CONTRACT #9
RFS # 327.01-01325
FA # 13-39779
Edison # 32702

Department of Environment and Conservation
Division of Underground Storage Tanks

VENDOR:
Pangean-CMD Associates, Inc.

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
ADMINISTRATIVE SERVICES
WILLIAM R. SNODGRASS TENNESSEE TOWER
312 ROSA L. PARKS AVE., 10TH FLOOR
NASHVILLE, TENNESSEE 37243

M E M O R A N D U M

TO: **Leni Chick, Contract and Audit Coordinator**
Fiscal Review Committee

FROM: **Ray Register, Director of Contract Administration**

DATE: **February 11, 2014**

SUBJECT: **Amendment 1 to Contract with Pangean-CMD Associates, Inc.**
FA1339779 — Edison 32702 — RFS 32701-01325

The Department of Environment and Conservation respectfully requests Fiscal Review Committee review and approval of the subject contract amendment. The contract was awarded pursuant to an RFP based on the proposer's experience, qualifications, and technical approach. There was no cost evaluation. The contractor is compensated in accordance with the Division of Underground Storage Tanks' Reimbursement Guidance Document (RGD-002), attached to the contract. These are the same rates that are reimbursed to tank owners from the petroleum underground storage tank fund pursuant to *Tenn. Code Ann.* §68-215-111(f). After considerable research, the division has prepared a periodic update to the Reimbursement Guidance Document. The amendment is required to change the attachment to the contract.

Thank you for your consideration of this matter.

Supplemental Documentation Required for Fiscal Review Committee

*Contact Name:	Ray Register	*Contact Phone:	532-0216
*Original Contract Number:	FA1339779	*Original RFS Number:	32701-01325
Edison Contract Number: (*if applicable*)	32702	Edison RFS Number: (*if applicable*)	32701-01325
*Original Contract Begin Date:	7/1/2012	*Current End Date:	6/30/2017

Current Request Amendment Number: (*if applicable*)	1
Proposed Amendment Effective Date: (*if applicable*)	April 15, 2014
*Department Submitting:	Environment and Conservation
*Division:	Underground Storage Tanks
*Date Submitted:	February 11, 2014
*Submitted Within Sixty (60) days:	Yes
If not, explain:	
*Contract Vendor Name:	Pangean-CMD Associates, Inc.
*Current Maximum Liability:	$1,500,000

*Current Contract Allocation by Fiscal Year:
(as Shown on Most Current Fully Executed Contract Summary Sheet)

FY: 2013	FY: 2014	FY: 2015	FY: 2016	FY: 2017	FY
$ 300,000	$ 300,000	$ 300,000	$ 300,000	$ 300,000	$

*Current Total Expenditures by Fiscal Year of Contract:
(attach backup documentation from STARS or FDAS report)

FY: 2013	FY:	FY:	FY:	FY	FY
$190,485.03	$233,678.59	$	$	$	$

IF Contract Allocation has been greater than Contract Expenditures, please give the reasons and explain where surplus funds were spent:	The agency prioritizes sites for clean up based on available funding. Surplus funds were either spent on higher priority sites in other regions with other contractors or were not spent at all.
IF surplus funds have been carried forward, please give the reasons and provide the authority for the carry forward provision:	
IF Contract Expenditures exceeded Contract Allocation, please give the reasons and explain how funding was acquired to pay the overage:	

*Contract Funding Source/Amount:	State:	$150,000	Federal:	$1,350,000

Supplemental Documentation Required for Fiscal Review Committee

Interdepartmental:		*Other*:	
If "*other*" please define:			

Dates of All Previous Amendments or Revisions: (*if applicable*)	Brief Description of Actions in Previous Amendments or Revisions: (*if applicable*)

Method of Original Award: (*if applicable)*	RFP
*What were the projected costs of the service for the entire term of the contract prior to contract award?	$1,500,000

Supplemental Documentation Required for Fiscal Review Committee

For all new non-competitive contracts and any contract amendment that changes Sections A or C.3. of the original or previously amended contract document, provide estimates based on information provided the Department by the vendor for determination of contract maximum liability. Add rows as necessary to provide all information requested.

If it is determined that the question is not applicable to your contract document attach detailed explanation as to why that determination was made.

Planned expenditures by fiscal year by deliverable. Add rows as necessary to indicate all estimated contract expenditures.

Deliverable description:	FY:	FY:	FY:	FY:	FY:
N/A					

Proposed savings to be realized per fiscal year by entering into this contract. If amendment to an existing contract, please indicate the proposed savings to be realized by the amendment. Add rows as necessary to define all potential savings per deliverable.

Deliverable description:	FY:	FY:	FY:	FY:	FY:
N/A					

Comparison of cost per fiscal year of obtaining this service through the proposed contract or amendment vs. other options. List other options available (including other vendors), cost of other options, and source of information for comparison of other options (e.g. catalog, Web site). Add rows as necessary to indicate price differentials between contract deliverables.

Proposed Vendor Cost: (name of vendor)	FY:	FY:	FY:	FY:	FY:
N/A					
Other Vendor Cost: (name of vendor)	FY:	FY:	FY:	FY:	FY:
Other Vendor Cost: (name of vendor)	FY:	FY:	FY:	FY:	FY:

Planned expenditures by fiscal year by deliverable. Add rows as necessary to indicate all estimated contract expenditures.

This item is not applicable. While there are many tasks and deliverables included in the Reimbursement Guidance Document, the agency does not presently know all of the leaking petroleum underground storage tank sites that will be prioritized for clean up over the term of the contract or which tasks and deliverables will be required on each site.

Proposed savings to be realized per fiscal year by entering into this contract. If amendment to an existing contract, please indicate the proposed savings to be realized by the amendment. Add rows as necessary to define all potential savings per deliverable.

This item is not applicable. Consistent and uniform reimbursement rates to all contractors provide cost savings through administrative efficiencies.

Comparison of cost per fiscal year of obtaining this service through the proposed contract or amendment vs. other options. List other options available (including other vendors), cost of other options, and source of information for comparison of other options (e.g. catalog, Web site). Add rows as necessary to indicate price differentials between contract deliverables.

This item is not applicable. All vendors who provide this service in the state are paid at the same rates in accordance with the Reimbursement Guidance Document.

Payments against a Contract

Unit	Sum Amount	Edison Contract ID	Vendor ID	Vendor Name	Type	PO ID	Voucher ID	Invoice	Date	Fiscal Year
32701	20.000	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00142727	LUST 4080044A04402-C-2-A	5/23/2013	2013
32701	32.500	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140043	LUST AFPAA489007501 C-1	4/30/2013	2013
32701	38.750	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140031	LUST AFPAA489001301 C-1	4/29/2013	2013
32701	38.750	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140046	LUST AFPAA489013501 C-1	4/30/2013	2013
32701	88.750	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140105	AFPAA519011001	4/30/2013	2013
32701	88.750	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140145	LUST AFPAA519095701 C-1	5/3/2013	2013
32701	105.000	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140139	LUST AFPAA519036901 C-1	5/3/2013	2013
32701	108.750	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140380	LUST AFPAA585003201 C-1	5/2/2013	2013
32701	108.750	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140386	AFPAA594008501	5/2/2013	2013
32701	108.750	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140389	AFPAA595012301	5/2/2013	2013
32701	108.750	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140393	LUST AFPAA594004101-C-1	5/2/2013	2013
32701	110.000	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140172	LUST AFPAA543006501 C-1	5/1/2013	2013
32701	113.750	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140209	AFPAA575001301	5/1/2013	2013
32701	113.750	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140213	LUST AFPAA583002701 C-1	5/1/2013	2013
32701	113.750	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140230	LUST AFPAA583013501 C-1	5/1/2013	2013
32701	117.500	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140198	LUSTAFPAA563020701 C-1	5/1/2013	2013
32701	117.500	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140200	AFPAA563029101	5/1/2013	2013
32701	125.000	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140373	AFPAA583023401	5/1/2013	2013
32701	130.000	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140096	LUST AFPAA493002801 C-1	4/30/2013	2013
32701	133.750	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140212	AFPAA575016801	5/1/2013	2013
32701	140.000	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00144961	LUST 4560064B06403 C-6	6/28/2013	2013
32701	163.750	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140030	LUST AFPAA471004401 C-1	4/30/2013	2013
32701	236.120	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140126	AFPAA519006401	5/2/2013	2013
32701	239.510	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00146945	LUST 4560064A06404 C-7	7/11/2013	2013
32701	250.000	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00141493	LUST 4560064B06402 C-4	5/24/2013	2013
32701	260.000	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00142726	LUST 4800005A0051 C-1-A	5/20/2013	2013
32701	268.750	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140226	AFPAA583013201	5/1/2013	2013
32701	276.250	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140228	AFPAA58301301	5/1/2013	2013
32701	282.560	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00145904	LUST 5190386C00001 C-3	6/28/2013	2013
32701	300.000	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00144968	LUST 4180098B00001 C-3	6/28/2013	2013
32701	301.250	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140208	AFPAA574008801	5/1/2013	2013
32701	340.960	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00144537	LUST 4560064A06401 C-1 A	6/12/2013	2013
32701	363.750	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140102	AFPAA519025001	4/30/2013	2013
32701	369.510	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00144981	LUST 4560064A06403 C-5	6/28/2013	2013
32701	387.500	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140472	LUST AFPAA522014401 C-1	5/3/2013	2013
32701	541.120	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00134168	AFPAA519999901 KO MEETING	3/8/2013	2013
32701	760.000	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00144964	LUST 4710111A11103 C-3	6/28/2013	2013
32701	771.380	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00145884	LUST 4080044B00001 C-3	6/28/2013	2013
32701	792.960	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00140159	LUST 5199023B02301 C-2	5/2/2013	2013
32701	1111.250	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140862	4080016A01601	5/6/2013	2013
32701	1140.840	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140136	4710111A11101	5/3/2013	2013
32701	1216.250	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140794	LUST 5430083A08301 C-1	5/6/2013	2013
32701	1400.000	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00141108	LUST 4180098A00002 C-2	5/23/2013	2013

32701	1535.000	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140027	LUST AFPAA444002401 C-1	4/29/2013	2013
32701	1538.750	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140035	LUST AFPAA480008401	4/30/2013	2013
32701	1557.500	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140024	LUST AFPAA418006101 C-1	4/29/2013	2013
32701	1561.250	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140029	LUST AFPAA467010201 C-1	4/29/2013	2013
32701	1569.140	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140204	LUST AFPAA574003601 C-1	5/1/2013	2013
32701	1587.500	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140048	LUST AFPAA493002201 C-1	4/30/2013	2013
32701	1597.500	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140028	LUSTAFPAA456001501 C-1	4/29/2013	2013
32701	1638.000	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00146226	LUST5199999B00001 C-3	7/5/2013	2013
32701	1642.500	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140814	LUST AFPAA480000101 C-1	5/6/2013	2013
32701	1648.750	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140801	LUST AFPAA493001301 C-1	5/6/2013	2013
32701	1651.250	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140816	LUST CLAIM 1 AFPAA471022601	5/6/2013	2013
32701	1699.500	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140131	AFPAA408001101	5/3/2013	2013
32701	1700.000	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140067	LUST AFPAA493004101 C-1	4/29/2013	2013
32701	1700.990	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140168	AFPAA522005001	5/2/2013	2013
32701	1727.240	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00137468	LUSTAFPAA456009301 C-1	4/18/2013	2013
32701	1735.670	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140206	AFPAA574005701	5/1/2013	2013
32701	1753.490	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00137621	LUSTAFPAA456005601 C-1	4/18/2013	2013
32701	1775.860	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140488	LUST AFPAA563004201 C-1	5/3/2013	2013
32701	1777.860	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00137629	LUSTAFPAA467004001 C-1	4/19/2013	2013
32701	1778.750	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140164	AFPAA519162301	5/2/2013	2013
32701	1788.980	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140483	LUST AFPAA493004901 C-1	5/3/2013	2013
32701	1809.970	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00137450	LUSTAFPAA471003601 C-1	4/19/2013	2013
32701	1818.110	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00137635	LUSTAFPAA456000301 C-1	4/18/2013	2013
32701	1824.740	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140817	LUST AFPAA456004401 C-1	5/6/2013	2013
32701	1841.180	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00136595	LUSTAFPAA456000101 C-1	4/12/2013	2013
32701	1847.820	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140034	LUST CLAIM 1 AFPAA480007201	4/30/2013	2013
32701	1852.470	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140211	AFPAA575008601	5/1/2013	2013
32701	1853.490	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140068	LUSTAFPAA493005701 C-1	4/29/2013	2013
32701	1883.130	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00137453	LUSTAFPAA467005001 C-1	4/19/2013	2013
32701	1888.680	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140438	AFPAA4519020401	5/2/2013	2013
32701	1890.500	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140157	LUST AFPAA519130301	5/2/2013	2013
32701	1905.990	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140022	LUSTAFPAA471018501 C-1	4/29/2013	2013
32701	1912.830	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140142	LUSTAFPAA519070601 C-1	5/2/2013	2013
32701	1938.490	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00137626	LUSTAFPAA471012901 C-1	4/19/2013	2013
32701	1941.020	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140202	AFPAA574003401	5/1/2013	2013
32701	1946.850	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00137464	LUSTAFPAA489015601 C-1	4/19/2013	2013
32701	1962.200	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00144958	LUST 5199999001 C-2	6/12/2013	2013
32701	1986.250	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00137455	LUSTAFPAA493003501 C-1	4/19/2013	2013
32701	2045.990	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140810	LUST AFPAA480007101 C-1	5/7/2013	2013
32701	2066.610	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00136594	LUSTAFPAA408001001 C-1	4/12/2013	2013
32701	2127.500	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140012	LUST AFPAA519122901 C-1	4/30/2013	2013
32701	2211.520	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140433	LUST AFPAA519075501 C-1	5/3/2013	2013
32701	2295.690	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140431	AFPAA542002201	5/3/2013	2013
32701	2315.040	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140007	LUST AFPAA583017901 C-1	5/1/2013	2013
32701	2439.790	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00140435	LUST 4560064B06401 C-2	5/3/2013	2013

32701	2457.760	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00141115	LUST 4800005A00502 C-2	5/30/2013	2013
32701	2676.070	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140859	LUST 5190386A38601 C-1	5/7/2013	2013
32701	2708.000	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00141103	LUST 5220080A08002 C-3	5/24/2013	2013
32701	2856.630	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00145857	LUST 425015A00001 C-1	6/27/2013	2013
32701	3172.860	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00146946	LUST4800005A00504C-4	7/12/2013	2013
32701	3506.250	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00136534	LUST 5220080B00001 C-1	3/29/2013	2013
32701	3652.060	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00141435	LUST 5430083B00001 C-2	5/24/2013	2013
32701	3714.400	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00146948	LUST5220080A08004C-5	7/12/2013	2013
32701	4399.820	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00141110	LUST 4080044A04402 C-2	5/23/2013	2013
32701	4484.090	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00145880	LUST 5220080A08003 C-4	6/28/2013	2013
32701	4507.340	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00142255	LUST 4180098A09801 C-1	5/16/2013	2013
32701	5896.410	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00140019	LUST 5199023A-B-C-1	4/30/2013	2013
32701	6435.340	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00145859	LUST 4800005A00503 C-3	7/3/2013	2013
32701	6626.770	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140009	LUST 4080044A04401 C-1	4/30/2013	2013
32701	6982.610	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00140553	LUST 4560064A06402 C-3	5/22/2013	2013
32701	7513.370	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00141119	LUST 4800005A0051 C-1	5/8/2013	2013
32701	8650.090	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00140856	LUST 5190386B38601 C-2	5/7/2013	2013
32701	9871.480	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00140436	LUST 4560064A06401 C-1	5/3/2013	2013
32701	10779.460	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061947	00134804	AFPAA469900201 C-1 PCR	3/15/2013	2013
32701	14725.700	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00141434	LUST 5220080A08001 C-2	5/10/2013	2013
32701	21654.530	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00143699	LUST 4710111A11102 C-2	5/31/2013	2013
	233678.590									

Payments against a Contract

Unit	Sum Amount	Edison Contract ID	Vendor ID	Vendor Name	Type	PO ID	Voucher ID	Invoice	Date	Fiscal Year
32701	135.940	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00156981	LUST 4560064A006 C-10	10/11/2013	2014
32701	155.320	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00159025	LUST 4560064A007 C-11	11/8/2013	2014
32701	230.460	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00170400	LUST 4560064A010 C-15	2/21/2014	2014
32701	242.110	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00167821	LUST 4560064A009 C-13	1/17/2014	2014
32701	281.710	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00164600	LUST 4560064A008 C-12	12/24/2013	2014
32701	406.880	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000079086	00162418	LUST AFPCC480000101 C-3A	11/29/2013	2014
32701	484.700	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00154065	LUST 4560064A005 C-9	9/18/2013	2014
32701	566.500	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000079086	00154895	LUST AFP480071B001 C-2	9/25/2013	2014
32701	591.540	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00157078	LUST AFPAA575001302 C-2	10/11/2013	2014
32701	614.710	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00149422	LUST 4560064A001 C-8	8/14/2013	2014
32701	656.540	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00157089	LUST AFPAA595012302 C-2	10/11/2013	2014
32701	662.200	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00149423	LUST 5190964A001 C-1	8/15/2013	2014
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32701	785.680	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00150183	LUST 5190869A001 C-1	8/16/2013	2014
32701	805.780	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000079086	00164596	LUST AFP4930057B001 C-2	12/24/2013	2014
32701	1082.830	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00150184	LUST AFP480001B001 C-2	8/15/2013	2014
32701	1132.200	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00159022	LUST 5850023A001 C-1	11/8/2013	2014
32701	1233.100	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00154062	LUST 5430061A001 C-1	9/20/2013	2014
32701	1288.140	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00156984	LUST AFPAA519025002 C-2	10/11/2013	2014
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32701	1352.010	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00170545	LUST 4800005A011 C-11	2/26/2014	2014
32701	1500.760	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00156989	LUST AFPAA519036902 C-2	10/11/2013	2014
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32701	1553.690	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000085766	00166910	LUST AFPCC480000102 C-4	1/10/2014	2014
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32701	1584.090	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00157092	LUST AFPAA583013502 C-2	10/11/2013	2014
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32701	1701.630	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00157073	LUST AFPAA563020701 C-2	10/11/2013	2014
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32701	1825.150	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00157079	LUST AFPAA583002702 C-2	10/11/2013	2014
32701	1889.200	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00154060	LUST 5220080A006 C-7	9/20/2013	2014
32701	1950.370	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00150182	LUST 5220080A005 C-6	8/21/2013	2014
32701	2031.190	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00156970	LUST 480005A007 C-7	10/17/2013	2014
32701	2078.660	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00164598	LUST 5220080A009 C-10	12/27/2013	2014
32701	2604.340	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00149421	LUST 4180098B002 C-4	7/30/2013	2014
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32701	2978.620	0000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00167813	LUST 4800005A010 C-10	1/29/2014	2014
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32701	4742.800	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00149927	LUST 5190386C001 C-4	8/14/2013	2014
32701	4783.100	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00167540	LUST 5220080A010 C-11	1/29/2014	2014
32701	5420.400	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000070310	00167842	LUST 4560064C001 C-14	1/17/2014	2014
32701	5655.220	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000079086	00157907	LUST AFPCC480000101 C-3	10/28/2013	2014
32701	5658.500	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000079086	00156820	LUST AFPBB542002201 C-2	10/11/2013	2014
32701	6552.860	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000079086	00164577	LUST AFP4800084B001 C-2	12/27/2013	2014
32701	6905.980	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000079086	00156982	LUST AFPBB493004101 C-2	10/11/2013	2014
32701	6999.600	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000079086	00156813	LUST AFPBB467010201 C-2	10/11/2013	2014
32701	12305.710	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000061945	00167849	LUST 5190386D001 C-5	1/27/2014	2014
32701	25186.210	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000085766	00166909	LUST AFPCC493004101 C-3	1/13/2014	2014
32701	30094.190	00000000000000000000032702	0000139111	Pangean CMD Associates Inc	DFA	0000085766	00166908	LUST AFP4800071C001 C-3	1/13/2014	2014
	190403.870									

POWER OF ATTORNEY

Lexon Insurance Company

LX - 104521

KNOW ALL MEN BY THESE PRESENTS, that **LEXON INSURANCE COMPANY**, a Texas Corporation, with its principal office in Louisville, Kentucky, does hereby constitute and appoint: William G. Franey, Eammon T. Long, Brenda L. Patterson, Jeri L. Russell, John R. Muha II, Mallory L. Murrow, Jessica Van Marken, Catherine Urquhart **********

its true and lawful Attorney(s)-In-Fact to make, execute, seal and deliver for, and on its behalf as surety, any and all bonds, undertakings or other writings obligatory in nature of a bond.

This authority is made under and by the authority of a resolution which was passed by the Board of Directors of **LEXON INSURANCE COMPANY** on the 1st day of July, 2003 as follows:

Resolved, that the President of the Company is hereby authorized to appoint and empower any representative of the Company or other person or persons as Attorney-In-Fact to execute on behalf of the Company any bonds, undertakings, policies, contracts of indemnity or other writings obligatory in nature of a bond not to exceed $2,500,000.00, Two-million five hundred thousand dollars, which the Company might execute through its duly elected officers, and affix the seal of the Company thereto. Any said execution of such documents by an Attorney-In-Fact shall be as binding upon the Company as if they had been duly executed and acknowledged by the regularly elected officers of the Company. Any Attorney-In-Fact, so appointed, may be removed for good cause and the authority so granted may be revoked as specified in the Power of Attorney.

Resolved, that the signature of the President and the seal of the Company may be affixed by facsimile on any power of attorney granted, and the signature of the Assistant Secretary, and the seal of the Company may be affixed by facsimile to any certificate of any such power and any such power or certificate bearing such facsimile signature and seal shall be valid and binding on the Company. Any such power so executed and sealed and certificate so executed and sealed shall, with respect to any bond of undertaking to which it is attached, continue to be valid and binding on the Company.

IN WITNESS THEREOF, **LEXON INSURANCE COMPANY** has caused this instrument to be signed by its President, and its Corporate Seal to be affixed this 21st day of September, 2009.

LEXON INSURANCE COMPANY
A TEXAS INSURANCE COMPANY

LEXON INSURANCE COMPANY

BY _____
David E. Campbell
President

ACKNOWLEDGEMENT

On this 21st day of September, 2009, before me, personally came David E. Campbell to me known, who being duly sworn, did depose and say that he is the President of **LEXON INSURANCE COMPANY**, the corporation described in and which executed the above instrument; that he executed said instrument on behalf of the corporation by authority of his office under the By-laws of said corporation.

"OFFICIAL SEAL"
MAUREEN K. AYE
Notary Public, State of Illinois
My Commission Expires 09/21/13

_____
Maureen K. Aye
Notary Public

CERTIFICATE

I, the undersigned, Assistant Secretary of **LEXON INSURANCE COMPANY**, A Texas Insurance Company, DO HEREBY CERTIFY that the original Power of Attorney of which the foregoing is a true and correct copy, is in full force and effect and has not been revoked and the resolutions as set forth are now in force.

Signed and Sealed at Woodridge, Illinois this 11 Day of JUNE, 2012.

LEXON INSURANCE COMPANY
A TEXAS INSURANCE COMPANY

_____
Philip G. Lauer
Assistant Secretary

"WARNING: Any person who knowingly and with intent to defraud any insurance company or other person, files an application for insurance or statement of claim containing any materially false information, or conceals for the purpose of misleading, information concerning any fact material thereto, commits a fraudulent insurance act, which is a crime and subjects such person to criminal and civil penalties."

