2009 (See [Attachment 1](#)) will be addressed. This letter responded to a QMR generated by the third party review consultant (AJA), which outlined the recommended work and plans to bid it out (See [Attachment 1](#) for recent QMR's). While your RFB response should address the PaDEP concerns this task includes your costs to present them to PaDEP and to follow-up promptly as necessary to gain approval to implement the RFB work. Mr. Yannaccone has specified that the necessary information may be provided by simple correspondence. He is NOT requiring a RAP.

This task also includes obtaining a Temporary Discharge Authorization from PaDEP for dewatering activities. Bidders may assume that the storm water inlet directly adjacent to the excavation area (roughly 20' to 25' NE of the loading dock) will be available for this use. This task also includes consulting time and correspondence as needed to obtain general approval for soil disposal. This task does NOT include pre-excavation soil sampling. This task does include presentation of an excavation pit sidewall sampling plan to PaDEP using a random grid pattern acceptable for demonstration sampling along with PaDEP discussion and coordination as needed

Task 1.2 Utilities Markout/Verification

This task includes costs to verify all underground utilities at the Site. These should include those related to the storm drain inlets near GF21 and RWA, an underground electric (UE) line shown on some maps near the western property corner and an underground gas (UG) line shown on some maps crossing Blueberry Alley towards the middle of the SW edge of the warehouse and any others that may exist.

Task 1.3 Pre-Approval Disposal Sampling

This task includes all costs associated with obtaining disposal facility pre-approval including pre-excavation geoprobe type soil sampling and analyses if/as required by the disposal facility selected by the bidder. Bidders should assume 2,000 cubic yards equal to 3,000 tons for the purpose of providing disposal sampling and analytical costs. One facility permitted to accept soils with up to 30,000 ppm of TPH has the following analytical requirements and limits (for reference only – bidders must determine requirements for the facility(s) they propose to use):

TPH by Method 8015	One composite per 100 cubic yards	<30,000 ppm
VOC by Method 8260	One grab every 800 cubic yards	varies
Total Metals by Method 6010	One grab every 800 cubic yards	(see below)
Arsenic	39.5 ppm	
Antimony	340 ppm	
Barium	2000 ppm	

Beryllium	5 ppm
Cadmium	48.5 ppm
Copper	1000 ppm
Lead	1390 ppm
Nickel	708 ppm
Thallium	6 ppm
Zinc	4500 ppm

TCLP Metals by Method 1311/6010 One per Site Must be non-Hazardous
 Arsenic
 Barium
 Cadmium
 Chromium h
 Chromium t
 Lead
 Mercury
 Selenium
 Silver

Paint Filter by Method 9095 One per site Must be Negative

For this example disposal facility the analytical requirements for a 2,000 cubic yards (~3,000 tons) excavation would be:

- 20 for TPH by Method 8015
- 3 for VOC by Method 8260
- 3 for Total Metals by Method 6010
- 1 for TCLP Metals by Method 1311/6010
- 1 for Paint filter by Method 9095

This is only an example specific to one facility. Bidders will be need to prepare their bids considering the necessary pre-approval disposal sampling specific to the disposal facility(s) they plan to utilize. Reasonable and appropriate excess sampling and analytical costs resulting from disposal in excess of 2,000 cubic yards (3,000 tons) will be considered Out-of-Scope items reimbursable under standard USTIF criteria with appropriate documentation and approvals.

Task 2.0 Excavation, Transportation, Disposal, and Backfilling

Task 2.1 Costs Per Ton Of Soil Excavated, Transported and Disposed at an Appropriate Offsite Facility

This task includes the Cost per ton of soil excavated, transported, and disposed at an appropriate facility to cover all direct and indirect costs related to this task. This includes all professional time, field staff time, contractor costs, equipment rentals, fencing, safety equipment, power or generators, O&M for dewatering equipment except for items covered under Task 3, and coordination with the claimant, PaDEP and ICF or their representative as needed. The bid basis amount is 3,000 tons (2000 yds³) from the area shown on the attached **Figure 1 - RFB Map** included in **Attachment 1**. The actual extent is to be adjusted as appropriate based on field observations, PID data and considering all of the provided data (especially the 2006 soil boring sample results). The average excavation depth is estimated at 10 feet but may reach ~13' in places based on the October 2006 soil boring results.