PERFORMANCE BOND

Bond No. 1054857

KNOW ALL BY THESE PRESENTS:

That we,

Pangean-CMD Associates, Inc.
(Name of Principal)

9874 Main St., Woodstock, GA 30354
(Address of Principal)

as Principal, hereinafter called the Principal, and

Lexon Insurance Company
(Name of Surety)

256 Jackson Meadows Drive, Hermitage, TN 37076
(Address of Surety)

as Surety, hereinafter called the Surety, do hereby acknowledge ourselves indebted and securely bound and held unto the State of Tennessee as Obligee, hereinafter called the Obligee, in the penal sum of

$375,000.00
(Dollar Amount of Bond)

good and lawful money of the United States of America, for the use and benefit of those entitled thereto, for the payment of which, well and truly to be made, we bind ourselves, our heirs, our administrators, executors, successors, and assigns, jointly and severally, firmly by these presents.

BUT THE CONDITION OF THE FOREGOING OBLIGATION OR BOND IS THIS:

WHEREAS, the Obligee has engaged the Principle for a sum not to exceed

$375,000.00
(Contract Maximum Liability)

to complete Work detailed in the Scope of Services in a written Contract bearing the Contract Number (assigned by the State of Tennessee):

RFP 32701-00714
(Contract Number)

a copy of which said Contract is by reference hereby made a part hereof, as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, if the Principal shall fully and faithfully perform all undertakings and obligations under the Contract hereinbefore referred to and shall fully indemnify and hold harmless the Obligee from all costs and damage whatsoever which it may suffer by reason of

any failure on the part of the Principle to do so, and shall fully reimburse and repay the Obligee any and all outlay and expense which it may incur in making good any such default, and shall fully pay for all of the labor, material, and Work used by the Principal and any immediate or remote sub-contractor or furnisher of material under the Principal in the performance of said Contract, in lawful money of the United States of America, as the same shall become due, then this obligation or bond shall be null and void, otherwise to remain in full force and effect.

AND for value received, it is hereby stipulated and agreed that no change, extension of time, alteration, or addition to the terms of the Contract or the Work to be performed thereunder or the specifications accompanying the same shall in any wise affect the obligation under this bond, and notice is hereby waived of any such change, extension of time, alteration, or addition to the terms of the Contract or the Work or the specifications.

IN WITNESS WHEREOF the Principal has hereunto affixed its signature and Surety has hereunto caused to be affixed its corporate signature and seal, by its duly authorized officers,

on this 11 day of June, 20 12.

WITNESS:

Pangean-CMD Associates, Inc.	Lexon Insurance Company
(Name of Principal)	(Name of Surety)
(Authorized Signature of Principal)	(Signature of Attorney-in-Fact)
Darren Moore	Eamonn T. Long
(Name of Signatory)	(Name of Attorney-in-Fact)
President	
(Title of Signatory)	(Tennessee License Number of Agent or Attorney-in-Fact)
	(Counter Signature of Resident Agent if not same as Attorney-in-Fact)

The Surety Company issuing bond shall be licensed to transact business in the State of Tennessee by the Tennessee Department of Commerce and Insurance. Bonds shall have certified and current Power-of-Attorney for the Surety's Attorney-in-Fact attached. The Attorney-in-Fact who executes bond on or on behalf of the Surety shall be licensed by and a resident of the State of Tennessee, and the Attorney-in-Fact's license number shall be affixed to the bond; or, countersignature by a licensed Agent who is a resident of the State of Tennessee, and the Agent's license number shall be affixed to the bond in addition to the signature of the Attorney-in-Fact.

CONTRACT AMENDMENT

Agency Tracking #	Edison ID	Contract #	Amendment #
32701-01325	32702	FA1339779	1

Contractor Legal Entity Name	Edison Vendor ID
Pangean-CMD Associates, Inc.	139111

Amendment Purpose & Effect(s)
Replace Attachment 1

Amendment Changes Contract End Date: ☐ YES ☒ NO **End Date:** 6/30/2017

TOTAL Contract Amount INCREASE or DECREASE per this Amendment (zero if N/A)**:** **$ 0**

Funding —

FY	State	Federal	Interdepartmental	Other	TOTAL Contract Amount
2013	30,000.00	270,000.00			300,000.00
2014	30,000.00	270,000.00			300,000.00
2015	30,000.00	270,000.00			300,000.00
2016	30,000.00	270,000.00			300,000.00
2017	30,000.00	270,000.00			300,000.00
TOTAL:	**150,000.00**	**1,350,000.00**			**1,500,000.00**

American Recovery and Reinvestment Act (ARRA) Funding: ☐ YES ☒ NO

Budget Officer Confirmation: There is a balance in the appropriation from which obligations hereunder are required to be paid that is not already encumbered to pay other obligations.

Speed Chart (optional)	Account Code (optional)
EN00010608	70803000

OCR USE

AMENDMENT 1
OF CONTRACT 32702

This Amendment is made and entered by and between the State of Tennessee, Department of Environment and Conservation, hereinafter referred to as the "State" and Pangean-CMD Associates, Inc., hereinafter referred to as the "Contractor." It is mutually understood and agreed by and between said, undersigned contracting parties that the subject contract is hereby amended as follows:

1. Contract Attachment 1 is deleted in its entirety and replaced with the new attachment 1 attached hereto.

Required Approvals. The State is not bound by this Amendment until it is signed by the contract parties and approved by appropriate officials in accordance with applicable Tennessee laws and regulations (depending upon the specifics of this contract, said officials may include, but are not limited to, the Commissioner of Finance and Administration, the Commissioner of Human Resources, and the Comptroller of the Treasury).

Amendment Effective Date. The revisions set forth herein shall be effective April 15, 2014. All other terms and conditions of this Contract not expressly amended herein shall remain in full force and effect.

IN WITNESS WHEREOF,

PANGEAN-CMD ASSOCIATES, INC.

SIGNATURE **DATE**

PRINTED NAME AND TITLE OF SIGNATORY (above)

DEPARTMENT OF ENVIRONMENT AND CONSERVATION:

ROBERT J. MARTINEAU, JR., COMMISSIONER **DATE**

STATE OF TENNESSEE

DEPARTMENT OF ENVIRONMENT AND CONSERVATION

DIVISION OF UNDERGROUND STORAGE TANKS

REIMBURSEMENT GUIDANCE DOCUMENT – 002

Effective Date April 15, 2014

RE: Pre-approved Cost Tasks, Descriptions, Maximum Costs and Reimbursement Guidance

I. GENERAL GUIDANCE

A. Purpose

The purpose of this Reimbursement Guidance Document (RGD) is to provide detailed descriptions and maximum costs for routine tasks associated with UST system closure, hazard management, investigation and clean-up of petroleum contaminated sites where owners/operators or petroleum site owners may apply for reimbursement of eligible expenses from the Petroleum Underground Storage Tank Fund (Fund). This document contains unit rates that the Division of Underground Storage Tanks (Division) considers to be reasonable. Only these rates or lower will be reimbursed unless prior written Division approval is granted. The Division will review reimbursement applications based on this guidance.

B. Applicability

This document replaces all previous published guidance affecting the reimbursement process.

Rule 400-18-01-.09(3) (c) states " Except as provided for in subparagraph (5)(d) of this rule, before the owner and/or operator or petroleum site owner will receive fund benefit, the applicable entry level amount to the fund shall be expended as approved costs by the owner and/or operator or petroleum site owner. The applicable entry level is the entry level in effect on the date of the release as set forth in subparagraph (6)(b) of this rule.

Rule 400-18-01-.09(4)(a) states: "If at the time of discovery of a release, the division determines that an owner and/or operator has failed to establish fund eligibility in accordance with subparagraph (3)(a) or (b) of this rule, corrective action costs and/or third party damages associated with that release are not eligible for coverage by the fund.

Rule 400-18-01-.09(4)(d) states: "If there is evidence of a suspected release or a confirmed release on or after July 1, 2004, that release shall be ineligible for

reimbursement from the fund if an Application for Fund Eligibility is not timely filed in accordance with the following:

1. An Application for Fund Eligibility shall be filed with the division within ninety (90) days of the discovery of evidence of a suspected release which is subsequently confirmed in accordance with Rules 0400-18-01-.04 and/or 0400-18-01-.05. The ninety (90) days shall start on the day the evidence of the suspected release is discovered.

2. An Application for Fund Eligibility shall be filed with the division within sixty (60) days of a release which was identified in any manner other than the process for confirmation of a suspected release in accordance with Rules 0400-18-01-.04 and/or 0400-18-01-.05, for example, during closure activities performed in accordance with Rule 0400-18-01-.07."

Rule 400-18-01-.09(6)(c) states: "The fund shall be responsible to eligible UST owners and/or operators or petroleum site owners for eligible corrective action costs above the entry level to the fund in an amount not to exceed one million dollars ($1,000,000) per site per occurrence. Likewise, the fund shall be responsible to eligible UST owners and/or operators or petroleum site owners for court awards involving third party claims above the entry level into the fund in an amount not to exceed one million dollars ($1,000,000) per site per occurrence."

Rule 400-18-01-.09(8)(c) states: "The owner and/or operator or petroleum site owner fund deductible amounts as specified in subparagraph (6)(b) of this rule are not eligible for reimbursement from the fund. Proof of payment of these initial amounts is required prior to reimbursement of any costs. The owner and/or operator or petroleum site owner fund deductible for taking corrective action cannot include any cost defined as fund ineligible in subparagraphs (a) and (b) of this paragraph."

Rule 400-18-01-.09(9)(d) states: "All claims against the fund are clearly obligations only of the fund and not of the State, and any amounts required to be paid under this part are subject to the availability of sufficient monies in the fund. The full faith and credit of the State shall not in any way be pledged or considered to be available to guarantee payment from such fund."

Rule 400-18-01-.09(10)(b) states: "Upon confirmation and reporting of a release in accordance with the requirements of paragraphs (1) through (3) of Rule 0400-18-01-.05 or after a release from the UST system is identified in any other manner, the owner and/or operator or petroleum site owner shall select a contractor from the division's list of approved contractors if the owner and/or operator or petroleum site owner expects to apply for fund benefits. The division shall be notified in writing of such a selection within thirty (30) days or other time frame specified by the division. A contractual agreement shall be established between the owner and/or operator or petroleum site owner and the contractor in accordance with the requirements of T.C.A. § 68-215-129. The division shall be provided a copy of the contractual agreement."

Rule 400-18-01-.09(12)(e) states: "All payments shall be subject to approval by the division. Should a site inspection or other information available to the division reveal a discrepancy between the work performed and the work addressed by a payment application, the division may deny payment or may require the fund to be reimbursed."

Rule 400-18-01-.09(12)(f) states: "All applications for payment of costs of cleanup shall be received by the division within one (1) year of performance of the task or tasks covered by that application in order to be eligible for payment from the fund."

Rule 400-18-01-.09(14)(d) states: "Contingent upon availability of funds, the department shall process all applications for payment as soon as possible upon receipt of application. If all costs are considered to be reasonable and eligible for reimbursement, payment will be issued within ninety (90) days once costs have been determined to be reasonable and eligible for reimbursement. If certain costs are considered as not being reasonable or eligible for reimbursement, the division may issue a check for the amount of the application not in question and provide a forty-five (45) day period in which the owner and/or operator or petroleum site owner or contractor may present such information as is necessary to justify the disallowed costs. Following review of such information, the division may agree to pay the previously disallowed costs, or any portion thereof, or may again disallow the costs for payment. If the division disallows costs upon a second review, the owner and/or operator or petroleum site owner may petition the board for a hearing on the disallowance pursuant to Rule 0400-18-01-.11."

C. Application for Fund Eligibility Determination and Reimbursement Application Format

T.C.A. 68-215-111(f)(6)(A)* states: "If there is evidence of a suspected or a confirmed release on or after July 1, 2004, in order for the tank owner, tank operator or petroleum site owner to receive reimbursement from the fund, an application for fund eligibility shall be filed:

> (i) Within ninety (90) days of the discovery of evidence of a suspected release which is subsequently confirmed in accordance with the rules promulgated pursuant to this part; or
>
> (ii) Within sixty (60) days of a release which was identified in any manner other than the process for confirmation of a suspected release stated in the rules promulgated pursuant to this part.

T.C.A. 68-215-111(f)(6)(B)* states: "The tank owner or tank operator shall send notification to the petroleum site owner by certified mail, return receipt requested, within seven (7) days of confirmation of a release. Failure to comply with the applicable deadline of subdivision (f)(6)(A)(i) or (ii) shall make the release ineligible for reimbursement from the fund."

T.C.A. 68-215-111(f)(7)* states: "On or after July 1, 2004, all applications for payment of costs of cleanup shall be received by the division within one (1) year of the performance of the task or tasks covered by that application in order to be eligible for payment from the fund."

*See Public Chapter No 794 of the Public Acts of 2008

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II. DEFINITIONS AND ACRONYMS

A. Definitions

For the purposes of this RGD only, the following definitions apply:

Contamination- Soil and/or ground water analytical results with regulated petroleum constituents exceeding the Division's Initial Screening Levels (ISLs) as identified during closure activities, Phase II investigation, etc. or Division's approved Site-Specific Clean-up Levels (SSCLs).

Deductible- The entry level or amount of financial responsibility that must be expended as approved costs by the responsible party prior to any reimbursement of eligible expenses. All releases that occurred after July 1, 2005 have a deductible of $20,000.00 (twenty thousand dollars) unless granted a reduced deductible. See the application for fund eligibility for further instructions about reduced deductibles.

Maximum Workday- The allowable maximum number of hours/day that may be claimed for any task is ten (10) hours unless written approval is obtained from the Division case manager in advance of conducting the work. This excludes tasks 2.4.e and any lump sum task.

Proof of payment- The acceptable evidence that the invoices included in the reimbursement application have been paid. The acceptable methods include either copies of canceled checks or affidavits (CAC Certification page) signed by the contractors stating they have received payment.

Reasonable cost- The monetary amount or range, as determined by the Division, to be commensurate with a corrective action activity. The Division's determination is based on an evaluation of typical expected costs. This evaluation considers the scope and complexity of the particular corrective action activity involved.

Week- Rental equipment is often rented on a weekly basis. A week is defined as three (3) to five (5) consecutive days.

B. Acronyms Used in this Document

BTEX	Benzene, toluene, ethylbenzene, and total xylenes
CAC	Corrective action contractor
CAD	Computer aided design
CAP	Corrective Action Plan
CAS	Corrective Action System
CASDR	Corrective Action System Down Report
CASFL	Corrective Action System Field Log
CASRL	Corrective Action System Repair Log
CFM	Cubic feet per minute

DMR	Discharge Monitoring Report
EAG	Environmental Assessment Guidelines
EPH	Extractable Petroleum Hydrocarbons
FID	Flame ionization detector
FP	Free product
FPIR	Free Product Investigation Report
FPRP	Free Product Removal Plan
GPM	Gallons per minute
HMR	Hazard Management Report
HNR	Hazard Notification Report
IRHMR	Initial Response and Hazard Management Report
ISCR	Initial Site Characterization Report
MCL	Maximum contaminant level
MEME	Mobile enhanced multi-phase extraction
MtBE	Methyl tertiary butyl ether
NAPH	Naphthalene
NOD	Notice of deficiency
NOV	Notice of violation
NPDES	National pollution discharge elimination system
OSHA	Occupational Safety and Health Administration
OVD	Organic vapor detector
PID	Photoionization detector
POTW	Publicly owned treatment works
QA/QC	Quality assurance and quality control
RGD	Reimbursement guidance document
SGS	Soil gas survey
SOW	Scope of work
TCLP	Toxicity characteristic leaching procedure
TGD	Technical guidance document
TRBCA	Tennessee risk-based corrective action
UST	Underground storage tank

III. REIMBURSEMENT APPLICATION DATABASE INSTRUCTIONS

An Access® database has been developed to prepare and submit electronic applications. The database is available for download from the Division's website: **http://www.tn.gov/environment/ust/**

Applications, appeals, questions, comments, etc. should be submitted to: **ust.reimbursement@tn.gov**

IV. REIMBURSEMENT APPLICATION GUIDELINES

In order to receive reimbursement, all reimbursement applications must be submitted within one (1) year of the date the work is performed.

A. Initial Reimbursement Application

After a new release has been confirmed, a Fund eligibility application shall be prepared and submitted. The initial reimbursement application shall not be submitted until Fund eligibility has been determined. If Fund eligibility is approved, then the Division will send a confirmation letter and include the applicable deductible. At this point, an

initial reimbursement application may be submitted. If Fund eligibility is denied, then the Division will notify the responsible party with a denial letter. This letter will also include information on the appeal process. If Fund eligibility is denied, then an initial application may be submitted during the Fund eligibility appeal process, but will not be reviewed by the Division. Some sites may not require corrective action that would result in the submittal of subsequent applications.

B. Subsequent Reimbursement Applications

Subsequent applications may be submitted at the completion of each cleanup activity provided they are submitted within one (1) year from the date performed.

C. Final Reimbursement Application

The final application shall be submitted within one (1) year of contamination case closure issued by the Division.

V. ELIGIBLE COSTS

The following processes include common tasks that are eligible for reimbursement with Division approval.

A. UST System Closure Process

1. Overexcavation of contaminated material after the first 100 cubic yards of native material has been removed
2. Sample collection after overexcavation and/or recharge of groundwater into the tank pit
3. Soil and water laboratory analysis, including routine shipping charges, after overexcavation and/or recharge of groundwater into the tank pit
4. Disposal of contaminated soil (including contaminated backfill), contaminated water, and/or free product
5. Installation and sampling of monitoring well required for risk-based closure
6. Preparation of a risk-based closure report

B. Hazard Management Process

1. Alternate water supply — installing water taps, hookup to public water supply, filtration system, and/or drilling a new well. This also includes abandonment of public or private water supplies that are no longer in use.
2. Rental of equipment that deals with emergency response (i.e., vapor abatement)
3. Recovery of free product
4. Sample collection
5. Soil, water, and air laboratory analysis, including routine shipping charges
6. Disposal of contaminated soil, contaminated water, and/or free product
7. Preparation of required submittals

C. Release Investigation Process

1. Installation of soil borings and/or monitoring wells
2. Rental of equipment relative to the investigation of the contaminated site
3. Tank tightness tests (if used for a required investigation by the Division)

4. Sample collection
5. Soil and water laboratory analysis, including routine shipping charges
6. Disposal of contaminated soil, contaminated water, and/or free product
7. Preparation of required submittals

D. Risk Management and Corrective Action Process

1. Public notice advertisements for corrective action
2. Construction, operation, and maintenance of approved treatment systems
3. Telephone charges associated with a telemetry system (must be plainly stated on the reimbursement application)
4. Rental of equipment that deals with remediation of the contaminated site
5. Installation of recovery wells, trenches, and associated piping
6. Sample collection
7. Soil, water, and air laboratory analysis, including routine shipping charges
8. Disposal of contaminated soil, contaminated water, and/or free product
9. Preparation of required submittals
10. Preparation of required permits
11. Obtaining necessary utility connections and service

E. Final Site Closure Process

1. Public notice advertisements for termination of a corrective action plan
2. Deactivation of the treatment system
3. Well abandonment
4. Decommissioning the treatment system
5. Site rehabilitation
6. Preparation of required submittals

F. Miscellaneous

1. Annual well fees (Shelby County) (no markup)
2. Color copy of topographic map (third party invoice required)
3. Bonds required by government agencies (no markup)
4. Preparation of required submittals

VI. INELIGIBLE COSTS

The following processes include common tasks and specific activities or costs that are not eligible for reimbursement.

A. UST System Closure Process

1. Activities associated with preparing, removing, and disposing of the tank system, including breaking and removing concrete, removing product from tanks, de-gassing tanks, etc.
2. Replacement backfill material for the volume of the excavated tank(s)
3. Completing an Application for Permanent Closure of Underground Storage Tank Systems, Permanent Closure Report (non risk-based report), Application for Fund Eligibility, and/or the Reimbursement Application
4. Expedited or rush charges for laboratory analysis of samples without prior Division approval

5. Field screening activities for the underground storage tank backfill material and the first 100 cubic yards of stockpiled soil
6. Rental/lease charges that exceed the purchase price of the equipment
7. Removal of backfill material in the tank pit and the first 100 cubic yards of overexcavated contaminated native material
8. Replacement of asphalt or concrete
9. Replacement, repair, maintenance, removal, and retrofitting of any UST system or interceptor trench
10. Samples required for tank closure

B. Hazard Management Process

1. Monthly water utility bills (if a public water connection was made in response to a release)
2. Utility deposits
3. Markup on utility bills and/or permits
4. Expedited or rush charges for laboratory analysis of samples without prior Division approval
5. Rental/lease charges that exceed the purchase price of the equipment
6. Replacement of asphalt or concrete (except for trenching with a corrective action system or interceptor trench)
7. Completing the Reimbursement Application

C. Release Investigation Process

1. Expedited or rush charges for laboratory analysis of samples without prior Division approval
2. Rental/lease charges that exceed the purchase price of the equipment
3. Completing the Reimbursement Application

D. Risk Management and Corrective Action Process

1. Monthly water utility bills (if a public water connection was made in response to a release)
2. Utility deposits
3. Markup on utility bills and/or permits
4. Expedited or rush charges for laboratory analysis of samples without prior Division approval
5. Rental/lease charges that exceed the purchase price of the equipment
6. Replacement of asphalt or concrete (except for trenching with a corrective action system)
7. Telephone charges not associated with a telemetry system
8. Completing the Reimbursement Application

E. Final Site Closure Process

5.1 Well abandonment permit (Shelby County)
5.2 Completing the Reimbursement Application

F. Miscellaneous

1. Any service for which the applicant will receive reimbursement from a commercial insurance carrier

2. Corrective action contractor costs
    a. Any type of reference book, technical book, and/or guideline
    b. Application or appeals for denied costs
    c. Cellular or portable phone charges
    d. Computer time, software, hardware, etc.
    e. Copy machine and copies
    f. Fax transmittals
    g. General office supplies
    h. Insurance
    i. Notary services
    j. Office equipment and miscellaneous office items
    k. Overtime charges
    l. Personnel protective equipment (chemical resistant suits, respirators, etc.)
    m. Postage or express shipping of maps, photographs, reports, etc.
    n. Property title searches
    o. Rental equipment insurance
    p. Telephone charges not associated with a telemetry system
    q. Video camcorder
    r. Mark-up on sales tax
    s. Mark-up on freight/shipping
3. Durable items which are not totally expended on one site such as raincoats, tools, shovels, etc.
4. Installation of leak detection
5. Legal fees
6. Loss of business revenues (business interruption)
7. Loss of petroleum product
8. Monthly water utility bills where the Division paid for connection to a public water supply
9. Responsible Party Costs
    a. Administration costs including management, office time, and supplies
    b. Any type of reference book, technical book, and/or guideline
    c. Application or appeals for denied costs
    d. Cellular or portable phone charges
    e. Change of Corrective Action Contractor (CAC) and any costs associated with initial project set-up review, site reconnaissance, etc. including file reviews
    f. Computer time, software, hardware, etc.
    g. Copy machine and copies
    h. Fax transmittals
    i. General office supplies
    j. Insurance
    k. Notary services
    l. Office equipment and miscellaneous office items
    m. Overtime charges
    n. Personnel protective equipment (chemical resistant suits, respirators, etc.)
    o. Postage or express shipping of maps, photographs, reports, etc.
    p. Property tax
    q. Property title searches
    r. Rental equipment insurance
    s. Telephone charges not associated with a telemetry system

t. Video camcorder
u. Mark-up on sales tax
v. Mark-up on freight/shipping

10. Tank tightness tests used for routine release detection
11. Technical Guidance Document - 013, Fund Eligibility site check
12. Travel
    a. Any travel outside of the state of Tennessee
    b. Mileage within Tennessee over 250 miles per round trip
    c. Airfare and/or car rentals
    d. Company car and/or truck rental
    e. Markup on per diem
13. Underground locator services (unless service is guaranteed in writing)

VII. PERSONNEL DESCRIPTIONS AND RATES

A. Staff Descriptions

Only the job titles and classifications listed below may be used for reimbursement purposes. **Any qualified professional who performs a task of a lesser-qualified person should be billed at the rate of that job task.** For example, a person who meets the experience and education of a Geologist, but performs the task of digging a trench, hand augering, bailing wells, etc. should be billed at the rate of a Technician. All onsite personnel shall have the appropriate health and safety certifications. Prior to beginning any task, the Excel® cost tasks and associated cost spreadsheets should be consulted to ensure that the proper personnel and equipment will be used in order to be Fund reimbursable. See section IX for cost task descriptions.

CAD Operator: This person must have the ability to develop scaled maps, engineering drawings, and contour maps using CAD computer programming software. The CAD computer operator must have a degree in information systems analysis, CAD computer programming, or possess CAD technical certification.

CAS Specialist: This person must have attended, received and maintain satisfactory certification from a Division approved manufacturer of high vacuum dual phase remediation systems. Annual recertification is required to bill this title. CAS Specialist Certificate must be submitted to: **ust.reimbursement@tn.gov**

Construction Foreman: This person must have completed all appropriate personal protection and safety courses, have three (3) years' experience in UST or hazardous substance site work, field supervision experience, and be supervising a construction crew.

Engineer: This person must be a professional engineer licensed in the State of Tennessee.

Environmental Specialist: This person must have a Bachelor of Engineering (BE) or Bachelor of Science (BS) or postgraduate degree in biology, engineering, environmental science, geology, industrial hygiene, soil science, or another science field acceptable to the Division from an accredited four (4) year college.

General Laborer: This person must have completed the appropriate personal health and safety courses. General laborer includes surveyor helpers, construction workers, and other site workers that have not been included in other billing classifications.

Geologist: This person must be a professional geologist licensed in the State of Tennessee.

Heavy Equipment Operator: This person must be knowledgeable of the capabilities and limitations of the equipment being used and is familiar with all applicable laws and regulations governing its use. Equipment operators must have current health and safety training.

Project Manager: This person must have five (5) years full-time experience in investigation, remedial planning or design phases of environmental project management. This person must have a BE, BS or postgraduate degree in engineering, geology, or other appropriate science. This person must also have supervisory and project management experience. Postgraduate work in an appropriate science may be substituted on a year for year basis for experience for a maximum of two (2) years.

Secretary: This person must possess computer skills and carry out general clerical duties, including contract administration and payment of utility bills. Clerical support and other office workers shall be included in this category.

Senior Environmental Specialist: This person must have a BA, BE, BS or postgraduate degree in biology, engineering, environmental science, industrial hygiene, soil science, or another science field acceptable to the Division from an accredited four (4) year college and have at least five (5) years of UST related work and/or hazardous substance remedial activities.

Senior Technician: This person must have completed appropriate personal safety and sampling courses and have at least three (3) years of experience working in the environmental field at hazardous substance or UST sites. All technicians must be high school graduates or have passed the general equivalency diploma (GED) test.

Surveyor: This person must have the ability to take linear and angular measurements and apply the principles of geometry and trigonometry to delineate the form, extent, position, etc., of a tract of land. This person must be licensed in Tennessee as a surveyor.

Technician: This person must have completed appropriate personal safety and sampling courses and have at least one (1) year of experience working in the environmental field at hazardous substance or UST sites. All technicians must be high school graduates or have passed the general equivalency diploma (GED) test.

Truck Driver: This person must be knowledgeable of all Tennessee motor vehicle laws and regulations as well as hold all licenses required for the type of motor vehicle operated.

B. Table of Reimbursable Tasks

Field Staff Description	Reimbursable Tasks
CAS Specialist	Routine/non-routine O&M, deactivation and/or reactivation of a CAS
Engineer	Assessment of remedial activities, overseeing drilling and monitoring well installation with appropriate geologic experience, sampling (soil, water, etc.) through the initial investigation phase, compiling/analyzing environmental data, overseeing of MEME events
Environmental Specialist	Assessment of remedial activities, sampling (soil, water, etc.) through the initial investigation phase, compiling/analyzing environmental data
Geologist	Assessment of remedial activities, overseeing drilling and monitoring well installation, sampling (soil, water, etc.) through the initial investigation phase, compiling/analyzing environmental data, overseeing of MEME events
Senior Environmental Specialist	Assessment of remedial activities, sampling (soil, water, etc.) through the initial investigation phase, compiling/analyzing environmental data, overseeing of MEME events
Senior Technician	Routine sampling (monthly, quarterly, etc. of soil, water, etc.), free product removal, monitoring well abandonment oversight, installation/maintenance of skimmer pumps, O & M (routine and non-routine), deactivation and/or reactivation of a non-state owned CAS
Technician	Tilling/disking, gauging, installation/replacements of booms/pads, deactivation and/or reactivation of CAS, site restoration, O & M (routine and non-routine) of non-state owned CAS

C. Table of Staff Rates

Field Operations Staff	Maximum Hourly Rate
Surveyor	$65.00
Construction foreman	$50.00
Senior technician	$55.00
Technician	$45.00
Heavy equipment operator, Truck driver	$35.00
General laborer	$30.00

Technical Staff	Maximum Hourly Rate
Project Manager	$95.00
Engineer, Geologist, Senior Environmental Specialist	$80.00
Environmental Specialist	$65.00
CAS Specialist	$65.00
CAD Operator	$50.00

Administrative Staff	Maximum Hourly Rate
Secretary	$30.00

VIII. REASONABLE REIMBURSEMENT RATES

A. Equipment

Construction equipment rental rates already include allowances for peripheral equipment attachments, depreciation, maintenance, field repairs, fuel, permits, lubricants, tires, OSHA equipment, insurance, equipment shelter and security, overhead, markup, and administrative costs. If the equipment size is not specified, then the lowest rate will be applied.

Excavating Equipment	Per Day	Per Week	
Trencher (walk behind)	$144.00	$432.00	
Trencher (ride on)	$255.00	$765.00	
Skid steer loader (bobcat)	$188.00	$564.00	
Pavement/concrete breaker for bobcat	$200.00	$600.00	
Backhoe (all types)	$255.00	$765.00	
Pavement/concrete breaker for backhoe	$275.00	$825.00	
Trackhoe ½ yd^3	$575.00	$1,725.00	
Trackhoe ¾ yd^3	$674.00	$2,022.00	
Trackhoe 1 yd^3	$834.00	$2,502.00	
Crawler loader 1 yd^3	$470.00	$1,410.00	
Dozer	$468.00	$1,404.00	
Field tractor and attachment	$253.00	$759.00	
Dump truck 15 yd^3 and larger (w/o driver)	$78.00/hr		
Mobilization and Demobilization			**Rate**
Excavation equipment (cost/mile) Maximum billing (250 miles round trip)			$1.25 $312.50

Support Equipment	Per Day	Per Week	
5 kW generator	$87.00	$261.00	
50 kW generator	$258.00	$774.00	
3,000 psi pressure washer	$55.00	$165.00	
Explosion proof evacuation fan (12,000 ft^3/min air movement) (mobilization included in daily rate)	$75.00	$125.00	

Miscellaneous Tools And Supplies	Per Day	Per Week	
Air jackhammer with bit and hose	$60.00		
Electric jackhammer with bit	$75.00		
Slide hammer and vapor probe kit	$133.00		
Hammer drill and vapor probe kit	$195.00		
Crane (17-ton skyhook)	$667.00	$2,001.00	

Plate compactor/tamper	$75.00	$200.00	
Utility trailer	$25.00		
Compressor 100 CFM, gas powered	$75.00		
Compressor 175 CFM, gas powered	$109.00		
Concrete saw with blade	$90.00		
Hydrocarbon skimmer pump (self-leveling)	$40.00	$120.00	
Submersible well development pump (electric) 2-inch diameter	$42.00		
Self-priming centrifugal pump (trash) 4-inch discharge	$65.00		
Welder/supplies/fuel	$60.00		

Portable Field Instruments	**Per Day**	**Per Week**	**> 1 Week per day**
Combustible gas indicator/with oxygen meter	$45.00		
Oxygen meter (dissolved/reduced)	$40.00		
OVD - PID	$89.00		
OVD - FID	$105.00		
Multi-gas meter (O_2, CO_2, CH_4)	$68.00		
Oil/water interface probe	$55.00		
Turbidity meter (approved CAP only)	$31.00		
Electronic water-level indicator	$25.00		
Manometer	$25.00		
pH meter (approved discharge only)	$27.00		
Velocity meter	$45.00		
Flow regulator (air samples only)	$60.00		
SUMMA Canister	$50.00		

Equipment/Supplies	**Unit Cost**
Disposable bailer	$10.00
Petroleum absorbent booms (8 inch diameter, 10 ft. sections)	$55.00
Petroleum absorbent pads (3/16", 18" x 18", 100 count)	$70.00
Petroleum absorbent pads (3/8", 18" x 18", 100 count)	$88.00
Petroleum absorbent sweeps (18" x 100' x 3/8")	$108.00
Reconditioned drums (17-H, 55-gallon)	$41.00
Soil and well sampling supplies (includes, but not limited to, ice, disposal of samples, twine or string, latex gloves, and decontamination materials. These supply costs are per sampling event and not per well.)	$20.00
0.45 micron water filter (PAHs and metals sampling)	$20.00
Safety cones, barricades, caution tape	$10.00/day
Straw bales	$5.00
Grass seed (contractor – 10 lb)	$10.00

B. Vehicles

Reimbursement is only for mileage <u>within</u> Tennessee with a **<u>maximum</u>** 250 miles round trip. <u>If the vehicle size is not specified, the lowest rate will be applied.</u>

Vehicle	Rate
Autos/pick-up trucks (cost/mile)	$0.47*
Three/quarter (3/4) ton truck (cost/mile)	$0.75
Vacuum truck/with driver cost/hour	$138.00

*Mileage shall be reimbursed in accordance with the state of TN travel regulations in effect at the time that work was performed. Current travel regulations can be found at: www.tn.gov/finance/act/documents/policy8.pdf

Mobilization and Demobilization	Rate
Vacuum truck with driver (cost/mile)	$2.25
Maximum billing (250 miles round trip)	$562.50

C. Disposal and Treatment of Contaminated Soil

Contaminated soil and clean soil must be segregated. **Disposal of soil with contaminant concentrations below the Division's Site Specific Clean-up Levels will not be reimbursed.** All invoices and weight tickets shall be submitted regardless of the treatment method. **Reimbursement will be limited to actual costs plus a maximum 5% markup not to exceed the following rates:**

Treatment	Per Ton
Land farming	$28.00
Landfill	cost + 5%
Transportation (less than 50 miles one way)	$11.00
Transportation (50 – 100 miles one way)	$20.00
Transportation (over 100 miles one way)	$24.50

D. Disposal and Treatment of Contaminated Water

Reimbursement is limited to water treated at a permitted water treatment facility**.** The Fund will not pay a per gallon rate for water treated on site. **Disposal and/or treatment of water with contaminant concentrations below the Division's Initial Screening Levels will not be reimbursed.** Original invoices and manifests, including the volume of water treated shall be submitted. **Reimbursement will be limited to actual costs plus a maximum 5% markup not to exceed the following rate (rate already includes transportation):**

Contents	Per Gallon
Water	$0.55

E. Drum Disposal of Contaminated Soil and/or Water

Soil and water that is drummed is not considered the most efficient way of handling contamination and will be scrutinized. **Disposal and/or treatment of soil and/or water with contaminant concentrations below the Division's Site Specific Clean-up Levels will not be reimbursed. Reimbursement will be limited to actual costs plus a maximum 5% markup not to exceed the following rates (rates already include transportation):**

Contents	Per Drum
Water	$90.00
Soil	$90.00
Used booms, pads, etc.	$90.00

F. Drilling

Equipment included in mobilization/demobilization costs are: rig, support vehicles, steam cleaner, grout plant, trailers, and crew. Price per foot costs include: drill rig, set up fee, installation, development, sand, bentonite, cement, flush mount manhole, lock, end plug, casing, and screen. CACs should negotiate prices with drillers prior to drilling. **Reimbursement will be limited to actual costs plus a maximum 15% markup not to exceed the following rates:**

Drilling Method and Equipment	Rate
Auger rig/core rig/wash rotary rig (cost/mile with a maximum of 250 miles round trip)	$3.00
Air Rotary Rig (cost/mile with a maximum of 250 miles round trip)	$4.25
Auger drilling [cost/foot including two (2) man crew] Two (2) inch wells Four (4) inch wells	 $36.00 $45.00
Air rotary drilling [cost/foot including two (2) man crew] Two (2) inch wells Four (4) inch wells	 $48.00 $57.00
Double cased well [cost/foot to drill and install outside casing including two (2) man crew, steel casing, and grouting] Six (6) inch Eight (8) inch	 $64.00 $76.00
Well abandonment (includes licensed well driller, equipment, and supplies)(cost/foot)	$11.00
Borings (cost/foot)	$16.00
Decontamination of rig and tools (cost/boring includes steam cleaner rental)	$125.00
Standby time not due to the driller (cost/day with maximum of 1 hour)	$150.00
Third man for drilling (cost/hour)	$30.00
Water tight bolt down manhole (one per well - all sizes)	$68.00
Centralizers-stainless steel (cost/per unit) Two (2) inch Four (4) inch	 $26.00 $28.00
Concrete penetration (cost/hole)	$99.00
Removal of manhole cover and well pad (cost/well) Recovery well vaults (2’x2’x2’) (must actually be removed)	$125.00 $300.00
Freight charges on well installation, drilling supplies, casing, screen, bentonite, etc.	Actual cost

Direct Push Technology and Equipment	Rate
Mobilization/demobilization (cost/mile with a maximum of 250 miles round trip)	$2.35
Direct push [cost/day including a two (2) man crew]	$1,640.00
Direct push [cost/half-day including a two (2) man crew]	$1,240.00
Soil sample liners (cost/unit)	$5.95

Soil gas survey sample train using nylon tubing (cost/sample train)	$29.00
Expendable probe points (cost/unit)	$11.00
Expendable soil gas probe points (cost/unit)	$22.00
Temporary well (cost/foot)	$5.00
Bentonite (cost/50-lb bag)	$15.00

Sampling Method	**Rate**
Split spoon sampling (ASTM-D1586) [cost/two (2) foot sampler]	$21.00
Continuous sampling [cost/five (5) foot sampler]	$48.00

G. Laboratory Analyses

Invoices must include the Facility ID number. Only analytical results required by the Division will be reimbursed. NPDES, POTW, TCLP, and other required costs associated with approved Division activities will also be reimbursed. **If GRO and/or EPH are required to be sampled for permit requirements, then you must submit a copy of the discharge approval letter with the reimbursement application.**

The chain of custody for the samples should always be submitted with any analytical charges. Samples received by the laboratory above the required temperature of 4 degrees Celsius will not be reimbursed. When sampling a drinking water supply, the detection limit shall not exceed the established MCL for that constituent. Any sample that fails to meet minimum detection limits will not be reimbursed. **The following analytical results will be reimbursed at actual cost plus a maximum 15% markup not to exceed the following rates:**

Soil Samples		**Maximum Rate (Includes Mark-up)**
Chemical of Concern	**Method**	
BTEX, MtBE, Naphthalene	Method 8260B	$86.00
BTEX, MtBE, Naphthalene, EDB, EDC	Method 8260B	$149.00
Metals (Cd, Cr, Pb, Ag, Zn)	Method 6010/3050	$110.00
Lead (Pb) only	Method 6010/3050	$34.00
TCLP	Method 1311	$479.00

Water Samples		**Maximum Rate (Includes Mark-up)**
Chemical of Concern	**Method**	
BTEX, MtBE, Naphthalene	Method 8260B	$96.00
BTEX, MtBE, Naphthalene, EDB, EDC	Method 8260B	$146.00
EDB only	Method 8011	$86.00
PAHs	Method 8270C-SIM/8310	$202.00
Metals (Cd, Cr, Pb, Ag, Zn)	Method 6010	$79.00
Metals (Cd, Cr, Pb) only	Method 6010	$58.00
Lead (Pb) only	Method 6010	$35.00
Oil & Grease	Method 1664 Revision B	$58.00
Total suspended solids	Method 160.2	$21.00
Extractable Petroleum Hydrocarbons (EPH)	TN EPH	$85.00

LC50 Toxicity Test	Method LC50	$1,275.00
IC25 Toxicity Test	Method IC25	$1,390.00
Fe, Mn for groundwater classification	NPDES	$57.00

Air Samples		**Maximum Rate (Includes Mark-up)**
Chemical of Concern	**Method**	
BTEX, MtBE, Naphthalene, Isopropyl Alcohol	Method TO-15	$295.00
Percent O_2 and CO_2 (must be analyzed concurrently from SUMMA® sample above)	Method TO-15	$243.00

H. Travel Expenses and Per Diem

Meals will not be reimbursed without a corresponding hotel/motel receipt. Only one (1) day of meals will be reimbursed per overnight stay.

Professional Travel/per-diem*	**Maximum Lodging Costs**	**Maximum Meals & Incidental Costs**
Davidson (Nashville)	$122.00	$66.00
Shelby (Memphis)	$99.00	$61.00
Williamson (Brentwood/Franklin)	$102.00	$56.00
Hamilton (Chattanooga)	$95.00	$56.00
Knox (Knoxville)	$90.00	$56.00
Anderson (Oak Ridge)	$88.00	$46.00
All other counties	$83.00	$46.00

Professional Travel Time	**Maximum Hours**
One-way per trip based on professional staff description and rate	2
Round trip based on professional staff description and rate	4

*Lodging and per diem shall be reimbursed in accordance with the state of TN travel regulations in effect at the time that the work was performed. Current travel regulations can be found at: **www.tn.gov/finance/act/documents/policy8.pdf**

I. Other

Each task provides a maximum cost. This cost represents the maximum the Division **may** reimburse if the work is acceptable and conducted as approved. Only actual charges, not the maximum, will be reimbursed. For example, a task may provide a maximum of up to ten (10) hours to conduct the work but the actual work performed by contractor personnel was five (5) hours. Only five (5) hours may be requested for reimbursement.

A detailed time sheet and/or field log/book shall be kept for every UST task conducted although they may not be required to be submitted with the application. The Division may request these to verify claim amounts. Time reporting should be broken into fifteen (15) minute increments (i.e. 0.25 hr; 1.75 hrs; etc.)

IX. TASK DESCRIPTIONS

1.0 UST SYSTEM CLOSURE PROCESS

TASK 1.1 OVEREXCAVATION

1.1.a Cost for excavating soil and stockpiling during UST Closure

This SOW will include all necessary personnel and labor, equipment and supplies to excavate, screen, collect samples and properly stockpile contaminated soil during an UST system closure as per Closure Assessment Guidelines. Cost includes all sampling supplies. This SOW includes personnel time to coordinate this task and to manage laboratory services (i.e. Chain of Custody, sample preparation, sample QA/QC, and invoice managing). Reimbursement is limited to excavation and stockpiling of contaminated soil. **Soil contamination as defined by the applicable Closure Guidelines must be documented by an approved state of Tennessee laboratory method.** Routine overexcavation shall not exceed three (3) workdays (maximum 10-hour workday) without prior approval from the appropriate Field Office.
Maximum cost is $180.00 per hour for on-site personnel (or $1,800.00 per day) and $3,009.00 per day equipment rental.

1.1.b Cost for mobilization and demobilization of heavy equipment

This SOW will include mobilization and demobilization of the trackhoe or backhoe to and from the site.
Maximum cost is limited to $1.25 per mile per piece of equipment not to exceed $312.50.

1.1.c Cost for loading stockpiled contaminated soil for disposal

This SOW will include all necessary personnel and labor, equipment, and supplies for loading petroleum contaminated soil for proper disposal at a permitted facility. **The volume of the contaminated material requested for reimbursement must agree with the volume of the contaminated area during the closure as reported in the Permanent Closure Report.** Routine loading shall not exceed one (1) workday (maximum 10-hour workday).
Maximum cost is $180.00 per hour for on-site personnel (or $1,800.00 per day) and $1,984.00 per day equipment rental.

1.1.d Cost for laboratory services

This SOW will include any soil laboratory analysis not associated with a boring or monitoring well installation. These samples may include, but are not necessarily limited to, samples from a tank pit, samples of a stockpile for disposal or treatment, interceptor trench, or samples that are obtained by hand augering. Consultant must attach the laboratory invoice to the reimbursement form. The cost of laboratory analyses will be reimbursed at cost plus 15% not to exceed the rates listed. A markup will not be allowed if the consultant uses their own lab. Transportation costs to the laboratory should be included in this task.

Maximum costs shall not exceed the reasonable reimbursable rates as determined by the applicable laboratory method, established in Reference 1.

1.1.e Cost for replacement backfill material during any type of overexcavation

This SOW consists of the cost for replacement backfill material to properly backfill the contaminated area(s) of the tank pit and/or associated piping trench(s) with a like material. **The volume of the backfill material requested for reimbursement must agree with the volume of the contaminated area during the closure as reported in the Permanent Closure Report minus the volume of the tank void. Backfill must be acquired/purchased locally whenever possible.**
Cost plus 15% markup which includes transportation costs.

1.1.f Cost for backfilling the tank pit and/or associated piping trench(s) during overexcavation

This SOW consists of all necessary personnel and labor, equipment and materials to properly backfill the contaminated area(s) of the tank pit and/or associated piping trench(s). Routine backfilling shall not exceed one (1) workday (maximum 10-hour workday) without prior approval from the appropriate Field Office.
Maximum cost is $180.00 per hour for on-site personnel (or $1,800.00 per day) and $3,009.00 per day equipment rental.

1.0 UST SYSTEM CLOSURE PROCESS

Task 1.2 Ground Water/Free Product Removal

1.2.a Cost for removing contaminated ground water and/or free product using a vacuum/pump truck

This SOW will include all necessary equipment (such as a vacuum or pump truck) and personnel time (such as truck driver, or technician and CAC), to monitor the removal of contaminated ground water and/or free product from a tank excavation, pit, trench, vault, etc. **Ground water contamination as defined by the applicable Closure Guidelines must be documented by an approved state of Tennessee laboratory method.** This SOW does not include the cost of laboratory analyses of samples collected. Routine ground water/free product removal shall not exceed eight (8) hours without prior Division approval.
Maximum cost is $218.00 per hour (or $1,744.00 per day).

1.2.b Cost for mobilization and demobilization of vacuum/pump truck

This SOW will include mobilization and demobilization of the vacuum truck or pump truck to and from site for ground water/free product removal.
Maximum cost is limited to $2.25 per mile. Total maximum cost of $562.50.

1.2.c Cost for inspecting/sampling tank pit for ground water recharge

This SOW will include any personnel time and all sampling supplies to inspect and/or collect a ground water sample for laboratory analysis from a tank pit, utility trench, or interceptor trench. This SOW includes personnel time to coordinate this task and to manage laboratory services (i.e. Chain of Custody, sample preparation, sample QA/QC, and invoice managing). Maximum on-site personnel time limited to two (2) hours. (Do not use the Sampling button in the cost database to enter costs for this task).
Maximum number of samples is two (2) per tank pit and/or two (2) per installation.
Maximum cost is $150.00 per event.