The excavation should extend only as close to the building and utilities as can be safely accomplished without risk of damage to any building or utility line structure.

The provided cost per ton is also to include removal of approximately 16 shallow wells (some with related piping) with total depths ranging from 6.4' to 15.2' below grade within or close enough to the anticipated excavation area that they are not expected to survive the excavation process. Since none of these wells extend more than a few feet below the anticipated average excavation depth of 10', and none extend into bedrock (no risk of cross contamination to a deeper zone), bidders must confirm but may assume that the PaDEP case manager (Mr. Thomas Yannaccone, PG) will permit them to be simply dug out during the excavation process. Some portion of the excavation may need to be extended close to the maximum total well depth in any case.

This task is based on a fixed price per ton of soils excavated + transported + disposed as documented on disposal facility weight tickets. This \$/ton rate is to include and encompass all costs associated with this task except for the collection and analysis of post excavation soil samples and certain dewatering related items covered in a later task.

It includes all professional time, field staff time, contractor costs, equipment rentals, fencing, safety equipment, power or generators, O&M for dewatering equipment except for items covered under Task 3, and coordination with the claimant, PaDEP and ICF or their representative as needed. The bid basis amount is 3,000 tons (2000 yds³) from the area shown on the attached **Figure 1 - RFB Map** included in **Attachment 1**. The actual extent is to be adjusted as appropriate based on field observations, PID data and considering all of the provided data (especially the 2006 soil boring sample results). The average excavation depth is estimated at 10 feet but may reach ~13' in places based on the October 2006 soil boring results.

Task 2.2 Costs Per Ton Of Suitable Emplaced Fill

This task includes the Cost per ton for a suitable combination of emplaced excavation backfill. This includes all direct and indirect costs related to the purchase, transportation emplacement, and compacting of backfill as appropriate to restore the loading dock area usage and to be consistent with subsequent repaving (repaving not part of this bid). The uppermost foot of fill is to be modified crushed gravel suitable as a paving sub-base.

Task 2.3 Collection and Analysis of 12 Post-Excavation DOA Samples

This task includes all costs associated with collection of post excavation soil samples in a manner that is suitable for Demonstration of Attainment (DOA) use. Mr. Yannaccone has indicated that this is possible but must be done correctly and without mixing methods (no discreet sample collection when planning use of random grid based DOA location selection).

This may involve projecting the excavation perimeter (estimated ~335 feet) along a line, dividing that line into 12 equal segments each 28 feet long then using the EPA's systematic random grid generation spreadsheet to randomly assign a spot along each segment and a random sample depth (selected from an appropriate depth interval). This interval may be 3' below grade to 13 feet below grade if below the water table impacts are to be included or may be ~3' to 7.5' if saturated zone impacts >SHS are not to be included (since they would be addressed by groundwater sampling).

This task is to include time and costs to present a proposed DOA sampling plan and to coordinate with PaDEP as needed to confirm that results will be acceptable for DOA use (if appropriate) as well as the costs associated with collection, analysis and reporting of the results.

Task 3.0 Dewatering Extras

The typical depth to water at the Site is ~5'. The approximate average excavation depth is expected to be ~10 feet and some soil samples, well logs, and boring logs have indicated soil SHS criteria exceedances can extend to as much as ~13 feet in places (requiring excavation to those depths where appropriate). Therefore, dewatering will be necessary.