1.2.d Cost for laboratory services

This SOW will include any ground water laboratory analysis not associated with a boring or monitoring well installation. Consultant must attach the laboratory invoice to the reimbursement form. The cost of laboratory analyses will be reimbursed at cost plus 15% not to exceed the rates listed. A markup will not be allowed if the consultant uses their own lab. Transportation costs to the laboratory should be included in this task.
Maximum costs shall not exceed the reasonable reimbursable rates as determined by the applicable laboratory method established in Reference 1.

1.2.e Cost for disposal of free product and/or ground water contaminated with petroleum product

This SOW consists of disposal of free product and/or ground water contaminated with petroleum product removed from a tank pit, trench, etc. **The volume of free product and/or ground water contaminated with petroleum product requested for reimbursement must agree with the volume documented in the Permanent Closure Report.** Ground water contamination as defined by the applicable Closure Guidelines must be documented by an approved state of Tennessee laboratory method. The Fund will not pay a per gallon rate for water treated on site.
Reimbursement will be limited to actual costs plus a maximum of 5% markup not to exceed $0.55 per gallon.

1.0 UST SYSTEM CLOSURE PROCESS

Task 1.3 Soil Treatment/ Disposal

Task 1.3.a Soil Treatment by Aeration

1.3.a.1 Cost for mobilization and setup for treatment of contaminated soil by aeration

This SOW will include either on-site or off-site natural attenuation of petroleum-contaminated soil by aeration. This SOW will include all necessary hauling, personnel and labor, equipment, and supplies (i.e. plastic sheeting, straw bales, etc.). **The volume of the contaminated material requested for reimbursement must agree with the volume of the contaminated area during the closure as reported in the Permanent Closure Report.**
Maximum cost is $2,160.00 per closure event and/or approved application.

1.3.a.2 Cost for tilling and/or disking of contaminated soil

This SOW consists of tilling and/or disking the petroleum contaminated soil generated at underground storage tank sites. Tilling and/or disking shall be conducted at a minimum of once per month and not to exceed two (2) times a month. Routine tilling and/or disking shall not exceed four hours on site time. Cost includes personnel and equipment.
Maximum cost is $395.00.

1.3.a.3 Cost for inspecting and maintaining the integrity of the treatment cell

This SOW will include all personnel time and equipment necessary to inspect and maintain the integrity of the treatment cell not to exceed one (1) time per month. Routine inspecting and/or maintaining shall not exceed two (2) hours on site technician time. Cost includes all personnel time, replacement of plastic sheeting, straw bales, etc.
Maximum cost is $405.00 per event.

1.3.a.4 Cost for sampling soil treated by aeration

This SOW will include sampling the treated soil in accordance with TGD–009 and the approved application. This SOW includes personnel time to coordinate this task and to manage laboratory services (i.e. Chain of Custody, sample preparation, sample QA/QC, and invoice managing). Sampling events shall be performed at a minimum, semi-annually and have prior written approval by the Division. Routine sampling shall not exceed two (2) hours on site personnel time. Cost includes all personnel time, a PID/FID, and all sampling supplies.
Maximum cost is $235.00 per event.

1.3.a.5 Cost for laboratory services

This SOW will include any soil laboratory analysis from a treated stockpile. Consultant must attach the laboratory invoice to the reimbursement form. The cost of laboratory analyses will be reimbursed at cost plus 15% not to exceed the rates listed. A markup will not be allowed if the consultant uses their own lab. Transportation costs to the laboratory should be included in this task.
Maximum costs shall not exceed the reasonable reimbursable rates as determined by the applicable laboratory method, established in Reference 1.

1.0 UST SYSTEM CLOSURE PROCESS

Task 1.3 Soil Treatment/ Disposal

Task 1.3.b Hauling and Soil Disposal by Landfilling

This task may also be used anytime excavated petroleum contaminated soil is disposed at a landfill.

1.3.b.1 Cost of scheduling for hauling and landfilling petroleum contaminated soil

This SOW will include all necessary contracting and scheduling for disposal of petroleum contaminated soil at a permitted landfill facility. Work shall not exceed two (2) hours. Maximum cost is $95.00 per hour.
Maximum cost is $190.00 per event.

1.3.b.2 Cost for hauling petroleum contaminated soil

This SOW will include all costs necessary for hauling (including driver) petroleum contaminated soil to a permitted landfill. **Disposal of soil with contamination levels below the Division's site-specific cleanup levels will not be reimbursed.** The most cost effective alternative (including transportation) must be chosen. Backup documentation must include original invoices and weight tickets.

Treatment	Per Ton
Transportation (less than 50 miles)	$11.00
Transportation (50 – 100 miles)	$20.00
Transportation (over 100 miles)	$24.50

1.3.b.3 Cost for disposal of petroleum contaminated soil

This SOW will include all costs necessary for disposal of petroleum contaminated soil at a permitted landfill. **Disposal of soil with contamination levels below the Division's site-specific cleanup levels will not be reimbursed. Reimbursement will be limited to actual costs plus a maximum 5% markup.**

1.3.b.4 Cost for disposal of petroleum contaminated soil in drums

This SOW will include all necessary personnel and labor, equipment and supplies to properly dispose petroleum contaminated soil in drums at a permitted disposal facility. This cost is for disposal only.
Maximum cost is $90.00 per drum.

1.0 UST SYSTEM CLOSURE PROCESS

Task 1.3 Soil Treatment/ Disposal

Task 1.3.c Soil Treatment by Landfarming

1.3.c.1 Cost of scheduling for landfarming petroleum contaminated soil

This SOW will include all necessary contracting and scheduling for disposal of petroleum contaminated soil at a permitted landfarm facility. Work not to exceed two (2) hours. Maximum cost is $95.00 per hour.
Maximum cost is $190.00 per event.

1.3.c.2 Cost for hauling petroleum contaminated soil

This SOW will include all necessary hauling, personnel and labor, equipment, and supplies for landfarming petroleum contaminated soil at a permitted landfarm. **The volume of the contaminated material requested for reimbursement must agree with the volume of the contaminated area during the closure as reported in the Permanent Closure Report**.

Treatment	Per Ton
Transportation (less than 50 miles)	$11.00
Transportation (50 – 100 miles)	$20.00
Transportation (over 100 miles)	$24.50

1.3.c.3 Cost for landfarming of petroleum contaminated soil

This SOW will include all costs necessary for landfarming of petroleum contaminated soil at a permitted facility.
Maximum cost is $28.00 per ton.

1.0 UST SYSTEM CLOSURE PROCESS

Task 1.4 TRBCA Closure Process

1.4.a Cost for scheduling drilling event

This SOW will include all necessary contracting and scheduling for a driller to perform all phases of drilling (i.e. soil borings, installation of monitoring wells, perform well development, boring abandonment, and various other drilling tasks as needed). This SOW shall include the scheduling of field activities associated with the drilling event, including locating all underground utilities. This SOW shall also include all personnel cost necessary to acquire all well permits from the appropriate agency.
Maximum cost is $285.00.

1.4.b Cost for supervision of fieldwork

This SOW shall include oversight of field activities as well as office support and coordination. This SOW includes one (1) field person, either a licensed professional geologist under the Tennessee Geologist Licensure Act of 2007 (*T.C.A. §62-36-101 et seq.*), or registered professional engineer under the Tennessee Architects, Engineers, Landscape Architects, and Interior Designers Law and Rules (T.C.A. *§62-2-101 et seq.*), and the necessary equipment to supervise and manage drilling activities. Cost includes all personnel time, PID/FID, water level indicator/interface probe, and all sampling supplies. Included in the SOW, the consultant is required to complete all boring logs, well construction records, and collect all necessary soil samples including samples for soil disposal. Supervisory time should not exceed drilling time.
Maximum cost per day is $1,075.00.

1.4.c Cost for mobilization/demobilization of drill rig

This SOW will include mobilization and demobilization of the drill rig to and from the site. Mobilization/demobilization is not to exceed 250 miles round trip.
Maximum cost is limited to $3.00 per mile not to exceed a total cost of $750.00 for an auger rig. Maximum cost is limited to $4.25 per mile not to exceed a total cost of $1,062.50 for an air rotary rig.

1.4.d Cost for drilling

This SOW will include support vehicles, steam cleaner, grout plant, trailers, and crew. Along with the invoice, the consultant must submit the appropriate reimbursement forms. All monitoring wells shall be installed and abandoned by a licensed well driller. In order to simplify and speed reimbursement, it is recommended that drilling companies itemize their invoices to reflect the reasonable rate document form format. The cost of drilling will be reimbursed at cost plus 15% markup not to exceed the reasonable rate schedule. A markup will not be allowed if the consultant uses their own driller. All wells are required to be properly developed prior to sampling. This includes surge blocking where needed.

1.4.e Cost for well development

This SOW will include all necessary personnel, labor, equipment and supplies to properly develop wells in accordance with the EAG twenty-four (24) hours after installation.
Maximum cost per day is $496.00.

1.4.f Cost for ground water sampling

This SOW includes all personnel time to purge and sample wells of any depth or diameter. This SOW includes static water level measurements and purge volume calculations. This SOW includes all ground water sampling for primary and secondary Drinking Water Standards as required in the EAG. This SOW includes sampling of purge water for disposal. This SOW includes personnel time and supplies to coordinate this task and to manage the laboratory services (i.e. Chain of custody, sample preparation, sample QA/QC, and invoice managing). Includes cost of drum.
Maximum cost is $273.50 for one (1) well.

1.4.g Cost for laboratory services

SOW includes laboratory costs associated with all sampling of soil and/or water. Consultant must attach the laboratory invoice to the reimbursement form. **Only analytical test(s) required by the current Closure Assessment Guidelines will be reimbursed.** The cost of laboratory analyses will be reimbursed at cost plus 15% not to exceed the rates listed. A markup will not be allowed if the consultant uses their own lab. Transportation costs to the laboratory should be included in this task.
Maximum cost shall not exceed the reasonable reimbursable rates as determined by the applicable laboratory method established in Reference 1.

1.4.h Cost for water use and Karst survey

This SOW includes preparation of a water use and Karst survey in accordance with the EAG. This SOW includes all fieldwork, telephone contacts and records search. This SOW includes the completion of the Water Use Survey Sheets. **This task is not repeatable unless requested/approved by the Division.**
Maximum cost is $890.00.

1.4.i Cost for disposal of free product and/or ground water contaminated with petroleum product

This SOW will include all necessary personnel and labor, equipment and supplies to properly dispose of free product and/or ground water contaminated with petroleum product removed from a monitoring well. Ground water contamination must be documented by an approved state of Tennessee laboratory method. This cost is for disposal only.
Maximum cost is $90.00 per drum.

1.4.j Cost for disposal of petroleum contaminated soil

This SOW will include all costs necessary for disposal of petroleum contaminated soil at a permitted landfill. **Disposal of soil with contamination levels below the Division's site-specific cleanup levels will not be reimbursed. Reimbursement will be limited to actual costs plus a maximum 5% markup.**

1.4.k Cost for disposal of petroleum contaminated soil in drums

This SOW will include all necessary personnel and labor, equipment and supplies to properly dispose petroleum contaminated soil in drums at a permitted disposal facility. This cost is for disposal only.
Maximum cost is $90.00 per drum.

2.0 HAZARD MANAGEMENT PROCESS

Task 2.1 Interceptor/Recovery Trench Installation (with Division approval only)

2.1.a Cost for interceptor/recovery trench design and approval

This SOW will include all personnel time to prepare a map for the proposed interceptor/recovery trench layout, plus cross sections and details as needed for proper construction. This SOW will include any project coordination time including cost estimates, equipment procurement/rental, and meeting with the responsible party and state regulators.
Maximum cost is $605.00.

2.1.b Cost for mobilization and demobilization of heavy equipment

This SOW will include mobilization and demobilization of the trackhoe or backhoe to and from the site.
Maximum cost is limited to $1.25 per mile per piece of equipment not to exceed $312.50.

2.1.c Cost for interceptor/recovery trench installation

This SOW will include all necessary personnel and labor, equipment and supplies to excavate, properly install and collect samples from a passive interceptor/recovery trench. Cost includes location of utilities and removal of any concrete, asphalt and/or soil during installation. Cost also includes all sampling supplies, and equipment and trench supplies such as a trackhoe or backhoe, well screens, piping, and sumps. Routine installation shall not exceed one (1) workday (maximum 10-hour work day) without prior approval from the appropriate Field Office.
Maximum cost is $180.00 per hour for on-site personnel (or $1,800.00 per day) and $2,494.00 per day equipment.

2.1.d Cost for loading stockpiled contaminated soil for disposal

This SOW will include all necessary personnel and labor, equipment, and supplies for loading petroleum contaminated soil for proper disposal at a permitted facility. **The volume of the contaminated material requested for reimbursement must agree with the volume of the contaminated area during the installation as reported in the Initial Response and Hazard Management Report.** Routine loading shall not exceed one (1) workday (maximum 10-hour work day).
Maximum cost is $180.00 per hour for on-site personnel (or $1,800.00 per day) and $1,984.00 per day equipment rental.

2.1.e Cost for replacement backfill material during any type of excavation

This SOW consists of the cost for replacement backfill material to properly backfill the contaminated area(s) of the tank pit and/or associated piping trench(s) with a like material. **The volume of the backfill material requested for reimbursement must agree with the volume of the contaminated area during the closure as reported in the Permanent Closure Report minus the**

volume of the tank void. Backfill must be acquired/purchased locally whenever possible.
Cost plus 15% markup which includes transportation costs.

2.1.f Cost for repair/replacement of asphalt after interceptor/recovery trench installation

This SOW will include all personnel and labor, equipment and supplies to properly restore trench location to a condition comparable to the original condition.
Maximum cost is $2.32 per square foot for asphalt.

2.1.g Cost for repair/replacement of concrete after interceptor/recovery trench installation

This SOW will include all personnel and labor, equipment and supplies to properly restore trench location to a condition comparable to the original condition.
Maximum cost is $3.75 per square foot for concrete.

2.1.h Cost for repair/replacement of landscaping after interceptor/recovery trench installation

This SOW will include all personnel and labor, equipment and supplies to properly restore trench location to a condition comparable to the original condition utilizing seed, mulch and straw by hand.
Maximum cost is $260.00.

2.1.i Cost for backfilling the void and/or associated trench(s) during excavation

This SOW consists of all necessary personnel and labor, equipment and materials to properly backfill the void area(s) and/or associated trench(s). Routine backfilling shall not exceed one (1) workday (maximum 10-hour workday) without prior approval from the appropriate Field Office.
Maximum cost is $180.00 per hour for on-site personnel (or $1,800.00 per day) and $3,009.00 per day equipment rental.

2.0 HAZARD MANAGEMENT PROCESS

Task 2.2 Ground Water/Free Product Removal from an Interceptor/Recovery Trench (with Division approval only)

2.2.a Cost for removing contaminated ground water and/or free product using a vacuum/pump truck from an interceptor/recovery trench

This SOW will include all necessary equipment (such as a vacuum or pump truck) and personnel (such as truck driver, CAC or technician), to monitor the removal of contaminated ground water and/or free product from an interceptor/recovery trench installation. **Ground water contamination must be documented by an approved state of Tennessee laboratory method.** This SOW does not include the cost of laboratory analyses of samples collected.
Maximum cost is $193.00 per hour (or $1,544.00 per day).

2.2.b Cost for mobilization and demobilization of vacuum/pump truck

This SOW will include mobilization and demobilization of the vacuum truck or pump truck to and from site.
Maximum cost is limited to $2.25 per mile. Total maximum cost of $562.50.

2.2.c Cost for ground water sample collected for laboratory analysis and supplies (not associated with a boring/monitoring well)

This SOW will include any personnel time and sampling supplies to collect a ground water sample for laboratory analysis during interceptor/recovery trench installation. This SOW includes personnel time to coordinate this task and to manage laboratory services (i.e. Chain of Custody, sample preparation, sample QA/QC, and invoice managing). Maximum on-site personnel time limited to two (2) hours.
Maximum number of samples is two (2) per tank pit and/or two (2) per installation.
Maximum cost is $150.00 per event.

2.2.d Cost for laboratory services

This SOW will include any ground water laboratory analysis collected during interceptor/recovery trench installation. Consultant must attach the laboratory invoice to the reimbursement form. The cost of laboratory analyses will be reimbursed at cost plus 15% not to exceed the rates listed. A markup will not be allowed if the consultant uses their own lab. Maximum costs shall not exceed the reasonable reimbursable rates as determined by the applicable laboratory method established in Reference 1. Transportation costs to the laboratory should be included in this task.
Maximum number of samples is two (2) per tank pit and/or two (2) per installation.

2.2.e Cost for disposal of free product and/or ground water contaminated with petroleum product

This SOW consists of disposal of free product and/or ground water contaminated with petroleum product removed from a tank pit, trench, etc. **The volume of free product and/or ground water contaminated as defined by the applicable Closure Guidelines requested for reimbursement must agree with the volume documented in the Initial Response and Hazard Management Report**. Ground water contamination must be documented by an approved state of Tennessee laboratory method. This cost is for disposal only. The Fund will not pay a per gallon rate for water treated on site.
Reimbursement will be limited to actual costs plus a maximum of 5% markup not to exceed $0.55 per gallon.

2.2.f Cost for obtaining a temporary permit to POTW

This SOW will include all personnel and labor to coordinate and prepare a permit application required by local POTW for temporary discharge of contaminated petroleum ground water.
Maximum cost is based on the actual permit fee required per municipality plus a maximum of two (2) hours personnel time (not to exceed $160.00).

2.2.g Cost for obtaining a ground water sample collected to meet POTW discharge requirements

This SOW will include all personnel and labor to collect a ground water sample for laboratory analysis to meet/establish POTW discharge permit requirements. This SOW includes personnel time to coordinate this task and to manage laboratory services (i.e. Chain of Custody, sample preparation, sample QA/QC, and invoice managing). The frequency and sampling requirements for discharge permits shall be performed according to the approved federal, state, and/or local government agency requirements. Maximum number is one (1) sample per discharge.
Maximum cost is $75.00 per required sample.

2.2.h Cost for discharge to POTW

This SOW will include all costs associated with the discharge of ground water/free product under the approved POTW permit. **The amount requested for reimbursement should agree with the volume (in gallons) reported discharged in the POTW report.**
Maximum cost is based on the actual discharge fee per gallon as charged by the POTW.

2.0 HAZARD MANAGEMENT PROCESS

Task 2.3 Free Product Removal by Hand Bailing (with Division approval only)

2.3.a Cost for removing free product by hand bailing

This SOW will include all necessary personnel and labor, equipment (such as a gloves, bailers, twine, oil-water interface probe, and 55-gallon reconditioned drum) and labor (senior technician) to remove free product from a monitoring well or observation well and properly store when encountered. This SOW includes measurement and recording of ground water depths and product thickness in each well. **Work is not to exceed 8 hours. Task is limited to a maximum of two (2) events per month. Duration is not to exceed three (3) months unless otherwise directed by the Division.**
Maximum cost is $55.00 per hour (or a maximum of $596.00 per event).

2.3.b Cost for disposal of free product

This SOW consists of transportation and disposal of contaminated petroleum product removed from a monitoring well or observation well. This cost is for disposal only.
Maximum cost is $90.00 per drum.

2.0 HAZARD MANAGEMENT PROCESS

Task 2.4 Mobile Enhanced Multi-phase Extraction (MEME)

2.4.a Cost for initial project setup

This SOW will consist of review of the existing site data, and coordination and scheduling the MEME event.
Maximum cost is $160.00 per event.

2.4.b Cost for mobilization and demobilization of vacuum truck

This SOW will include mobilization and demobilization of the vacuum truck to and from site. Mobilization/demobilization is not to exceed 250 miles round trip.
Maximum cost is limited to $2.25 per mile per piece of equipment. Total maximum cost of $562.50.

2.4.c Cost for supervision of 8-hour MEME event field work

This SOW will include all personnel time for the supervision of one (1) complete MEME event. This SOW includes one (1) field person to oversee MEME activities for a maximum of two (2) hours onsite.
Maximum cost is $160.00.

2.4.d Cost for performing an 8-hour MEME event

This SOW will include the setup and performance of one (1) 8-hour MEME event according to the approved application. This SOW will include personnel and equipment to perform one (1) eight (8) hour MEME event. This SOW includes tabulating results (free product and ground water measurements before and after the event plus vacuum pressure on affected wells during the event), recording the amount of product and water recovered, vacuum radius of influence, etc. Required equipment also includes instrumentation for measuring temperature, velocity, relative humidity, and the concentration of emissions. Cost includes one (1) senior technician onsite for 10 hours: two (2) hours allowed for set-up and shut down and eight (8) hours for the actual MEME event.
Maximum cost is $3,125.50 per 8-hour event.

2.4.e Cost for performing a 24-hour MEME event

This SOW will include the setup and performance of one (1) 24-hour MEME event according to the approved application. This SOW will include personnel and equipment to perform one (1) twenty four hour MEME event. This SOW includes tabulating results (free product and ground water measurements before and after the event plus vacuum pressure on affected wells during the event), recording the amount of product and water recovered, vacuum radius of influence, etc. Required equipment also includes instrumentation for measuring temperature, velocity, relative humidity, and the concentration of emissions. Cost includes one (1) senior technician onsite for 26 hours: two (2) hours allowed for set-up and shut down and 24 hours for the actual MEME event.
Maximum cost is $6,642.50 per 24-hour event.

2.4.f Cost for disposal of free product and/or ground water contaminated with petroleum product

This SOW consists of disposal of free product and/or ground water contaminated with petroleum product removed during a MEME event. **The volume of free product and/or ground water contaminated with petroleum product requested for reimbursement must agree with the volume documented in the MEME Report**.
Reimbursement will be limited to actual costs plus a maximum of 5% markup not to exceed $0.55 per gallon.

2.4.g Cost for free product assessment after an 8-hour MEME event

This SOW includes measurement and recording of ground water depth and product thickness of each well after a free product recovery event. The intent of this SOW is to determine if the free product recovery method should be continued. A recommendation shall be provided as to the status of free product in the wells and the most appropriate course of further action. Cost includes personnel and labor, equipment and supplies.
Maximum cost is $352.50 per event.

2.4.h Cost for laboratory services

This SOW includes laboratory costs associated with all sampling of influent groundwater. Consultant must attach the laboratory invoice to the reimbursement form. The cost of laboratory analyses will be reimbursed at cost plus 15% not to exceed the rates listed. A markup will not be allowed if the consultant uses their own lab. Transportation costs to the laboratory should be included in this task.
Maximum cost shall not exceed the reasonable reimbursable rates as determined by the applicable laboratory method established in Reference 1.

2.4.i Cost for supervision of 24-hour MEME event field work

This SOW will include all personnel time for the supervision of one (1) complete MEME event. This SOW includes one (1) field person to oversee 24-hour MEME activities, assembly of sample train and collection of influent water sample for a maximum of four (4) hours.
Maximum cost is $320.00.

2.0 HAZARD MANAGEMENT PROCESS

Task 2.5 Free Product Recovery on Surface Water

2.5.a Cost for installation of absorbent pads and/or booms on surface water

This SOW will include all personnel time to install/lay booms or absorbent pads (up to 50) to recover free-floating product from impacted surface waters. Personnel time includes time for two (2) employees [one (1) senior technician and one (1) technician]. This SOW includes all field materials used including absorbent booms, absorbent pads, polypropylene rope, steel fence posts, and field supplies.
Maximum cost is $260.00 per event.

2.5.b Cost for boom inspection and replacement

This SOW will include all personnel time [for one (1) senior technician and one (1) technician] and materials to replace and/or repair absorbent booms placed on surface water to recover free product. **Task is limited to two (2) times per month. Duration is not to exceed three months unless otherwise directed by the Division.**
Maximum cost is $210.00 per event.