Task 3.1 Dewatering Equipment (4,000 lbs. GAC minimum)

This task requires bidders to provide a minimum of 4,000 lbs. of GAC capacity to support site dewatering requirements including dissolved phase hydrocarbon removal required by the temporary discharge authorization, the potential need for removal of a heavy sheen, emulsified product, or a thin SPL layer that may manifest in the excavation pit during dewatering and/or to provide high capacity sediment filtration. Bidders will be expected to maintain the capacity to respond quickly and effectively to any circumstance that might cause a project delay. For example, a spare dewatering pump(s) and sufficient capacity should be readily available in the event of a pump failure or rain event(s). A high solids capable "trash pump(s)" and geofabric dewatering bag(s) such as the Dewatering Bag Oil and Sediment Models identified at www.spillcontainment.com or www.tank-depot.com or similarly effective means should be available to address high sediment loads if/as needed during dewatering (especially from an open pit). Note that the 10'X15' dewatering bag model is listed in the advertising literature as having a 9 ton sediment capacity and a 15 gallon oil capacity with the 15'X15' model listed at 50% higher for each. Preparedness is expected in order to get the necessary work done quickly to minimize the time that the loading dock is out of service.

Task 3.2 Collection/Disposal of up to 55 gallons of SPL

This task

During the last 5 SPL thickness measuring events conducted by AJA, the average SPL thickness (in GF9, and GF12-16) was 0.13 feet. Assuming an SPL area of 2,827 ft² (circle with 30' radius), 20% porosity, a 5:1 ratio of apparent:true thickness and a maximum 50% potentially recoverable fraction yields a recoverable SPL volume estimate of:

$0.13 \times 2827 \times 0.2 \times 1/5 \times 1/2 \times 7.481 = 55$ gallons. While this value obviously may vary, the technical contact believes this to be a reasonable, real world, "ballpark", order of magnitude estimate of the amount of SPL that may manifest as recoverable in the proposed excavation. Since 55 gallons (386 lbs.) of gasoline would be immobilized by as little as 38.6 tons of soil (assuming 0.5% residual saturation) it would not be unusual if the mixing inherent to dewatering and excavation resulted in only a sheen or the total absence of recoverable SPL or an amount small enough to be handled by large GAC filtration units.

This Task includes providing a suitable drum and the means to effectively recover and containerize up to 55 gallons of SPL on site if necessary. This would include removal of SPL accumulations from GF9 and GF12-GF16 just prior to dewatering and additional

recovery from wells being used for dewatering if/as necessary. This task does not include disposal of the recovered SPL. Reasonable and necessary costs to remove accumulations exceeding 55 gallons would be reimbursable as out of scope based on normal USTIF criteria.

Task 3.3 Temporary Discharge Sampling /Analysis/Reporting

Reasonable and necessary costs to complete the sampling and reporting associated with a temporary discharge authorization provided by PADEP will be treated as a T&M item subject to normal USTIF criteria.

Task 3.4 Carbon Recycling/Disposal Costs

Reasonable and necessary costs to recycle or dispose of spent carbon will be treated as a T&M item subject to normal USTIF criteria.

Task 4 Disposal of Construction Debris

Task 4.1 This task includes costs per ton associated with collection and disposal or recycling of miscellaneous construction debris such as asphalt, or concrete not acceptable for inclusion with soils going to the disposal facility. This task should include all costs associated with container rental fees, loading, and disposal of up to 30 tons .

Task 5.0 Monitoring Well Installation

Task 5.1 Geoprobe Wells Installation (3)

This task includes a fixed cost per well for the installation of three geoprobe type property boundary wells on the opposite side of the building (to the south) from the source area excavation to be used for demonstration of attainment compliance monitoring (MW26 – MW28 on the Figure 1 RFB Map).

Task 5.2 Excavation Area Wells Installation (3)

This task includes a fixed cost per well for the installation of approximately 3 wells to be installed following backfilling of the excavation to replace the ~16 expected to be dug out. One of these backfilled excavation pit wells would be installed near the center of the excavation area. A second would be installed near current well RWB and the third would be installed midway between existing wells GF12 and GF17 near the downgradient edge (along the building wall).