2.5.c Cost of drums for spent booms and/or absorbent pads

This SOW will include all personnel time for purchasing and delivery of required drums to store used booms and/or absorbent pads. This SOW includes cost of drum. This SOW also includes properly sealing and labeling drums.
Maximum cost is $96.00 for initial drum and $41.00 per additional drums.

2.5.d Cost for disposal of drums filled with spent booms and/or absorbent pads

This SOW will include all necessary personnel and labor, equipment and supplies to properly dispose of drums filled with spent booms and/or absorbent pads at a permitted disposal facility. This cost is for disposal only.
Maximum cost is $90.00 per drum.

2.5.e Cost for specifying and purchasing a passive skimmer

This SOW will include all necessary personnel time to properly specify and purchase a passive skimmer system to remove free product from surface water. Professional hours are limited to engineers, geologists, or environmental specialists not to exceed two (2) hours. **Cost of skimmer system is not to exceed $1300.00/each.**
Maximum cost is $1,460.00.

2.5.f Cost for installation of a passive skimmer

This SOW will include all necessary personnel (senior technician) and equipment to install a passive skimmer system to remove free product from surface water. **Work is not to exceed 2 hours.**
Maximum cost is $110.00.

2.5.g Cost for servicing a passive skimmer

This SOW will include emptying free product and properly storing recovered product from surface water. This SOW includes all personnel (senior technician), miscellaneous equipment, and supplies. Task is limited to a maximum of two (2) events per month. **Work is not to exceed 2 hours. Maximum cost is $110.00.**

2.0 HAZARD MANAGEMENT PROCESS

Task 2.6 Continuous Free Product Removal (with Division approval only)

2.6.a Cost for specifying and purchasing a passive skimmer

This SOW will include all necessary personnel time to properly specify and purchase a passive skimmer system to remove free product from a monitoring well. Professional hours are not to exceed two (2) hours. **Cost of skimmer system is not to exceed $800/each.**
Maximum cost is $960.00.

2.6.b Cost for installation of a passive skimmer or absorbent pad/sock

This SOW will include all necessary personnel (senior technician) and equipment to install a passive skimmer system or absorbent pad/sock to remove free product from a monitoring well. This SOW includes measurement and recording of ground water depths and product thickness in each well. **Work is not to exceed two (2) hours.**
Maximum cost is $110.00.

2.6.c Cost for servicing a passive skimmer

This SOW will include emptying free product and properly storing recovered product from a monitoring well. This SOW includes all personnel (senior technician), miscellaneous equipment, and supplies. **Work not to exceed two (2) hours. Task is limited to a maximum of two (2) events per month.**
Maximum cost is $110.00.

2.0 HAZARD MANAGEMENT PROCESS

Task 2.7 Impacted Drinking Water Management

2.7.a Cost for temporary response activities

This SOW will consist of notifying the groundwater user of impact to their water supply and delivery of bottled water or installation of a temporary purification system.
Maximum cost is $2,500.00 without an approved cost proposal. With an approved cost proposal, the maximum cost is equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing.

2.7.b Cost for permanent response activities

This SOW will include the cost of the bid presented in the Permanent Source of Potable Water (PSPW) proposal, and change order(s) if applicable, approved in writing by the Division.
Maximum cost is equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing.

2.0 HAZARD MANAGEMENT PROCESS

Task 2.8 Petroleum Vapor Impact Management

2.8.a Cost for temporary response activities

This SOW will consist of notifying the affected occupants and/or property owners of impacted buildings or utility districts of impacted utilities concerning the vapor hazard and proposed temporary actions. This SOW also included implementation of temporary response actions.
Maximum cost is $2,500.00 without an approved cost proposal. With an approved cost proposal, the maximum cost is equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing.

2.8.b Cost for permanent response activities

This SOW will include the cost of the bid presented in the Petroleum Vapor Permanent Abatement (PVPA) System Proposal, and change order(s) if applicable, approved in writing by the Division.
Maximum cost is equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing.

2.8.c Cost for permit and/or utility service

This SOW includes all personnel time necessary to secure permits and/or utility connections with federal, state, and/or local government agency requirements.
Maximum cost is $160.00.

3.0 RELEASE INVESTIGATION PROCESS

Task 3.1 Project Management

3.1.a Cost for initial project setup and review

This SOW will include all personnel time to review existing site data, including incident information, past site history, agency requirements (NOD, NOV, etc.), previous assessments and remediation (closure reports, IRHMR, ISCR, etc.). This SOW assumes client will provide consultant with all available information plus all reimbursement documentation. **This task is not repeatable per release.**
Maximum cost is $600.00.

3.1.b Cost for site reconnaissance

This SOW will include all personnel time to locate and identify potential receptors such as water wells, surface waters, basements, public utilities, and to locate and identify all potentially affected parties, including names and addresses. This SOW will also consist of gathering information about the site so that a detailed site map and site vicinity map can be later generated from field observation (i.e. location of discharge and extent, identification of all receptors, monitoring wells, and other site features). This SOW includes project manager oversight and staff level persons (or equal) to perform fieldwork, telephone coordination with property owners and local city and state government agencies. This SOW includes data review, evaluation and reporting (client, property owners, appropriate Field Office). If a previous consultant has already completed this task, then it should not be duplicated unless requested by the Division.
Maximum cost is $845.00.

3.1.c Cost for grant of access

This SOW will include all personnel time to acquire a grant-of-access from adjacent and nearby property owners. Access purposes may include, but are not limited to borings and soil sampling, monitoring and recovery well installation, city or county waterline hookup, easements, etc.
Maximum cost is $320.00 per agreement.

3.1.d Cost for pre-Corrective Action Plan meeting

This SOW will include the meeting held between Division personnel, the CAC and/or the responsible party, as deemed necessary by the Division prior to submission of a CAP. Topics for discussion shall include but not be limited to measured drawdown and radius of influence during the 24 hour MEME event, extraction rates for soil vapor and groundwater, number of extraction wells and number with free product, permit requirements (treated water, air, construction, etc.), electrical supply availability and local requirements, and site obstructions (hindrances to CAS delivery and/or placement). This may include any time for an on-site meeting. Maximum cost includes the time required for oversight by the Project Manager and a maximum of two (2) geologists/engineers to schedule, plan, and attend the meeting.

Maximum cost is $1,375.00 per meeting.

3.0 RELEASE INVESTIGATION PROCESS

Task 3.2 System Test

3.2.a Cost for system test

The UST system tightness testing is reimbursable for release investigations only. An approved tightness test for a release investigation will follow Rule 0400-18-01-.05(3)(a). All tightness test methods must be third party certified. **System tightness testing for system compliance is not reimbursable**. **Maximum cost is actual invoice cost from tightness tester.**

3.0 RELEASE INVESTIGATION PROCESS

Task 3.3 Drilling

3.3.a Cost for scheduling drilling event

This SOW will include all necessary contracting and scheduling for a driller to perform all phases of drilling (i.e. soil borings, installation of monitoring wells, vertical wells, remedial wells, perform well development, boring abandonment, and various other drilling tasks as needed). This SOW shall include the scheduling of field activities associated with the drilling event. This SOW shall include locating all underground utilities. This SOW shall also include all personnel time necessary to acquire all well permits from the appropriate agency.
Maximum allowable cost is $285.00.

3.3.b. Cost for mobilization/demobilization of drill rig

This SOW will include mobilization and demobilization of the drill rig to and from the site. Mobilization/demobilization is not to exceed 250 miles round trip.
Maximum cost is limited to $2.35 per mile not to exceed a total cost of $587.50 for a direct push technology rig. Maximum cost is limited to $3.00 per mile not to exceed a total cost of $750.00 for an auger rig. Maximum cost is limited to $4.25 per mile not to exceed a total cost of $1,062.50 for an air rotary rig.

3.3.c Cost for supervision of field work

This SOW will include oversight of field activities as well as office support and coordination. This SOW includes one (1) field person, either a licensed professional geologist under the Tennessee Geologist Licensure Act of 2007 (*T.C.A. §62-36-101 et seq*.), or registered professional engineer under the Tennessee Architects, Engineers, Landscape Architects, and Interior Designers Law and Rules (T.C.A. *§62-2-101 et seq*.) with appropriate geologic experience, and the necessary equipment to supervise and manage drilling activities. Cost includes all personnel time, equipment and supplies. Included in the SOW, the consultant is required to complete all boring logs, well construction records, and collect all necessary soil samples including samples for soil disposal. Supervisory time should not exceed drilling time.
Maximum allowable cost per day is $972.50.

3.3.d Cost for drilling

This SOW will include support vehicles, steam cleaner, grout plant, trailers, and crew. All monitoring wells shall be installed by a licensed well driller. Along with the invoice, the consultant must submit the appropriate reimbursement forms. In order to simplify and speed reimbursement, it is recommended that drilling companies itemize their invoices to reflect the reasonable rate document form format. The cost of drilling will be reimbursed at cost plus 15% markup not to exceed the reasonable rate schedule. A markup will not be allowed if the consultant uses their own driller. All wells are required to be properly developed prior to sampling. This includes surge blocking where needed.

3.3.e Cost for well development

This SOW will include all necessary personnel, labor, equipment and supplies to properly develop wells in accordance with the EAG twenty-four (24) hours after installation.
Maximum cost per day is $1,136.00.

3.3.f Cost for disposal of petroleum contaminated soil in drums

This SOW will include all necessary personnel, labor, equipment and supplies to properly dispose petroleum contaminated soil in drums at a permitted disposal facility. This cost is for disposal only.
Maximum cost is $90.00 per drum.

3.0 RELEASE INVESTIGATION PROCESS

Task 3.4 Sampling

3.4.a Cost for ground water sampling

This SOW includes all personnel time to purge and sample wells of any depth or diameter. This SOW includes static water level measurements and purge volume calculations. This SOW includes all ground water sampling for primary and secondary Drinking Water Standards as required in the EAG. This SOW includes sampling of purge water for disposal. This SOW includes personnel time to coordinate this task and to manage the laboratory services (i.e. Chain of custody, sample preparation, sample QA/QC, and invoice managing). Includes cost of drum.
Maximum cost is $273.50 for one (1) well and $120.00 per well for each additional well sampled.

3.4.b Cost for water supply well sampling

This SOW includes all personnel and sampling supplies to purge and sample a water supply well (i.e. indoor or outdoor spigot). This SOW includes all necessary equipment, personnel and sampling supplies to perform well purging (by letting spigot run for an adequate time) followed by sampling. This SOW includes sampling of purge water for disposal. This SOW includes the time to coordinate this task and to manage the laboratory services (i.e. Chain of custody, sample preparation, sample QA/QC, and invoice managing).
Maximum cost is $75.00 for one (1) well and $55.00 for each additional well sampled.

3.4.c Cost for surface water sampling

This SOW includes sampling of various types of surface waters (i.e. includes ponds, streams, creeks, etc.) to verify contamination. This SOW includes all necessary equipment, personnel and sampling supplies to perform sampling. This SOW includes personnel time to coordinate this task and to manage the laboratory services (i.e. Chain of custody, sample preparation, sample QA/QC, and invoice managing).
Maximum cost is $75.00 for one (1) sample point and $55.00 for each additional sample point.

3.4.d Cost for soil sampling (not associated with drilling activities)

This SOW includes various types of soil sampling not associated with drilling activities, closure activities, stockpile sampling or overexcavation sampling. (i.e. includes surface sampling, etc.) to verify contamination. This SOW includes all necessary equipment, personnel, and sampling supplies to perform sampling. This SOW includes personnel time to coordinate this task and to manage the laboratory services (i.e. Chain of custody, sample preparation, sample QA/QC, and invoice managing).
Maximum cost is $180.00 for one (1) sample point by hand augering and $55.00 for each additional sample point.

3.4.e Cost for laboratory services

This SOW includes laboratory costs associated with all sampling of soil and/or water. Consultant must attach the laboratory invoice to the reimbursement form. The cost of laboratory analyses will be reimbursed at cost plus 15% not to exceed the rates listed. A markup will not be allowed if the consultant uses their own lab. Transportation costs to the laboratory should be included in this task.
Maximum cost shall not exceed the reasonable reimbursable rates as determined by the applicable laboratory method established in Reference 1.

3.4.f Cost for disposal of free product and/or ground water contaminated with petroleum product

This SOW consists of disposal of free product and/or ground water contaminated with petroleum product removed from a monitoring well. Ground water contamination must be documented by an approved state of Tennessee laboratory method. This cost is for disposal only.
Maximum cost is $90.00 per drum.

3.4.g Cost for collection of thirty (30) day static ground water levels

This SOW includes all personnel and equipment to properly collect thirty (30) day static water level measurements in accordance with the current Environmental Assessment Guidelines as required to develop potentiometric maps in the Initial Site Characterization Report.
Maximum cost is $190.00.

3.0 RELEASE INVESTIGATION PROCESS

Task 3.5 Receptor and Water Use Survey

3.5.a Cost for receptor survey

This SOW includes preparation of a receptor survey in accordance with the EAG. This SOW includes all fieldwork, telephone contacts and records search. This SOW includes the completion of the Water Use Survey Sheets. **This task is not repeatable unless requested/approved by the Division.**
Maximum cost is $330.00.

3.5.b Cost for water use and Karst survey

This SOW includes preparation of a water use and Karst survey in accordance with the EAG. This SOW includes all fieldwork, telephone contacts and record searches. This SOW includes the completion of the Water Use Survey Sheets. **This task is not repeatable unless requested/approved by the Division.**
Maximum cost is $890.00.

3.0 RELEASE INVESTIGATION PROCESS

Task 3.6 Site Survey

3.6.a Cost for site survey by a licensed professional surveyor

This SOW will include all personnel time to coordinate and schedule field activities associated with the survey event, collect, and record all data required to complete an acceptable monitoring well location map. This SOW shall include surveying the elevation of the established and documented point on the top of each well casing correlated with a mean sea level datum.
Maximum cost not to exceed $745.00 for the initial four (4) wells. Maximum cost is $145.00 for each additional well.

3.0 RELEASE INVESTIGATION PROCESS

Task 3.7 Vapor Monitoring

3.7.a Cost for vapor monitoring

This SOW includes monitoring of various types of above ground structures and subsurface structures (i.e. includes buildings, basements, crawl spaces, utility vaults, etc.) for petroleum vapors. This SOW includes all necessary equipment and personnel to coordinate and conduct this task. This SOW should be performed in conjunction with any monitoring or sampling task when personnel is already on site and not performed as a separate event, unless otherwise directed by the Division.
Maximum cost is $215.00 per day.

3.0 RELEASE INVESTIGATION PROCESS

Task 3.8 Soil Gas Survey

Task 3.8.a Soil Gas Survey Using Direct Push Technology

3.8.a.1 Cost for scheduling soil gas survey event

This SOW will include all necessary contracting and scheduling to perform all phases of the soil gas survey (i.e. soil borings and various other drilling tasks as needed). This SOW will include the scheduling of field activities associated with the soil gas survey event. This SOW will include locating all underground utilities.
Maximum allowable cost is $285.00.

3.8.a.2 Cost for mobilization/demobilization of direct push technology

This SOW will include mobilization and demobilization of the drill rig to and from the site. Mobilization/demobilization is not to exceed 250 miles round trip.
Maximum cost is limited to $2.35 per mile not to exceed a total cost of $587.50.

3.8.a.3 Cost for supervision of fieldwork using a direct push technology (4 or less samples)

This SOW will include oversight of field activities as well as office support and coordination. This SOW will include all personnel and the necessary equipment to supervise and manage drilling activities. Cost includes all personnel time, sample train, assembly and testing of sample train and sample supplies. Included in the SOW the CAC is required to complete all field forms and collect all necessary samples. Supervisory time should not exceed drilling time.
Maximum allowable cost per half day is $1,356.00 (5 hours).

3.8.a.4 Cost for supervision of fieldwork using a direct push technology (5 or more samples)

This SOW will include oversight of field activities as well as office support and coordination. This SOW will include all personnel and the necessary equipment to supervise and manage drilling activities. Cost includes all personnel time, sample train, assembly and testing of sample train and sample supplies. Included in the SOW, the CAC is required to complete all field forms and collect all necessary samples. Supervisory time should not exceed drilling time.
Maximum allowable cost per full day is $2,392.00 (10 hours).

3.8.a.5 Cost for drilling using direct push technology (4 hours)

This SOW will include support vehicles, steam cleaner, trailers, and a two (2) person crew. Along with the invoice, the CAC must submit the appropriate reimbursement forms. In order to simplify and speed reimbursement, it is

recommended that drilling companies itemize their invoices to reflect the reasonable rate document form format. The cost of drilling will be reimbursed at cost plus 15% markup not to exceed the reasonable rate schedule. A markup will not be allowed if the consultant uses their own driller.
Maximum allowable cost per half day is $1,343.00 (4 hours).

3.8.a.6 Cost for drilling using direct push technology (8 hours)

This SOW will include support vehicles, steam cleaner, trailers, and a two (2) person crew. Along with the invoice, the CAC must submit the appropriate reimbursement forms. In order to simplify and speed reimbursement, it is recommended that drilling companies itemize their invoices to reflect the reasonable rate document form format. The cost of drilling will be reimbursed at cost plus 15% markup not to exceed the reasonable rate schedule. A markup will not be allowed if the consultant uses their own driller.
Maximum allowable cost per full day is $1,831.00 (8 hours).

3.8.a.7 Cost for laboratory services

SOW includes laboratory costs associated with all air or soil gas sampling. Consultant must attach the laboratory invoice to the reimbursement form. The cost of laboratory analyses will be reimbursed at cost plus 15% not to exceed the rates listed. A markup will not be allowed if the consultant uses their own lab. Transportation costs to the laboratory should be included in this task.
Maximum cost shall not exceed the reasonable reimbursable rates as determined by the applicable laboratory method established in Reference 1.

3.0 RELEASE INVESTIGATION PROCESS

Task 3.8 Soil Gas Survey

Task 3.8.b Soil Gas Survey Using Hammer Drill or Slide Hammer

3.8.b.1 Cost for scheduling soil gas survey event

This SOW will include all necessary contracting and scheduling to perform all phases of the soil gas survey (i.e. soil borings and various other drilling tasks as needed). This SOW will include the scheduling of field activities associated with the soil gas survey event. This SOW will include locating all underground utilities.
Maximum allowable cost is $285.00.

3.8.b.2 Cost for fieldwork using a hammer drill or slide hammer (4 hours)

This SOW will include oversight of field activities as well as office and field support and coordination. This SOW will include all personnel and the necessary equipment to supervise and conduct field activities. Cost includes all personnel time, sample train, assembly and testing of sample train and sample supplies. Included in the SOW, the consultant is required to complete all field forms and collect all necessary samples. **Maximum allowable cost per half day is $1,932.00 (4 hours) plus shipping**.

3.8.b.3 Cost for fieldwork using a hammer drill or slide hammer (8 hours)

This SOW will include oversight of field activities as well as office and field support and coordination. This SOW will include all personnel and the necessary equipment to supervise and conduct field activities. Cost includes all personnel time, sample train, assembly and testing of sample train and sample supplies. Included in the SOW, the consultant is required to complete all field forms and collect all necessary samples. **Maximum allowable cost per full day is $3,226.00 (8 hours) plus shipping**.

3.8.b.4 Cost for laboratory services

SOW includes laboratory costs associated with all air or soil gas sampling. Consultant must attach the laboratory invoice to the reimbursement form. The cost of laboratory analyses will be reimbursed at cost plus 15% not to exceed the rates listed. A markup will not be allowed if the consultant uses their own lab. Transportation costs to the laboratory should be included in this task. **Maximum cost shall not exceed the reasonable reimbursable rates as determined by the applicable laboratory method established in Reference 1.**

4.0 RISK MANAGEMENT AND CORRECTIVE ACTION PROCESS

Task 4.1 Risk Reduction

4.1.a Cost for risk reduction implementation

This SOW will include the cost of the bid, and change order(s) if applicable, approved in writing by the Division.
Maximum cost is equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing.

4.1.b Cost for disconnection of private water supply well

This SOW will include all necessary personnel and labor, equipment and materials to properly disconnect a private water supply well. Required activities include, but are not limited to, termination and disconnection of the power supply and disconnection and capping of any associated piping from the well to the building.
Maximum cost is equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing.

4.1.c Cost for supervision of private water supply well abandonment

This SOW includes all necessary personnel time to properly abandon a private water supply well in accordance with the Water Well Licensing Regulations and Well Construction Standards (rule 1200-4-9-.16). This SOW includes field activities and supervision, project scheduling and oversight.
Maximum cost is $600.00 per event.

4.1.d Cost for private water supply well abandonment

This SOW includes the proper abandonment of a private water supply well performed by a licensed well driller in accordance with the Water Well Licensing Regulations and Well Construction Standards (rule 1200-4-9-.16). All private water supply wells shall be installed and abandoned by a licensed well driller. Along with the invoice, the consultant must submit the appropriate reimbursement forms. In order to simplify and speed reimbursement, it is recommended that drilling companies itemize their invoices to reflect the reasonable rate document form format. The cost of well abandonment will be reimbursed at cost plus 15% markup not to exceed the reasonable rate schedule. A markup will not be allowed if the consultant uses their own driller.
Maximum cost is not to exceed $11.00 per foot.

4.0 RISK MANAGEMENT AND CORRECTIVE ACTION PROCESS

Task 4.2 Institutional Controls

4.2.a Cost for institutional control implementation

This SOW will include the cost of the bid, and change order(s) if applicable, approved in writing by the Division.
Maximum cost is equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing.

4.0 RISK MANAGEMENT AND CORRECTIVE ACTION PROCESS

Task 4.3 Engineering Controls

4.3.a Cost for engineering control implementation

This SOW will include the cost of the bid, and change order(s) if applicable, approved in writing by the Division.
Maximum cost is equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing.

4.0 RISK MANAGEMENT AND CORRECTIVE ACTION PROCESS

Task 4.4 Corrective Action

Task 4.4.a Corrective Action System Installation

4.4.a.1 Cost for public notice advertisement

This SOW includes all personnel time and charges associated with placing public notice of impending corrective action in the newspaper, the state register, sending certified letters to property owners, and/or personal contacts.
Personnel time is limited to one (1) hour. Maximum cost is limited to the actual amount of advertisement or postage cost plus personnel time.

4.4.a.2 Cost for permit and/or utility service

This SOW includes all personnel time necessary to secure permits and/or utility connections with federal, state, and/or local government agency requirements.
Maximum cost is $160.00.

4.4.a.3 Cost for oversight of corrective action system delivery

This SOW includes all personnel time to coordinate, schedule and oversee delivery of the corrective action system. Cost includes crane rental with operator or forklift for offloading.
Maximum cost is $1,067.00.

4.4.a.4 Cost for soil excavation and soil source removal

This SOW will include all personnel, equipment and supplies to complete soil excavation and source removal in accordance with an approved Corrective Action Plan. All costs shall be proposed and will be reimbursed in accordance with task 1.1.a.–e.
Maximum cost is equal to the cost of the proposal and any modifications made by the Division, and change orders if applicable, submitted to the Division in the CAP and approved in writing.

4.4.a.5 Cost for recovery well trench installation

This SOW will include all personnel, equipment and supplies to complete recovery well and contingent piping and trenching in accordance with an approved Corrective Action Plan. This includes any personnel time (not travel time or mileage) required to purchase necessary supplies.
Maximum cost for recovery well trench installation, including piping and fittings, is $65.00 - $78.00/ linear foot depending on the number of lines in the recovery trench.

4.4.a.6 Cost for recovery wellhead manifold, extraction vault and tubing installation

This SOW will include all personnel, equipment and supplies to construct and install recovery well heads and vaults for each recovery well in accordance with an approved Corrective Action Plan.

Maximum cost is $1,380/wellhead.

4.4.a.7 Cost for corrective action system inlet piping manifold

This SOW will include all personnel, equipment and supplies to construct and install the corrective action system inlet piping manifold in accordance with an approved Corrective Action Plan. This includes any personnel time (not travel time or mileage) required to purchase necessary supplies.
Maximum cost for one (1) recovery well inlet is $330.00. Maximum cost for each additional recovery well inlet is $117.00.

4.4.a.8 Cost for concrete pad and bollard installation

This SOW includes all personnel, equipment and supplies to properly construct and pour a ten (10) foot wide by fourteen (14) foot long by four (4) inch thick concrete pad for the corrective action system to be placed on in accordance with the current Corrective Action Plan Guidelines CAS Figure Packages. It also includes personnel, equipment and supplies to construct and install the bollards for the corrective action system (up to 12 bollards maximum). This should be performed in conjunction with concrete pad installation or any corrective action installation task when personnel is already on site and not performed as a separate event, unless otherwise directed by the Division.

Maximum cost is $1,820.00 per pad installation.
Maximum cost is $2,400.00 for bollards installation

4.4.a.9 Cost for mobilization/demobilization of heavy equipment

This SOW will include mobilization and demobilization of any heavy equipment to and from the site for corrective action system offloading from the delivery truck.
Maximum cost is limited to $1.25 per mile per piece of equipment not to exceed $312.50.

4.4.a.10 Cost for corrective action system discharge trench installation

This SOW will include all personnel, equipment and supplies to complete CAS discharge piping and trenching in accordance with an approved Corrective Action Plan.
Maximum cost for discharge trench installation, including piping and fittings, is $25.00/linear foot.

4.4.a.11 Cost for wet test of system

This SOW will include personnel, equipment, and supplies to ensure that 500 gallons of potable water are at the site so that the corrective action system may be properly wet tested after delivery and prior to start-up. These activities include, but are not limited to pre-diagnostic testing, electrical and telephone line connections, hydrating the carbon filters, and CAS troubleshooting. This is a one-time cost unless otherwise approved by the Division and includes completing the manufacturer pre-startup checklist.
Maximum cost is $1,200.00 per wet test.

4.4.a.12 Cost for electrical service installation

This SOW will include the cost of the bid by a licensed electrician, and change order(s) if applicable, approved in writing by the Division.
Maximum cost is equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing.

4.4.a.13 Cost for disposal of CAS site debris

This SOW will include the cost for the proper disposal of non-contaminated materials that must be removed from the site during installation of the CAS and associated trenching. This includes asphalt, concrete/rebar, scrap trench piping but does not include disposal of soils or gravel. This task should also be used for disposal costs associated with 4.4.d.9.
Maximum cost is equal to the itemized costs in other sections of RGD-002 (i.e. landfill costs, hauling, etc.) or the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing.

4.0 CORRECTIVE ACTION PROCESS

Task 4.4 Corrective Action

Task 4.4.b Corrective Action System Operation and Maintenance

4.4.b.1 Cost for routine operation and maintenance

This SOW will include routine, scheduled site visits. This is limited to one (1) visit per month. If additional visits are required, a request in advance must be made and approved by the case manager. Onsite personnel shall perform routine and scheduled repairs during the site visit. Onsite personnel shall inspect and document system performance on Division provided field forms (CASFL) including, but is not limited to, the tabulation of gauge and meter readings, inspecting for and repair of leaks (including removing any standing water/product/oil), excessive equipment heat and noise, and equipment wear. Other routine activities may include but are not necessarily limited to: adjusting the system for summer or winter operation, checking extraction wells, depth to water and/or adjusting stinger well depths to maximize free product/contaminant recovery; checking all wells (extraction and monitoring) not connected to or in use by the CAS that have contained free product in the past and removing any free product; checking down-hole pumps or air assist lines, if applicable; checking/changing filters, hoses, oil; cleaning the stripper and oil/water separator inside utilizing Rydlyme to remove sludge/fouling/mineral build-up; inspecting and cleaning the stripper aeration tubes/lid seal (gasket roll)/packing media and replacing if necessary and cleaning the stripper exterior; cleaning the AWS inside to remove sludge/fouling/mineral build-up and cleaning the exterior; cleaning the exterior of the heat exchanger; checking all transfer pumps for signs of mineral deposits and cleaning if needed; checking and cleaning the conductivity level probe rods in the AWS and sump; checking the oil sight gauge for water or cloudiness, draining if necessary, and throttling the oil to raise the temperature; cleaning the bag filter housings inside and out to remove sludge/fouling/mineral build-up; backwashing GAC vessels to remove sludge/fouling/mineral build-up and cleaning the exterior; repairing/replacing gauges; and applying lubricants as needed. All components and equipment shall be operated, maintained and cleaned in accordance with the manufacturers' O&M manual and Division requirements, which include quarterly O&M requirements, when applicable. The maximum cost includes all personnel and equipment to service and maintain the system equipment. Price does not include major repairs or extensive troubleshooting which may be covered by the manufacturer. Office coordination and scheduling time is included in the daily rate. Routine operation and maintenance shall not exceed one (1) workday (maximum 10-hour workday) without prior approval from the appropriate field office.
Maximum cost is $1,257.50 per day. All routine O&M conducted on a state owned system shall be performed by a CAS Specialist or a Senior Technician if the system is responsible party owned.

4.4.b.2 Cost for non-scheduled maintenance

This SOW will include a nonscheduled site visit as a result of a system shutdown or failure. This SOW includes all personnel and equipment to perform the tasks troubleshooting, and repairing of the system and completion of Division provided field forms (CASRL and/or CASDR). It excludes costs for supplies, components, and equipment replacement. Office coordination and scheduling time is included in the daily price rate and therefore, only the actual time spent onsite is to be reimbursed. This task will only be reimbursed if the field office is notified no later than one (1) working day after any non-routine field activity after the system shutdown or failure.
Maximum cost is $905.00 per day not including supplies, components, and equipment replacement. All non-scheduled O&M conducted on a state owned system shall be performed by a CAS Specialist or a Senior Technician if the system is responsible party owned.

4.4.b.3 Cost for evaluation of performance meeting

This SOW will include the meeting held between Division personnel, the CAC and/or the responsible party, as deemed necessary by the Division to evaluate the performance of the corrective action system. Topics for discussion shall include but not be limited to COC concentration reduction, plume dynamics, system operational performance, system repair history, and recommendations for system and/or CAP modifications to increase system performance. This may include any time for an on-site meeting. Maximum cost includes the time required for oversight by the Project Manager and a maximum of two (2) geologists/engineers to schedule, plan, and attend the meeting.
Maximum cost is $1,375.00 per meeting.

4.4.b.4 Cost for utilities and payment of bills

This SOW includes all personnel time necessary to process and pay bills associated with utility connection and corrective action system usage including electric, natural gas, telephone, sanitary sewer (POTW), and water.
Maximum cost is $60.00 per month.

4.4.b.5 Cost for charges for utility service

This SOW includes all costs for utility service necessary to operate an approved corrective action system including electric, natural gas, telephone, sanitary sewer (POTW), and water usage.
Maximum cost is limited to the actual amount of the utility bill.

4.4.b.6 Cost for additional technician during operation and/or maintenance

This SOW will include all personnel time necessary for an additional technician to assist with operation and/or maintenance as described in tasks 4.4.b.1 and 4.4.b.2. **This task must be requested in advance and approved by the case manager.** Operation and/or maintenance shall not exceed one (1) workday (maximum 10-hour workday) without prior approval from the appropriate field office. This is limited to one (1) visit per month. If additional visits are

required, then they must be requested in advance and approved by the case manager.
Maximum cost is $450.00 per day.

4.4.b.7 Cost for review of telemetry report

This SOW includes all personnel time necessary to review and interpret all telemetry alarms, data and reports associated with the corrective action system.
Maximum cost is $190.00 per month.

4.4.b.8 Cost for annual routine operation and maintenance

This SOW will include a routine scheduled site visit for annual operation and maintenance as outlined in the manufacturers' operating manual. This task is limited to one (1) workday per twelve (12) month period and shall not exceed one (1) workday (maximum 10-hour workday) without prior approval from the appropriate field office. The maximum cost includes all personnel and equipment to service and maintain the system equipment and completion of all tasks and paperwork required by the Division's CASFL. Price does not include major repairs or extensive troubleshooting which may be covered by the manufacturer. Office coordination and scheduling time is included in the daily rate. All field work shall be completed by a senior technician and technician.
Maximum cost is $1,522.50 per day plus the cost of the annual O&M kit from the system manufacturer ($2,440.00 includes 15% mark-up) plus actual cost of shipping. All annual routine O&M conducted on a state owned system shall be performed by a CAS Specialist.

CORRECTIVE ACTION PROCESS

Task 4.4 Corrective Action

Task 4.4.c Corrective Action Sampling

4.4.c.1 Cost for ground water sampling

This SOW will include all personnel time and sampling supplies to purge and sample wells of any depth or diameter. This SOW includes static water level measurements, purge volume calculations, sampling of purge water for disposal, personnel time to coordinate this task and to manage the laboratory services (i.e. chain of custody, sample preparation, sample QA/QC, and invoice managing). The schedule for ground water monitoring shall be performed in accordance with the schedule in the approved CAP. Wells to be sampled shall be in accordance with the approved CAP. Includes cost of drum**.**
Maximum cost is $273.50 for one (1) well and $120.00 per well for each additional well sampled.

4.4.c.2 Cost for water supply well sampling

This SOW includes all personnel and sampling supplies to purge and sample a water supply well (i.e. indoor or outdoor spigot). This SOW includes all necessary equipment, personnel and sampling supplies to perform well purging (by letting spigot run for an adequate time) followed by sampling. This SOW includes sampling of purge water for disposal. This SOW includes the time to coordinate this task and to manage the laboratory services (i.e. Chain of custody, sample preparation, sample QA/QC, and invoice managing).
Maximum cost is $75.00 for one (1) well and $55.00 for each additional well sampled.

4.4.c.3 Cost for surface water sampling

This SOW includes sampling of various types of surface waters (i.e. includes ponds, streams, creeks, etc.) to verify contamination. This SOW includes all necessary equipment, personnel and sampling supplies to perform sampling. This SOW includes personnel time to coordinate this task and to manage the laboratory services (i.e. Chain of custody, sample preparation, sample QA/QC, and invoice managing).
Maximum cost is $75.00 for one (1) sample point and $55.00 for each additional sample point.

4.4.c.4 Cost for soil sampling (not associated with drilling activities)

This SOW includes various types of soil sampling not associated with drilling activities, closure activities, stockpile sampling or overexcavation sampling. (i.e. includes surface sampling, etc.) to verify contamination. This SOW includes all necessary equipment, personnel, and sampling supplies to perform sampling. This SOW includes personnel time to coordinate this task and to manage the laboratory services (i.e. Chain of custody, sample preparation, sample QA/QC, and invoice managing).
Maximum cost is $180.00 for one (1) sample point by hand augering and $55.00 for each additional sample point.

4.4.c.5 Cost for laboratory services

This SOW will include any soil laboratory analysis performed for corrective action monitoring. Consultant must attach the laboratory invoice to the reimbursement form. The cost of laboratory analyses will be reimbursed at cost plus 15% not to exceed the rates listed. A markup will not be allowed if the consultant uses their own lab. Transportation costs to the laboratory should be included in this task.
Maximum costs shall not exceed the reasonable reimbursable rates as determined by the applicable laboratory method established in Reference 1.

4.4.c.6 Cost for monitored natural attenuation

This SOW includes the collection of geochemical and/or biological samples and evaluation of parameters that support intrinsic remediation such as dissolved oxygen, nitrate, sulfate, total dissolved iron, methane, and total organic carbon. Sampling and laboratory analysis for the appropriate COCs shall also be a part of this task. This SOW includes personnel time to coordinate this task and to manage the laboratory services (i.e. Chain of custody, sample preparation, sample QA/QC, and invoice managing).
Maximum cost is $235.00 for one (1) well (all parameters) or $120.00 per well if more than one (1) well is sampled.

4.4.c.7 Cost for land and receptor monitoring

This SOW shall consist of monitoring for changes in land, surface, and/or ground water use surrounding the site. Compare receptors used during preparation of the approved Exposure Assessment to any changes observed on site or surrounding the site. This SOW should be performed in conjunction with any monitoring or sampling task when personnel is already on site and not performed as a separate event, unless otherwise directed by the Division.
Maximum cost is $160.00.

4.4.c.8 Cost for Publicly Owned Treatment Works (POTW) sampling

This SOW will include all personnel and labor to collect corrective action system water samples for laboratory analysis to meet/establish POTW discharge permit requirements. This SOW includes personnel time to coordinate this task and to manage laboratory services (i.e. Chain of Custody, sample preparation, sample QA/QC, and invoice managing). The frequency and sampling requirements for discharge permits shall be performed according to the approved federal, state, and/or local government agency requirements. Maximum number is one (1) sample per influent and one (1) sample per discharge. Influent samples should be collected for the COCs approved in the SSSR. Effluent samples should be collected for the COCs approved in the permit. This SOW should be performed in conjunction with any monitoring or sampling task when personnel is already on site and not performed as a separate event, unless otherwise directed by the Division.

Maximum cost is $75.00 for the first sample and $55.00 for each additional sample collected.

4.4.c.9 Cost for National Pollutant Discharge Elimination System (NPDES) sampling

This SOW includes all personnel time and labor costs to collect corrective action system water samples for laboratory analysis to meet/establish NPDES discharge permit requirements. This SOW includes personnel time to coordinate this task and to manage laboratory services (i.e. Chain of Custody, sample preparation, sample QA/QC, and invoice managing). The frequency and sampling requirements for discharge permits shall be performed according to the approved federal, state, and/or local government agency requirements. Maximum number is one (1) sample per influent and one (1) sample per discharge. Influent samples should be collected for the COCs approved in the SSSR. Effluent samples should be collected for the COCs approved in the permit. This SOW should be performed in conjunction with any monitoring or sampling task when personnel is already on site and not performed as a separate event, unless otherwise directed by the Division. This task shall also be used for automatic sampling for NPDES permits requirements (other than Task 4.4.c.10 for initial set-up and final retrieval).
Maximum cost is $75.00 for the first sample and $55.00 for each additional sample collected.

4.4.c.10 Cost for effluent toxicity sampling (NPDES)

This SOW includes all personnel time and labor costs to conduct whole effluent toxicity sampling over a five (5) day period. Personnel are allotted a maximum of one (1) hour onsite time per day on days one (1), three (3) and five (5) to collect grab samples from the CAS effluent. **Also includes personnel time to schedule & coordinate task.**
Maximum cost is $305.00.

4.4.c.11 Cost for corrective action system air monitoring

This SOW includes all personnel time and labor to monitor effluent air concentrations on site for compliance with required state or local issued permits. The frequency requirements for discharge monitoring shall be performed according to the approved federal, state, and/or local government agency requirements. This SOW should be performed in conjunction with any monitoring task when personnel is already on site and not performed as a separate event, unless otherwise directed by the Division.
Maximum cost is $205.00.

4.4.c.12 Cost for disposal of drums filled with free product or ground water contaminated with petroleum product

This SOW will include all necessary personnel and labor, equipment and supplies to properly dispose of drums filled with free product and/or ground water contaminated with petroleum product removed from a monitoring well. Ground water contamination must be documented by an approved state of Tennessee laboratory method. This cost is for disposal only at a permitted disposal facility.
Maximum cost is $90.00 per drum.

4.4.c.13 Cost for disposal of drums filled with petroleum contaminated soil

This SOW will include all necessary personnel and labor, equipment and supplies to properly dispose of drums filled with petroleum contaminated soil. Soil contamination must be documented by an approved state of Tennessee laboratory method. This cost is for disposal only at a permitted disposal facility.
Maximum cost is $90.00 per drum.

4.4.c.14 Cost for vacuum monitoring of CAS

This SOW includes all personnel time and labor to obtain and document vacuum measurements during each monitoring event as required by the CASFL. All vacuum measurements shall be documented in the CASFL and submitted with the applicable report. This SOW should be performed in conjunction with any monitoring task when personnel is already on site and not performed as a separate event, unless otherwise directed by the Division.
Maximum cost is $120.00.

4.0 CORRECTIVE ACTION PROCESS

Task 4.4 Corrective Action

Task 4.4.d Corrective Action System Closure

4.4.d.1 Cost for deactivation of corrective action system

This SOW includes all personnel and equipment to properly deactivate corrective action system in accordance with the current Division Corrective Action System Deactivation Checklist and local, state and federal laws and guidelines. Office coordination and scheduling time is included in the daily rate.
Maximum cost is $2,651.00.

4.4.d.2 Cost for disposal of drums filled with petroleum contaminated waste

This SOW will include all necessary personnel and labor, equipment and supplies to properly dispose of drums filled with free product and/or ground water contaminated with petroleum product removed from a monitoring well. Ground water contamination must be documented by an approved state of Tennessee laboratory method. This cost is for disposal only at a permitted disposal facility.
Maximum cost is $90.00 per drum.

4.4.d.3 Cost for permit and/or utility connection termination

This SOW includes all personnel time necessary to terminate permits and/or utility connections with federal, state, and/or local government agency requirements.
Maximum cost is $160.00 for oversight. Maximum cost for subcontracted electrician (if required by utility district) not to exceed the cost of the bid submitted to the Division and approved in writing.

4.4.d.4 Cost for preparation of the corrective action system for removal from the site for refurbishment

This SOW includes all personnel and equipment to properly sever tie downs, piping and electrical wiring from the corrective action system, and to remove unusable power poles, exposed piping, fencing and enclosures in accordance with the current local, state and federal laws and guidelines. This cost also includes oversight during the loading of the corrective action system and associated equipment for transport to a Division approved system vendor for refurbishing.
Maximum cost not to exceed $330.00.

4.4.d.5 Cost for decommissioning a corrective action system

This SOW includes all personnel and equipment to properly decommission the corrective action system including dismantling any associated ancillary equipment, removing unusable power poles, exposed piping, fencing and enclosures in accordance with the current Division Corrective Action System Decommission Checklist and local, state and federal laws and guidelines. This

includes properly preparing the system for removal from the site. Office coordination and scheduling time is included in the daily rate. This SOW does not include hauling or disposal of non-state owned equipment and debris to a disposal or recycling facility. All state owned equipment pick-up will be scheduled by the Division. **Maximum cost is not to exceed $2,662.00.**

4.4.d.6 Cost for mobilization and demobilization of heavy equipment

This SOW will include mobilization and demobilization of the backhoe and/or skid-steer loader and concrete breaker to and from the site for decommissioning or following removal of corrective action system that is being refurbished.
Maximum cost is limited to $1.25 per mile per piece of equipment not to exceed $312.50.

4.4.d.7 Cost for oversight of the corrective action system pick-up for refurbishment by the state contractor

This SOW includes all personnel for oversight by the state contractor of pick-up and loading of the corrective action system for transport for refurbishment. This cost also includes inspection to determine that all tie downs have been properly severed and piping and wiring have been properly disconnected and capped from the corrective action system. **This task will only be reimbursed if requested/approved by the Division.**
Maximum cost not to exceed $330.00.

4.4.d.8 Cost for reactivation of the corrective action system and oversight of performance (with Division approval)

This SOW includes all personnel and equipment to properly reactivate the corrective action system after Division approval and in accordance with the current Division Corrective Action System Reactivation Checklist. This task includes maximum on-site allowable personnel time up to 10 hours to make any necessary system adjustments. Office coordination and scheduling time is included in this task.
Maximum cost is $1,456.00.

4.4.d.9 Cost for removal of the concrete pad for a state owned corrective action system sent for refurbishment (if required by property owner)

This task is to be conducted at the request of the property owner (written documentation required) and in conjunction with Tasks 4.4.d.7 or 5.2.c (travel time, mileage, lodging and per diem costs will not be reimbursed for this task). This SOW includes all personnel and equipment to break up and remove the concrete pad after the corrective action system has been removed from the site for refurbishment. Office coordination and scheduling time is included. This SOW includes hauling debris to a disposal or recycling facility. This cost does not include the disposal costs. Disposal costs should be requested in task 4.4.a.13.
Maximum cost not to exceed $1,155.00.

NOTE: The Division will not reimburse for the hauling and/or disposal of a non-state owned CAS.

5.0 FINAL SITE CLOSURE PROCESS

Task 5.1 Well Abandonment

5.1.a Cost for supervision of well abandonment

This SOW includes all necessary personnel time to properly abandon wells in accordance with the current EAG, including preparing the Division's monitoring well abandonment checklist for the drillers. This SOW includes field activities and supervision, project scheduling and oversight.
Maximum cost is $380.00 per event.

5.1.b Cost for well abandonment

This SOW includes the proper abandonment in accordance with the current EAG and performed by a licensed well driller, including completion of the Division's monitoring well abandonment checklist and taking pictures of final well abandonment. All monitoring wells shall be abandoned by a licensed well driller. Along with the invoice, the consultant must submit the appropriate reimbursement forms. In order to simplify and speed reimbursement, it is recommended that drilling companies itemize their invoices to reflect the reasonable rate document form format. The cost of well abandonment will be reimbursed at cost plus 15% markup not to exceed the reasonable rate schedule. A markup will not be allowed if the consultant uses their own driller.
Maximum cost is not to exceed $11.00 per foot. Maximum cost for manhole covers and concrete pad removal is $125.00 per well. Maximum cost for recovery well vault removal is $300.00 per vault.

5.1.c Cost for mobilization/demobilization of support truck

This SOW will include mobilization and demobilization of a support truck (equipped to properly abandon monitoring wells) to and from the site. Mobilization/demobilization is not to exceed 250 miles round trip.
Maximum cost is limited to $0.75 per mile not to exceed a total cost of $187.50.

NOTE: If a drill rig is thought to be required to properly abandon the monitoring wells, then **prior written approval** must be obtained from the Division. Otherwise, the cost will not be considered to be reasonable and will not be reimbursed.

5.0 FINAL SITE CLOSURE PROCESS

Task 5.2 Site Restoration

5.2.a Cost for scheduling for site restoration activities

This SOW will include all necessary contracting and scheduling for site restoration activities. Work is not to exceed two (2) hours. Maximum cost is $95.00 per hour. **Maximum cost is $190.00 per event.**

5.2.b Cost for supervision of site restoration

This SOW will include oversight of field activities as well as office support and coordination. Work not to exceed two (2) hours. Maximum cost is $80.00 per hour. **Maximum cost is $160.00 per event.**

5.2.c Site restoration

This SOW will include all personnel and labor, equipment and supplies to properly restore the site to a condition comparable to the original condition utilizing seed, mulch, and straw by hand. This SOW does not include tank(s), line(s), asphalt and/or concrete replacement.
Maximum cost is $395.00.

6.0 SUBMITTED DOCUMENTS MAXIMUM COST TABLE

The following application, proposal, report, and submittal costs are limited to these maximum reimbursable amounts.