Task 6.0 Installation of 6 Horizontal VPs w/Individual Stub-ups

This task includes the installation of a partial perimeter horizontal SVE point network following excavation and backfilling. The purpose of this vent point network is to address or help mitigate the effects of the infeasible-to-excavate mass close to the warehouse structure.

Task 6.1 Installation of 6 Horizontal VPs w/Individual Stub-ups

This task includes the installation of a network of ~6 shallow screened 2" horizontal vent lines (~23' of screen each) to encompass ~150 linear feet of the building/loading dock perimeter. The 2" screened vent lines are to be placed within a minimum 6" sand pack layer with the pipe centerline extending to between 2.5' and 3' below grade (to balance

vapor interception capability with minimization of the time that they may be nonfunctional due to high water table conditions). The sand pack interval is to extend no higher than level of the underside of the warehouse floor slab. Each of the ~six ~23 foot horizontal vent screens is to be connected via a dedicated 2" schedule 40 PVC solid pipe placed in the same trench and exiting at a common stub-up area (to be designated by the solicitor within 20 feet of the vented portion of the trench). The ~six 2" PVC stub-ups are to be vertical, extending at least 3 feet above grade and are to be spaced on 12-inch to 16-inch centers with each stub-up equally distant from the warehouse wall with that distance being 18 inches +or- 6 inches.

The goal of this SVE point network is to support the future installation of a (probably in-line radon-style) system if needed to promote a cost effective Site-specific closure by eliminating or sufficiently mitigating the vapor intrusion pathway which may remain following excavation of the feasible-to-excavate soil mass. The solicitor has designated that vent lines be run only outside the warehouse walls given the difficulty with inside access and installation. Should this prove insufficient, and if inside work is requested by the solicitor, reasonable and necessary costs for that portion will be reimbursable as an Out-of-Scope item. (See the [Figure 1](#) RFB Map in [Attachment 1](#) for details)

The claimant is aware of issues or potential issues (especially thick concrete, current use of floor space, etc.) that would make indoor installation of a typical sub-slab depressurization system problematic, infeasible, and possibly too disruptive to facility operations. The bid will therefore specify outdoor trenches/piping only (which the claimant may decide to augment in the future if the vapor intrusion pathway is not sufficiently addressed by the outside work).

As a commercial HVAC wholesaler, the claimant has some experience with radon mitigation equipment and installation of the aboveground portion of such systems. Bidders will be expected to stub-up the horizontal vent lines at the location and spacing directed by the claimant.

This RFB does not include the remaining above ground work because the need for and design of air moving equipment is best determined after the below grade work, because there may be a need for undetermined inside work (also best determined or decided after the other work), and because the claimants experience may make his direct control over completion of this work a more efficient and cost-effective option. In addition, depending on the success of the excavation in removing the bulk of the hydrocarbon mass and especially with respect to any near or/under building mass not feasible to remove and many other factors, there is a small possibility that the effects of passive venting (without powered air moving equipment attached to the stub-ups) may be sufficient to address the vapor intrusion pathway.

Task 7.0 Post-Excavation GW Sampling and Data Collection

Task 7.1 Post-Excavation GW Sampling and Data Collection

This task includes the completion of a groundwater monitoring event with liquid level data collection for up to 16 wells. It includes the sampling collection and analysis for regulated unleaded gasoline shortlist parameters (new list).

Task 8.0 Excavation and QMR Report Completion/Submittal

Task 8.1 Excavation and QMR Report Completion/Submittal

This task includes completion of a comprehensive Excavation and QMR report providing the data, results and discussion of all of the RFB work including Maps, Figures, and Tables as appropriate.

SCHEDULING

As part of this RFB, the selected consultant shall be prepared to begin work at the Site within two (2) weeks of the project award date.

QUALIFICATION QUESTIONS

In order for proposals to be considered administratively complete, the proposals need to provide answers to the following questions.