Task Code	Submitted Documents (Applications/Proposals/Reports/Submittals)		Maximum Cost
6.1	**UST Closure**		
	6.1.a	TRBCA Closure Report	$605.00
	6.1.b	Soil Stockpile Sampling Report (TGD-005)	$345.00
	6.1.c	Overexcavation Report	$930.00
	6.1.d	Application to Treat Petroleum Contaminated Soil (TGD-009)	$185.00
	6.1.e	Soil Treatment and Disposal Report	$335.00
6.2	**Hazard Notification Report**		$80.00
6.3	**Site Check Report (TGD-012)**		$2,690.00
6.4	**Initial Response and Hazard Management Report (IRHMR)**		$1,715.00
	6.4.a	Hazard Management Report	$370.00
	6.4.b	Health and Safety Plan (if not included with IRHMR)	$320.00
6.5	**Impacted Drinking Water Management (TGD-019)**		
	6.5.a	Impacted Drinking Water - Hazard Management Report (TGD-019)	$415.00
	6.5.b	Impacted Drinking Water Supply Temporary Response – Proposal (if costs anticipated to exceed $2500.00)	$365.00
	6.5.c	Impacted Drinking Water Supply Permanent Response – Proposal	$735.00
6.6	**Petroleum Vapor Impact Management (TGD-020)**		
	6.6.a	Petroleum Vapor Impact - Hazard Management Report (TGD-020)	$415.00
	6.6.b	Petroleum Vapor Impact Temporary Response – Proposal (if costs anticipated to exceed $2500.00)	$365.00
	6.6.c	Petroleum Vapor Impact Permanent Response – Proposal	$735.00
6.7	**Mobile Enhanced Multi-phase Extraction (MEME) (TGD-016)**		
	6.7.a	Application to Perform MEME	$370.00
	6.7.b	8-hour MEME Report	$370.00
	6.7.c	24-hour MEME Report	$490.00

Task Code	Submitted Documents (Applications/Proposals/Reports/Submittals)		Maximum Cost
6.8	**Free Product Removal**		
	6.8.a	Free Product - Hazard Management Report (TGD-004)	$495.00
	6.8.b	Free Product Investigation Proposal	$760.00
	6.8.c	Free Product Investigation Report	$1,715.00
	6.8.d	Free Product Removal Plan	$5,285.00
6.9	**Initial Site Characterization Report**		$4,905.00
	6.9.a	Additional Monitoring Well Installation Proposal	$160.00
	6.9.b	Additional Monitoring Well Installation Report	$370.00
6.10	**Exposure Assessment Report (TGD-017)**		$1,215.00
	6.10.a	Additional Remediation and/or Risk Management Response Submittal	$80.00
	6.10.b	Additional Remediation and/or Risk Management Evaluation – with Division approval	$735.00
	6.10.c	Risk Analysis Report only	$305.00
6.11	**Soil Gas Survey (TGD-018)**		
	6.11.a	Soil Gas Survey Application	$370.00
	6.11.b	Soil Gas Survey Report	$630.00
6.12	**Source Removal (Overexcavation)**		
	6.12.a	Source Removal Proposal	$240.00
	6.12.b	Source Removal Report	$930.00
6.13	**Risk Reduction**		
	6.13.a	Risk Reduction Proposal	$240.00
	6.13.b	Risk Reduction Report	$630.00
6.14	**Institutional Controls**		
	6.14.a	Institutional Control Proposal	$240.00
	6.14.b	Institutional Control Report	$95.00
6.15	**Engineering Controls**		
	6.15.a	Engineering Control Proposal	$240.00
	6.15.b	Engineering Control Report	$225.00
6.17	**Corrective Action Plan (CAP)**		
	6.17.a	CAP - Soil Contamination Only	$3,930.00
	6.17.b	CAP with Ground Water Contamination	$5,285.00

Task Code	Submitted Documents (Applications/Proposals/Reports/Submittals)		Maximum Cost
6.18	**Monitoring Reports (TGD-007)**		
	6.18.a	Risk Monitoring Report (RMR)	$1,105.00
	6.18.b	Closure Monitoring Report (CMR)	$1,105.00
	6.18.g	Corrective Action Baseline Monitoring Report (CABMR)	$1,720.00
	6.18.h	Corrective Action Monitoring Report with as-built diagrams (CAMR-ab)	$2,200.00
	6.18.i	Corrective Action Monitoring Report (CAMR)	$1,960.00
	6.18.j	Corrective Action Closure Monitoring Report (CACMR)	$1,220.00
6.19	**Permit Applications and Discharge Monitoring Reports**		
	6.19.a	NPDES Permit Application	$445.00
	6.19.b	Discharge Monitoring Report (DMR)	$160.00
	6.19.c	POTW Application	$445.00
	6.19.d	POTW Report	$160.00
	6.19.f	Air Exceedance Report	$160.00
	6.19.g	Annual Air Emissions Report	$320.00
	6.19.h	Monitoring Well Maintenance Fee	$110.00
	6.19.i	Class V Underground Injection Well Application (TGD-003)	$445.00
	6.19.j	Monitoring Well Permit – no markup	$150.00
	6.19.k	Right-of-way Bond – no markup	actual cost
6.20	**Miscellaneous Application/Proposals/Reports/Submittals**		
	6.20.a	Field Work Notification	$30.00
	6.20.b	Boring Log Installation submittal	$80.00
	6.20.c	Public Notice of Corrective Action	$80.00
	6.20.z	Other report as required by the Division	actual cost as approved by case manager in writing
6.21	**Corrective Action System Deactivation Report**		$80.00
6.22	**Monitoring Well Abandonment Report**		$80.00

REFERENCE 1

Product Released	Chemicals To Sample Drinking Water	Chemicals To Sample Non-Drinking Water	Chemicals To Sample Surface Drinking Water***	Chemicals To Sample Surface Non-Drinking Water***
Gasoline	Benzene Ethylbenzene Toluene Totals Xylenes MtBE Naphthalene	Benzene Ethylbenzene Toluene Totals Xylenes MtBE Naphthalene	Benzene Ethylbenzene Toluene Totals Xylenes	Benzene Ethylbenzene Toluene
Diesel* Jet Fuel Kerosene	Benzene Ethylbenzene Toluene Totals Xylenes MtBE PAHs	Benzene Ethylbenzene Toluene Totals Xylenes MtBE Naphthalene	Benzene Ethylbenzene Toluene Totals Xylenes Benzo(a)pyrene	Benzene Ethylbenzene Toluene Modified PAHs****
Waste Oil* Used Oil	PAHs Cadmium Chromium, Total Lead, Total Silver Zinc	Naphthalene	Benzo(a)pyrene Cadmium Chromium, Total Lead, Total	Modified PAHs****
Aviation* Fuel	Benzene Ethylbenzene Toluene Totals Xylenes MtBE EDB***** EDC PAHs Lead, Total	Benzene Ethylbenzene Toluene Totals Xylenes MtBE Naphthalene EDB EDC	Benzene Ethylbenzene Toluene Totals Xylenes EDB***** EDC Benzo(a)pyrene Lead, Total	Benzene Ethylbenzene Toluene EDC Modified PAHs****
Unknown**	Aviation+Waste Oil	Aviation+Waste Oil	Aviation+Waste Oil	Aviation+Waste Oil

*EPH to be sampled only during tank closure and analyzed by TN Extractable Petroleum Hydrocarbons (EPH) Method; GRO no longer required

**Tanks with unknown contents will be required to analyze all COCs

***Chemicals to be sampled **only** at the surface water receptor

****Modified PAHs – Reference 2 list minus Acenaphthylene, Benzo(g,h,i)perylene, Naphthalene, and Phenanthrene. Include these COCs in all ground water sample analysis if a surface water is a potential receptor. Do NOT add to soil analysis.

*****EDB ground water samples shall be analyzed by EPA method 8011

BTEX, MtBE, Naphthalene, EDB, and EDC shall be analyzed by EPA method 8260B

PAHs in water shall be analyzed by either EPA method 8270C SIM or EPA method 8310 (water samples shall be field filtered using a 0.45 micron filter); PAHs in soil no longer required

Metals shall be analyzed by EPA method 200.7 for water and EPA method 6010/3050 for soil (water samples shall be field filtered using a 0.45 micron filter)

REFERENCE 2

Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Chrysene
Dibenz (a,h)anthracene
Fluoranthene
Fluorene
Indeno(1,2,3-c,d)pyrene
Naphthalene
Phenanthrene
Pyrene

7.0 PER DIEM AND LODGING PROCESS

Task 7.1 Per Diem

7.1.a Cost for per diem charges

This SOW will include the cost of all per diem charges accrued performing site remediation tasks as requested by the Division. Date(s) and time(s) must not exceed time for being onsite plus travel. Meals will not be reimbursed without a corresponding lodging receipt. No mark-up allowed. **Maximum cost** shall be reimbursed in accordance with the state of Tennessee travel regulations at the time that work was performed. Current travel regulations can be found at: **www.tn.gov/finance/act/documents/policy8.pdf**

7.0 PER DIEM AND LODGING PROCESS

Task 7.2 Lodging

7.2.a Cost for lodging charges

This SOW will include the cost of all lodging charges accrued performing site remediation tasks as requested by the Division. Date(s) must not exceed time for being onsite. Hotel invoice must be submitted with reimbursement request. No mark-up allowed. **Maximum cost** shall be reimbursed in accordance with the state of Tennessee travel regulations at the time that work was performed. Current travel regulations can be found at: **www.tn.gov/finance/act/documents/policy8.pdf**

X. INSTRUCTIONS FOR COMPLETING REIMBURSEMENT APPLICATIONS IN THE COST DATABASE

The Division of Underground Storage Tanks (Division) has a process for reimbursement involving electronic applications. This process consists of three (3) parts: cost task descriptions, cost task spreadsheets and a cost database. The cost task descriptions provide details of commonly performed tasks at contaminated UST sites (see Section IX). The cost spreadsheets provide the breakdown of routine maximum cost for performing each task. The cost database is a Microsoft Access® program and requires you to use version Access® 2007 or higher. Different versions of Access (32 vs. 64 bit) are available. If you upgrade or change computers, you may need a different version of the cost database. Please contact the Division if you begin encountering problems after a change.

Applications, appeals, questions, comments, etc. should be submitted to: **ust.reimbursement@tn.gov**

A. UST COST DATABASE INSTRUCTIONS

Before beginning any electronic invoice, it is a good idea to become familiar with the task description and associated cost spreadsheet to determine: 1) what job titles are allowed to be billed, 2) what type of equipment is reimbursable for each task and 3) whether the task is an office/field task or travel time to/from task. At first, it may not be obvious where certain tasks should be entered. It may be useful to scan through several sheets before beginning any data entry.

Always use the tab key to exit data boxes and always tab out to save information.

Once information has been entered into a field, it will automatically be saved when you exit that field.

B. TO BEGIN THE INVOICE

The terms on the first page of the application database must be agreed to by clicking the box. Click on the “Start UST database” button to begin. On the next page, click on the map of the state of Tennessee in any location to open the database.

C. COST DATABASE MAIN PAGE

Click on the “ENTER NEW FACILITY ID/INVOICE NUMBER” button to begin. A pop up box will appear for the entry of the seven-digit UST facility ID number not including dash. After entry of the UST facility ID number, click ok. Another pop up box will appear for entry of the invoice number. After entry of the invoice number, click ok. The program is set up with an automatic clock and calendar function. If you do not want to use this feature, then click on the “Pop-up and Other Options” button to disable it. Also in the “Pop-up and Other Options” button you may turn on/off the auto-complete function and also set the mileage, lodging and per diem rates for the database. Additionally, there are buttons to remove duplicate records from the tblGeneralInformation table and to remove a zero numbered task in the tblReimbursement table.

D. INVOICE ENTRY PAGE

It is important that all information on this page be correct. The facility ID number will appear as a default on the next page. Enter the appropriate information in all fields. If any field is left blank, a pop up box will identify the field that needs to be completed. If the case number is not known, enter "Unk". It is recommended that you contact the case manager to obtain this number. All work that is to be entered for this invoice must be within the time period entered in "Work Start Date" to "Work End Date" or an error message will occur.

NA or Unk is acceptable in phone number box for the facility phone number only. If the site does not have a corrective action system, then leave the start-up date field blank and click "No" in the "SAVE" pop up box. If you accidentally enter a date, hit the delete key. After all fields are completed, click the "Save/Close" button. This will store all background information that can be used for any future applications for this facility.

E. GENERAL INFORMATION PAGE

To begin entering task information/cost, go to the UST cost database main page and click enter/edit task information after selecting a Facility ID and invoice number on the Main page.

1. Entering or deleting employee names

   Click the "Enter/Delete CAC Employee Names" button. Enter all employee names and titles. After entering all employees click the "Close Employee" button.

2. Entering or editing detail task information

   Click the "Enter/Edit Detail Task Information" button.

F. PROCESS AND TASK PAGE

Click the "Enter New Task" button. Enter a process task, and subtask, and sub sub task by using the drop down boxes provided. The appropriate buttons applicable to the task will be enabled for data entry.

G. BUTTONS

Only the buttons applicable to each process/task/sub task/sub sub task will be enabled for data entry. At this time, it is encouraged that you familiarize yourself with each task description and cost spreadsheet before beginning database entry.

Comment fields have been provided throughout the database. These fields should be used to supplement your application submittal and offer explanation when needed.

TRENCHING - Enter costs associated with recovery well trenching or discharge trenching approved by the Division not to exceed the reasonable rates in RGD-002.

PERSONNEL – Personnel hours can be billed as on-site, office, travel to or travel from time. Refer to each task cost description. **NOTE:** Travel time is a separate,

billable expense and is **NOT** included in any task description. Each approved field activity is allowed a maximum of two (2) hours travel to the site and two (2) hours travel from the site.

RENTALS – A drop down menu is available of the most commonly encountered rental equipment and items. If a piece of equipment does not appear that accompanies the application, then it must be entered on the "Miscellaneous" button and an explanation attached why the piece of equipment was necessary. It is required that you obtain prior approval from the case manager for any rental equipment not listed in the drop down menu.

SUPPLIES – A drop down menu is available of the most commonly encountered supplies and items. If a supply does not appear that accompanies the application, then it must be entered on the "Miscellaneous" button. It is required that you obtain prior approval from the case manager for any supplies not listed in the drop down menu.

MILEAGE - The starting location should include, at a minimum, the name of the city and the ending location should be the name of the city where the site is located. On the return trip, the ending location should either be the CAC office or another UST site where work has been approved by the Division. If the destination is another UST site, then please enter the seven digit facility ID # and city. **NOTE:** Mileage is a separate, billable expense and is **NOT** included in any task description. Each approved field activity is allowed a maximum of 250 miles total round trip at a rate of $0.47/mile for automobiles and at a rate of $0.75/mile for large (diesel) trucks. Only mileage within the state of Tennessee is reimbursable. If you are traveling from a different state, please list the nearest city in the state of Tennessee as your beginning and/or ending location.

SAMPLING - Reimbursed costs include all necessary equipment, personnel and sampling supplies. **DO NOT** itemize separately for personnel time on site. **This task is all an inclusive, lump sum task.** The first well must be entered separately and identified by location number (i.e. MW-1; One well @ $273.50). Any additional wells sampled may be entered on the same page (i.e. MW-2 thru MW-6; 5 wells @ $120.00/each).

WELL SURVEYING – Reimbursed costs include all necessary equipment, personnel and sampling supplies. **DO NOT** itemize separately for personnel time on site. **This task is all an inclusive, lump sum task.** The first four (4) wells must be entered together (i.e. MW-1 – MW-4 @ $745.00). Any additional wells surveyed may be entered on the same page (i.e. MW-5 and MW-6; 2 wells @ $145.00/each).

ANALYSIS – Reimbursed at cost plus 15% mark-up not to exceed the rates listed in the RGD-002.

MEME – Enter costs associated with any mobile enhanced multi-phase extraction event that has been approved by the Division.

CAS INSTALL - Enter costs associated with wellhead vault installation, manifold installation or concrete pad installation approved by the Division not to exceed the reasonable rates in RGD-002.

WELL INSTALLATION - Enter costs associated with any drilling activity such as direct push, slide hammer, or hammer drill (soil gas survey) or augering or air rotary (monitoring well installation) event that has been approved by the Division.

WELL ABANDONMENT - Enter costs associated with any monitoring well abandonment event that has been approved by the Division.

MISCELLANEOUS – This button should be used sparingly and **only** as an exception. It cannot be used for reports. Costs entered on this tab will be require justification and may be grounds for a detailed audit.

HAULING/DISPOSAL – Costs for properly disposing of contaminated soil and/or groundwater as approved by the Division not to exceed the reasonable rates in RGD-002.

REPORTS – After selection of the appropriate report, enter the date the report was submitted to the Division and the cost requested.

UTILITIES – Enter costs associated with payment of utilities when a corrective action system has been approved by the Division and is installed.

LODGING/PER DIEM – Enter costs associated with lodging and per diem for Division approved work in accordance with the state of Tennessee travel regulations in effect at the time that the work was performed.

H. PREVIEWING THE INFORMATION (GENERAL INFORMATION PAGE)

The "Print Preview and Printing" button may be used any time prior to creating a file for submittal to the state for review purposes as needed. This is a useful tool and it is recommended that you review the information entered prior to creating a file for submittal to the state. In this manner, you can determine if the costs will be reimbursed as entered or if there are any disallowable costs.

I. CREATE FILE FOR SUBMITTAL TO STATE OF TENNESSEE (USE ONLY AFTER THE APPLICATION IS COMPLETE)

After all entries have been completed and the file is ready to be created, go to the General Information page and click on the button labeled "3. Create File for State Submittal". A Browse for Folder box will appear to provide a choice of where the file is to be stored. Click on the appropriate folder for the file to be stored. After the file has been successfully saved, the message "The export file was successfully created" will appear. Click "Ok".

J. BACK-UP DOCUMENTATION TO APPLICATION

Back-up documentation including invoices, receipts, time sheets, etc. should be scanned and submitted as a pdf file.

K. SUGGESTED PRACTICES

Always make a back-up copy after each session of data entry in a secure and separate file location for problem situations that may arise. Database maintenance should be

performed occasionally as needed using the Microsoft Access® manage tool, compact and repair.

L. SIGNATURE PAGES

At this time, the Division does not have a process in place to accept electronic signatures. However, applications must be signed by both the Responsible Party and the CAC to verify the costs submitted represent actual costs accrued during the cost of cleanup. The preferred method is for the person completing the application to provide a copy of the application to the Responsible Party and attach the certification pages. After the Responsible Party has reviewed the application, it must be signed and notarized. The CAC should also complete the applicable certification page in the same manner. Both original, notarized certification pages must be submitted with the electronic submittal. **Electronic copies of these pages will not be accepted**. Applications will not be forwarded to the fiscal office for payment without both certification pages. Copies of these pages are found under Forms and can be downloaded at: **www.tn.gov/environment/ust/**

Any item/cost that is not listed in RGD-002 must be pre-approved by the case manager in writing. All back-up documents (emails, letters, etc.) for approval shall be submitted with the application. Failure to obtain case manager approval and/or furnish the back-up documentation will result in denial of the requested costs for that item/cost.

CONTRACT

(fee-for-service contract with an individual, business, non-profit, or governmental entity of another state)

Begin Date	End Date	Agency Tracking #	Edison Record ID
7/1/2012	6/30/2017	32701-01325	32702

Contractor Legal Entity Name	Edison Vendor ID
Pangean-CMD Associates, Inc.	139111

Service Caption (one line only)

Leaking underground storage tank services

Subrecipient or Vendor

☐ Subrecipient ☒ Vendor

CFDA #

Funding —

FY	State	Federal	Interdepartmental	Other	TOTAL Contract Amount
2013	30,000.00	270,000.00			300,000.00
2014	30,000.00	270,000.00			300,000.00
2015	30,000.00	270,000.00			300,000.00
2016	30,000.00	270,000.00			300,000.00
2017	30,000.00	270,000.00			300,000.00
TOTAL:	**150,000.00**	**1,350,000.00**			**1,500,000.00**

American Recovery and Reinvestment Act (ARRA) Funding: ☐ YES ☒ NO

Ownership/Control

☐ African American ☐ Asian ☐ Hispanic ☐ Native American ☐ Female

☐ Person w/Disability ☐ Small Business ☐ Government ☒ NOT Minority/Disadvantaged

☐ Other:

Selection Method & Process Summary (mark the correct response to confirm the associated summary)

☒ RFP	The procurement process was completed in accordance with the approved RFP document and associated regulations.
☐ Competitive Negotiation	The predefined, competitive, impartial, negotiation process was completed in accordance with the associated, approved procedures and evaluation criteria.
☐ Alternative Competitive Method	The predefined, competitive, impartial, procurement process was completed in accordance with the associated, approved procedures and evaluation criteria.
☐ Non-Competitive Negotiation	The non-competitive contractor selection was completed as approved, and the procurement process included a negotiation of best possible terms & price.
☐ Other	The contractor selection was directed by law, court order, settlement agreement, or resulted from the state making the same agreement with all interested parties or all parties in a predetermined "class."

Budget Officer Confirmation: There is a balance in the appropriation from which obligations hereunder are required to be paid that is not already encumbered to pay other obligations.

Thomas W. Ede

OCR USE - FA

FA1339779

Speed Chart (optional)	Account Code (optional)
EN00010608	70803000

CONTRACT
BETWEEN THE STATE OF TENNESSEE,
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
AND
PANGEAN-CMD ASSOCIATES, INC.

This Contract, by and between the State of Tennessee, Department of Environment and Conservation, hereinafter referred to as the 'State" and Pangean-CMD Associates, Inc., hereinafter referred to as the "Contractor," is for the provision of services related to the investigation, containment, and remediation of sites contaminated by leaking underground storage tanks, as further defined in the "SCOPE OF SERVICES."

The Contractor is a For-Profit Corporation.
Contractor Edison Registration ID # 139111
Contractor Place of Incorporation or Organization: Georgia

A. SCOPE OF SERVICES:

A.1. The Contractor shall provide all service and deliverables as required, described, and detailed herein and shall meet all service and delivery timelines as specified by this Contract.

A.2. The Contractor, at the direction of the State, shall provide services related to the investigation, containment, and remediation at sites where petroleum products have leaked from underground storage tanks (UST). The services shall include, but not be limited to:

a. tank tightness testing,
b. emergency response activities,
c. initial abatement,
d. tank removal,
e. soil transportation and disposal,
f. product recovery and disposal via vacuum trucks or other methods,
g. investigation and cleanup activities,
h. spill response,
i. installation and maintenance of booms and pads in creeks,
j. installation of venting systems in impacted sewers or buildings,
k. provision of alternate water supplies,
l. maintenance and storage of the State's remediation equipment,
m. installation of monitoring wells,
n. soil and groundwater sampling,
o. installation of remediation systems,
p. operation and maintenance of remediation systems,

A.3. Prior to the Contractor commencing any work, the State shall issue a Notice to Proceed via electronic mail and/or regular mail to the Contractor that outlines the technical requirements on a site-specific basis. Plans for the project will be submitted to the State for review and approval, if required.

A.4. When the State has determined that a petroleum site constitutes an imminent, substantial danger to the public health, safety, and/or environment, the Contractor shall respond to the situation **within 4 hours** of notification by the State. The Contractor shall be prepared to perform such work as venting explosive vapors in buildings and sewers, providing alternate water supplies, placing and maintaining oil absorbent booms and pads in a creek, removing standing product or contaminated water from pits or tanks, etc.

A.5. In instances where the danger is not determined to be imminent, **within 24 hours** of notification by the State, the Contractor shall mobilize on site a sampling/reconnaissance team. This team shall be able to assess the situation at a leaking petroleum site and develop a cleanup plan to abate all immediate risks to the public health and/or the environment.

A.6. The Contractor, at the State's direction, shall remain on site to continue such action as is necessary to prevent further environmental damage from the release of petroleum from leaking USTs. The Contractor shall be prepared to perform work as directed by the State to locate the source of petroleum causing the problem.

A.7. Any and all activities conducted by the Contractor, including the development of any and all plans and reports, shall comply with Chapter 0400-18-01, Rules of the Department of Environment and Conservation, Division of Underground Storage Tanks, Underground Storage Tank Program, which can be found at http://www.tn.gov/sos/rules/0400/0400-18/0400-18-01.20120307.pdf, as well as published guidelines and guidance documents found at http://tn.gov/environment/ust.