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

What petroleum impacted soil excavation related experience will your company bring to the project? This especially includes personnel expected to in responsible charge (PG or PE) but should also include field personnel experience. In the event that use of a subcontractor(s) is planned, the subcontractors experience may be relayed as well.

Do you have any specific or general plans/technique for managing excavation dewatering which you feel will document your experience or capabilities for the type of work proposed?

CONTRACT INFORMATION AND BID INSTRUCTION

The Solicitor wishes to execute a mutually agreeable fixed price contract based on unit prices per ton, per well, per task, and based on other unit costs for labor, equipment, materials, subcontractors/vendors and other direct costs for T&M items. The prices provided in the bid will remain in effect for the duration of the project (i.e. no escalation clause). The unit prices quoted by the successful bidder 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;
- A fixed price cost estimate for work through the completion of the work plan
- 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**);
- A statement of qualifications including that of any major subcontractor(s); Describe how the Solicitor and ICFIPAUSTIF 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;
- 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; and
- Provide a description of how the proposed Scope of Work will be completed.

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 successful 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) has been provided on the accompanying compact disk.

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 bidder's work to complete the tasks discussed will be subject to ongoing review by the PAUSTIF or its representatives to assess whether the work was 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 **general format of the provided contract sample** or must clearly cross reference any requested changes.

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, USTIF, and AJA will treat the bids as confidential, but that limited general information may be released by the solicitor and/or AJA after the bid selection process is completed. In addition for your reference, a copy of the USTIF Competitive Bidding Fact Sheet is provided in **Attachment 5**. The aforementioned guidance document can provide you with additional information on the bidding process.

PAYMENT TERMS

Per Ton Payment Requests

Requests for payment for items/tasks tied to tons of soils excavated+transported+disposed or tons of backfill emplaced may be made as soon as the weight ticket (or similar official documentation) can be provided.

Per Task Payment Requests

Payment requests for work that is fixed Per Task and not included within either of the per ton categories should be submitted upon completion of the task.

T&M Payment Requests

Payment requests for work that is specified for T&M reimbursement may be submitted periodically as the work is completed. These requests will be subject to standard USTIF reimbursement criteria (including claim limits).

Out of Scope Work Payment Requests

All out of scope work requires written pre-approval by the claimant and USTIF prior to implementation and will be subject to standard USTIF reimbursement criteria (including claim limits).

ATTACHMENTS

Attachment 1 - Tables, Figures, Historical Documentation and Correspondence

Attachment 2 - Cost Summary Sheet

Attachment 3 - Detailed Cost Sheet

Attachment 4 - Fixed Price Contract **Draft**

Attachment 5 - USTIF Competitive Bidding Fact Sheet

ATTACHMENT 1

Project Documents, Files, Photos, etc.

RFB MAP

AJA2008Q1Q2.pdf

AJA2008Q3Q4.pdf

AJA2009Q1.pdf

AJABestSPLBailTiming Thru06022009.xls

DEPtoBVSC 01071998.pdf

DEPtoBVSC 12272000.pdf

DEPtoGF 04202004 SPL Delineation.pdf

DEPtoGF 11132003.pdf

FarmertoDEP 05222000 OLDSystem.pdf

GF May07 FandTandRER Report.pdf

GF Nov07 FandT Revisions+cover+AJA Note.pdf

GF SSCR Feb07.pdf

GFtoDEP 02112005 VacTruck.pdf

GFtoDEP 04132004 SB1-19 Results 2002.pdf

PaDEP ResponseToRFBPlan01122009.pdf

Well and Boring Logs GF1-14.pdf

Well Install Data GF1-3 and GF9-15.pdf

ATTACHMENT 2

**Bid Cost Summary
(MS Excel Format)**

ATTACHMENT 3

**Detailed Costs
(MS Excel Format)**

ATTACHMENT 4
REMEDIATION AGREEMENT

ATTACHMENT 5
USTIF COMPETITIVE BIDDING FACT SHEET