A.8. Unless otherwise stated, all permits, applications, or waste transport identification numbers (such as monitoring well installation permits, NPDES permit applications, injection well permit applications, air permit applications, hazardous waste generator ID number forms, solid waste disposal permits, etc.) necessary to conduct work during investigations and corrective actions at LUST Trust Fund sites and any other UST sites will be obtained by the Contractor on behalf of the State or as an agent for the State.

A.9. The schedule for submission of cost estimates, plans, reports, and the implementation of these plans or activities will be defined in the Notice to Proceed on a site-specific basis. Plans and reports to be submitted by the Contractor may include but not be limited to:

a. Field Work Notification

b. UST Permanent Closure Report

c. Tennessee Risk Based Corrective Action (TRBCA) Closure Report

d. Health and Safety Plan

e. Source Removal Proposal

f. Overexcavation or Source Removal Report

g. Hazard Notification Report – this form shall be printed, completed and submitted to the Division of Underground Storage Tanks within seventy-two (72) hours upon the discovery of impacted drinking water, petroleum vapors, free product, and/or other hazards. For more information see: http://www.tn.gov/environment/ust/docs/CN1259_HNR.pdf

h. Initial Response and Hazard Management Report (IRHMR) - For more information see: http://www.tn.gov/environment/ust/docs/irhmr.pdf

i. Initial Site Characterization Report (ISCR) – The ISCR shall contain all data gathered during field activities and determine the applicable clean-up levels using Technical Guidance Document (TGD)–017, Risk-based Procedure to Determine Clean-up Levels – Exposure Assessment Report Preparation. For more information see: http://www.tn.gov/environment/ust/docs/iscr.pdf

j. Additional Monitoring Well Proposal – A written proposal including the rationale, cost and locations for additional monitoring well installations.

k. Additional Well Installation Report

l Risk Reduction Proposal

m. Risk Reduction Report

n. Institutional Control Proposal

o. Institutional Control Report

p. Engineering Control Proposal

q. Engineering Control Report

r. Advanced Risk Model Proposal

s. Advanced Risk Model Report

t. Corrective Action Plan Reports (CAP) – Any confirmed release of petroleum or petroleum product that results in concentrations of a Chemical of Concern (COC) above the applicable Risk-Based Cleanup Level (RBCL) or the applicable Site-Specific Cleanup Level (SSCL) requires corrective action. As directed by the Division, an Exposure Assessment (ExA) shall be conducted prior to the submittal of a Corrective Action Plan (CAP) to determine the applicable RBCL or the applicable SSCL for each COC. Unless otherwise directed by the Division, if soil or ground water contamination is above the applicable RBCLs or SSCLs, then complete the relevant portions of the CAP. For more information see: http://www.tn.gov/environment/ust/docs/cap.pdf

u. CAP On-property Soil Contamination

v. CAP On-property and Off-property Ground Water Contamination

w. CAP On-property and Off-property Contamination

x. Public Notice of Corrective Action

y. Corrective Action Baseline Monitoring Report (CABMR)

z. Corrective Action Monitoring Report with as-built diagrams (CAMR-ab)

aa. Corrective Action Monitoring Report (CAMR)

bb. Corrective Action Closure Monitoring Report (CACMR)

cc. POTW Application

dd. POTW Report

ee. Air Emissions Application

ff. Air Exceedance Report

gg. Annual Air Emissions Report

hh. Corrective Action System Deactivation Report

ii. Boring Log Installation submittal

jj. Monitoring Well Abandonment Report - A written report detailing the completion of monitoring well abandonment activities.

kk. Technical Guidance Document (TGD)-003 Application For Authorization To Operate A Class V Underground Injection Well Or Storm Water Discharge To The Subsurface – One of the options for disposal of treated wastewater at UST sites is that of reinjection. Injection wells of this type are classified as Class V wells under rule 1200-4-6.14. This

class of injection well is permitted by rule. For more information see: http://www.tn.gov/environment/ust/docs/tgd003.pdf

ll. TGD-004 Free Product Removal Report – For more information see: http://www.tn.gov/environment/ust/docs/tgd004.pdf

mm. Free Product – Hazard Management Report

nn. Free Product Investigation Proposal

oo. Free Product Investigation Report

pp. Free Product Removal Plan

qq. TGD-005 Soil Stockpile Sampling Report - Sampling And Reporting Requirements For Excavated Material – The purpose of this document is to assist the regulated community in determining whether excavated material requires treatment. This determination is based upon the collection and analysis of discrete samples obtained from the excavated material. For more information see: http://www.tn.gov/environment/ust/docs/tgd005.pdf

rr. TGD-007 Monitoring Reports - The purpose of this Technical Guidance Document (TGD) is to assist the regulated community in determining the requirements for periodic monitoring and reporting at UST sites. All work associated with this TGD shall be performed in accordance with the applicable sections of the Environmental Assessment Guidelines. For more information see: http://www.tn.gov/environment/ust/docs/tgd007.pdf

ss. Risk Monitoring Report (RMR)

tt. Closure Monitoring Report (CMR)

uu. TGD-009 Application to Treat Petroleum Contaminated Soil – Provides the Contractor with the requirements for treating petroleum contaminated soil generated at underground storage tank (UST) sites. For more information see: http://www.tn.gov/environment/ust/docs/tgd009.pdf

vv. Soil Treatment and Disposal Report

ww. TGD-010 Procedure to obtain an NPDES Permit at a Petroleum Underground Storage Tank Site and the Division's Interim Requirements – One method of disposal of treated water is to discharge to surface waters according to a National Pollution Discharge Elimination System (NPDES) permit issued by the Division of Water Pollution Control (WPC). WPC and the Division of Underground Storage Tanks (UST) developed an agreement which streamlines the NPDES process thus allowing for timely free product removal, clean-up of ground water, and proper wastewater treatment. For additional information see: http://www.tn.gov/environment/ust/docs/tgd010.pdf

xx. NPDES Permit Application

yy. Discharge Monitoring Report (DMR)

zz. TGD-012 Site Check Report – Investigation shall be conducted at facilities with evidence of on-site environmental impact (exclusive of analytical data) or off-site environmental impact and at which underground storage tank (UST) system(s) have passed tightness testing. An environmental impact includes, but is not limited to, the discovery of released petroleum at a UST site and/or in the surrounding area (such as free product or vapors in soils, basements, sewer and utility lines and nearby surface water). For additional information see: http://www.tn.gov/environment/ust/docs/tgd012.pdf

aaa. TGD-016 Mobile Enhanced Multi-phase Extraction (MEME) – The purpose of this document is to provide guidance for applying mobile enhanced multi-phase extraction (MEME) technology at petroleum underground storage tank sites. For more information see: http://www.tn.gov/environment/ust/docs/tgd016.pdf

bbb. Application to perform MEME

ccc. 8-hour MEME Report

ddd. 24-hour MEME Report

eee. TGD-017 Risk-Based Procedure To Determine Clean-Up Levels – Exposure Assessment Report Preparation – Provides the minimum requirements to determine clean-up levels at petroleum underground storage tank sites that have, at a minimum, completed an Initial Site Characterization Report (ISCR) in accordance with Rule 0400-18-01-.06(5)(b). These clean-up levels will be determined for specific Chemicals of Concern (COCs) to provide adequate protection of human health and/or the environment. For more information see: http://www.tn.gov/environment/ust/docs/tgd017.pdf

fff. Additional Remediation and/or Risk Management Response Submittal

ggg. Additional Remediation and/or Risk Management Evaluation – with Division approval

hhh. Risk Analysis Report (newer version)

iii. TGD-018 Soil Gas Survey - The purpose of this Technical Guidance Document (TGD) is to establish a standard for conducting soil gas sampling. The collection of soil gas data will aid in determining whether the measured subsurface soil gas vapor levels for each Chemical of Concern (COC) that exceeded the approved site-specific cleanup levels (SSCLs) pose an indoor air risk to the occupants of on-site structures. For more information see: http://www.tn.gov/environment/ust/docs/tgd018.pdf

jjj. Soil Gas Survey Application

kkk. Soil Gas Survey Report

lll. TGD-019 Impacted Drinking Water Management - The purpose of this Technical Guidance Document (TGD) is to assist the regulated community in understanding and complying with the requirements for management of an impacted drinking water supply specified in Rule 0400-18-01-.06(4)(b)1. For more information see: http://www.tn.gov/environment/ust/docs/tgd019.pdf

mmm. Hazard Management Report

nnn. Impacted Drinking Water – Hazard Management Report

ooo. Impacted Drinking Water Supply Temporary Response Proposal

ppp. Impacted Drinking Water Supply Permanent Response Proposal

qqq. TGD-020 Petroleum Vapor Impact Management - The purpose of this Technical Guidance Document (TGD) is to assist the regulated community in understanding and complying with the requirements for management of a petroleum vapor impact specified in Rule 0400-18-01-.06(4)(b)2. For more information see: http://www.tn.gov/environment/ust/docs/tgd020.pdf

rrr. Petroleum Vapor Impact – Hazard Management Report

sss. Petroleum Vapor Impact Temporary Response Proposal

ttt. Petroleum Vapor Impact Permanent Proposal

uuu. Other reports as required by the Division

A.10. Should the State request the Contractor to modify any plan/report or reject the plan, the Contractor must submit a revised plan/report within twenty (20) working days of the Notice from the State. The State will not compensate a Contractor for expenses specific to the development of a plan/report that has been rejected or modified one (1) or more times even though the State may request further modifications of the plan. Compensation for work performed under this Contract will be paid after approval and acceptance by the State.

A.11. The State will select projects to be completed under the Leaking UST Services Contract. In the event modifications or additions to the original Notice to Proceed are deemed necessary, the State shall notify the Contractor in writing. In the event that the State determines that work at any site is completed or that additional work at a site is not necessary, activities at the site will cease and the Contractor will be compensated for that percent of each task completed at that time. It is the intent of this Contract that the State shall have the right to cease operations at any site on which a Notice to Proceed was previously issued by notifying the Contractor either verbally or in writing.

A.12. Quality Management Plan. TDEC has entered into grants and cooperative agreements with the U.S Environmental Protection Agency to implement federally mandated environmental programs in Tennessee. Per EPA Executive Order 5360.1, which directs the implementation of an agency wide quality management system, TDEC has agreed to implement an agency wide quality management system when it enters into each TDEC/EPA grant and cooperative agreement, TDEC has agreed to develop and implement a Quality Management Plan for activities that generate and utilize environmental data. This Quality Management Plan requires TDEC to insure that environmental data generated and it uses to make environmental decisions is scientifically sound, legally defensible and meets defined precision and accuracy requirements. 40 CFR 30, 40 CFR 31 and 48 CFR 46 stipulate the requirements that states require contractors receiving federal funds to meet quality management system requirements.

Work performed by the Contractor for TDEC shall meet the criteria set in place by the TDEC Quality Management Plan as described in "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs (ANSI/ASQC E4-1994)" and "EPA Requirements for Quality Management Plans (QA/R-2"). The Contractor shall either submit for approval or develop Quality Assurance Project Plans as deemed necessary by TDEC for review and approval. For projects and tasks that TDEC has developed Quality Assurance Project Plans and Standard Operating Procedures, the Contractor agrees to meet the requirements of said quality assurance & quality control documents.

A.13. Electronic Mail. The Contractor shall have the capability to send and receive electronic mail. The Contractor shall maintain electronic mail capability for the duration of the contract.

A.14. Required Staff. The Contractor shall have the following personnel on staff in house (not subcontracted) for the duration of the contract:

a. A geologist with a current Tennessee Professional Geologist (P.G.) license or an engineer with a current Tennessee Professional Engineer (P.E.) license, and

b. One (1) corrective action system specialist with a current certification from a Division approved manufacturer of high vacuum dual phase remediation systems per region awarded.

B. CONTRACT PERIOD:

B.1. This Contract shall be effective for the period beginning July 1, 2012, and ending on June 30, 2017. The Contractor hereby acknowledges and affirms that the State shall have no obligation for services rendered by the Contractor which were not performed within this specified contract period.

C. PAYMENT TERMS AND CONDITIONS:

C.1. Maximum Liability. In no event shall the maximum liability of the State under this Contract exceed one million five hundred thousand dollars ($1,500,000.00). The payment rates in section C.3 (detailed within the State's Reimbursement Guidance Document (RGD)-002 (as amended from time to time) included in Attachment 1 (http://www.tn.gov/environment/ust/docs/rgd002.pdf)) and the Travel Compensation provided in Section C.4. shall constitute the entire compensation due the Contractor for all service and Contractor obligations hereunder regardless of the difficulty, materials or equipment required. The payment rates include, but are not limited to, all applicable taxes, fees, overheads, and all other direct and indirect costs incurred or to be incurred by the Contractor.

The Contractor is not entitled to be paid the maximum liability for any period under the Contract or any extensions of the Contract for work not requested by the State. The maximum liability represents available funds for payment to the Contractor and does not guarantee payment of any such funds to the Contractor under this Contract unless the State requests work and the Contractor performs said work. In which case, the Contractor shall be paid in accordance with the payment rates detailed in section C.3 and detailed within the State's Reimbursement Guidance Document (RGD)-002 (as amended from time to time) included in Attachment 1. The State is under no obligation to request work from the Contractor in any specific dollar amounts or to request any work at all from the Contractor during any period of this Contract.

C.2. Compensation Firm. The maximum liability of the State under this Contract is firm for the duration of the Contract and not subject to escalation for any reason unless amended. The payment rates under this Contract are based upon the State's Reimbursement Guidance Document (RGD)-002. In the event of a change in the maximum rate(s) within the State's Reimbursement Guidance Document (RGD)-002, the Unit Rates in Attachment 1 will automatically reflect the change and contractors shall be reimbursed at the new rate(s).

C.3. Payment Methodology. The Contractor shall be compensated based on the payment rates herein for units of service authorized by the State in a total amount not to exceed the Contract Maximum Liability established in section C.1.

a. The Contractor's compensation shall be contingent upon the satisfactory completion of units, milestones, or increments of service defined in section A.

b. The Contractor shall be compensated for said units, milestones, or increments of service based upon the payment rates detailed in the State's Reimbursement Guidance Document (RGD) – 002 as it may be amended from time to time, published at http://www.tn.gov/environment/ust/docs/rgd002.pdf.

c. The Contractor shall not be compensated for travel time to the primary location of service provision.

d. Freight charges on well installation and drilling supplies, casing, screen, bentonite, etc., will be reimbursed at the Contractor's actual cost as documented by a copy of the freight invoice.

e. Analyticals, other items and tasks required by the State but not listed in RGD-002 will be reimbursed at the Contractor's actual cost as documented by a copy of the invoice.

f. All personnel must meet the qualifications enumerated in Attachment 1, "Personnel Descriptions."

C.4. Travel Compensation. Compensation to the Contractor for travel, meals, or lodging shall be subject to amounts and limitations specified in the "State Comprehensive Travel Regulations," as they are amended from time to time. The Contractor shall only be reimbursed for mileage within Tennessee with a maximum 250 miles round trip. If the vehicle size is not specified, the lowest rate will be applied. The Contractor is also limited to four (4) hours of round trip travel time. Personnel Mileage to and from sites shall be determined starting from the Contractor's office that is located closest to the specific UST site or from another UST site, if traveling between sites.

The Contractor must include (in addition to other invoice requirements of this Contract) a complete itemization of travel compensation requested in accordance with and attaching to the invoice appropriate documentation and receipts as required by the above-referenced "State Comprehensive Travel Regulations."

C.5. Invoice Requirements. The Contractor shall invoice the State only for completed tasks within a Notice to Proceed (NTP) and in the amounts stipulated in section C.3 and detailed within the State's Reimbursement Guidance Document (RGD)-002 (as amended from time to time) included in Attachment 1, above, and present said invoices no more often than monthly, with all necessary supporting documentation, to:

ust.reimbursement@tn.gov

a. Invoices shall be completed as required within the REIMBURSEMENT GUIDANCE DOCUMENT – 002 April 1, 2012 (as amended from time to time) (http://www.tn.gov/environment/ust/docs/rgd002.pdf) (see Section X, A through K).

b. The Contractor understands and agrees that an invoice under this Contract shall:

(1) include only charges for service described in Contract Section A and in accordance with payment terms and conditions set forth in Contract Section C;
(2) only be submitted for completed tasks and shall not include any charge for future work;
(3) not include sales tax or shipping charges, except freight charges in accordance with section C.3.d.; and
(4) initiate the timeframe for payment (and any discounts) only when the State is in receipt of the invoice, and the invoice meets the minimum requirements of this section C.5.

c. All invoices for work required under this contract shall be submitted within sixty (60) days of completion of a task. Invoices submitted for payment of tasks performed after more than sixty (60) days prior to the date of invoice submission, but less than one (1) year of performance of the task or tasks covered by that invoice may be accepted at the discretion of the State. Invoices submitted for payment of tasks more than one (1) year of after performance of the task or tasks covered by that invoice will be denied payment in accordance with Rule 0400-18-01-.09(12)(f).

C.6. Payment of Invoice. A payment by the State shall not prejudice the State's right to object to or question any payment, invoice, or matter in relation thereto. A payment by the State shall not be construed as acceptance of any part of the work or service provided or as approval of any amount invoiced.

C.7. Invoice Reductions. The Contractor's invoice shall be subject to reduction for amounts included in any invoice or payment theretofore made which are determined by the State, on the basis of audits conducted in accordance with the terms of this Contract, not to constitute proper remuneration for compensable services.

C.8. Deductions. The State reserves the right to deduct from amounts, which are or shall become due and payable to the Contractor under this or any contract between the Contractor and the State of Tennessee any amounts, which are or shall become due and payable to the State of Tennessee by the Contractor.

C.9. Prerequisite Documentation. The Contractor shall not invoice the State under this Contract until the State has received the following documentation properly completed.

a. The Contractor shall complete, sign, and present to the State an "Authorization Agreement for Automatic Deposit (ACH Credits) Form" provided by the State. By doing so, the Contractor acknowledges and agrees that, once said form is received by the State, all payments to the Contractor, under this or any other contract the Contractor has with the State of Tennessee shall be made by Automated Clearing House (ACH).

b. The Contractor shall complete, sign, and present to the State a "Substitute W-9 Form" provided by the State. The taxpayer identification number detailed by said form must agree with the Contractor's Federal Employer Identification Number or Tennessee Edison Registration ID referenced in this Contract.

D. STANDARD TERMS AND CONDITIONS:

D.1. Required Approvals. The State is not bound by this Contract until it is signed by the contract parties and approved by appropriate officials in accordance with applicable Tennessee laws and regulations (depending upon the specifics of this contract, said officials may include, but are not limited to, the Commissioner of Finance and Administration, the Commissioner of Human Resources, and the Comptroller of the Treasury).

D.2. Modification and Amendment. This Contract may be modified only by a written amendment signed by all parties hereto and approved by both the officials who approved the base contract and, depending upon the specifics of the contract as amended, any additional officials required by Tennessee laws and regulations (said officials may include, but are not limited to, the Commissioner of Finance and Administration, the Commissioner of Human Resources, and the Comptroller of the Treasury).

D.3. Termination for Convenience. The State may terminate this Contract without cause for any reason. Said termination shall not be deemed a breach of contract by the State. The State shall give the Contractor at least thirty (30) days written notice before the effective termination date. The Contractor shall be entitled to compensation for satisfactory, authorized service completed as of the termination date, but in no event shall the State be liable to the Contractor for compensation for any service which has not been rendered. Upon such termination, the Contractor shall have no right to any actual general, special, incidental, consequential, or any other damages whatsoever of any description or amount.

D.4. Termination for Cause. If the Contractor fails to properly perform its obligations under this Contract in a timely or proper manner, or if the Contractor violates any terms of this Contract, the State shall have the right to immediately terminate the Contract and withhold payments in excess of fair compensation for completed services. Notwithstanding the above, the Contractor shall not be relieved of liability to the State for damages sustained by virtue of any breach of this Contract by the Contractor.

D.5. Subcontracting. The Contractor shall not assign this Contract or enter into a subcontract for any of the services performed under this Contract without obtaining the prior written approval of the State. If such subcontracts are approved by the State, each shall contain, at a minimum, sections of this Contract below pertaining to "Conflicts of Interest," "Nondiscrimination," and "Records" (as identified by the section headings). Notwithstanding any use of approved subcontractors, the Contractor shall be the prime contractor and shall be responsible for all work performed.

D.6. Conflicts of Interest. The Contractor warrants that no part of the total Contract Amount shall be paid directly or indirectly to an employee or official of the State of Tennessee as wages, compensation, or gifts in exchange for acting as an officer, agent, employee, subcontractor, or consultant to the Contractor in connection with any work contemplated or performed relative to this Contract.

The Contractor acknowledges, understands, and agrees that this Contract shall be null and void if the Contractor is, or within the past six months has been, an employee of the State of Tennessee or if the Contractor is an entity in which a controlling interest is held by an individual who is, or within the past six months has been, an employee of the State of Tennessee.

D.7. Nondiscrimination. The Contractor hereby agrees, warrants, and assures that no person shall be excluded from participation in, be denied benefits of, or be otherwise subjected to discrimination in the performance of this Contract or in the employment practices of the Contractor on the grounds of handicap or disability, age, race, color, religion, sex, national origin, or any other classification protected by Federal, Tennessee State constitutional, or statutory law. The Contractor shall, upon request, show proof of such nondiscrimination and shall post in conspicuous places, available to all employees and applicants, notices of nondiscrimination.

D.8. Prohibition of Illegal Immigrants. The requirements of *Tennessee Code Annotated*, Section 12-4-124, *et seq.*, addressing the use of illegal immigrants in the performance of any Contract to supply goods or services to the state of Tennessee, shall be a material provision of this Contract, a breach of which shall be grounds for monetary and other penalties, up to and including termination of this Contract.

a. The Contractor hereby attests, certifies, warrants, and assures that the Contractor shall not knowingly utilize the services of an illegal immigrant in the performance of this Contract and shall not knowingly utilize the services of any subcontractor who will utilize the services of an illegal immigrant in the performance of this Contract. The Contractor shall reaffirm this attestation, in writing, by submitting to the State a completed and signed copy of the document at Attachment 3, hereto, semi-annually during the period of this Contract. Such attestations shall be maintained by the Contractor and made available to state officials upon request.

b. Prior to the use of any subcontractor in the performance of this Contract, and semi-annually thereafter, during the period of this Contract, the Contractor shall obtain and retain a current, written attestation that the subcontractor shall not knowingly utilize the services of an illegal immigrant to perform work relative to this Contract and shall not knowingly utilize the services of any subcontractor who will utilize the services of an illegal immigrant to perform work relative to this Contract. Attestations obtained from such subcontractors shall be maintained by the Contractor and made available to state officials upon request.

c. The Contractor shall maintain records for all personnel used in the performance of this Contract. Said records shall be subject to review and random inspection at any reasonable time upon reasonable notice by the State.

d. The Contractor understands and agrees that failure to comply with this section will be subject to the sanctions of *Tennessee Code Annotated*, Section 12-4-124, *et seq.* for acts or omissions occurring after its effective date. This law requires the Commissioner of Finance and Administration to prohibit a contractor from contracting with, or submitting an offer, proposal, or bid to contract with the State of Tennessee to supply goods or services for a period of one year after a contractor is discovered to have knowingly used the services of illegal immigrants during the performance of this Contract.

e. For purposes of this Contract, "illegal immigrant" shall be defined as any person who is not either a United States citizen, a Lawful Permanent Resident, or a person whose physical presence in the United States is authorized or allowed by the federal

Department of Homeland Security and who, under federal immigration laws and/or regulations, is authorized to be employed in the U.S. or is otherwise authorized to provide services under the Contract.

D.9. Records. The Contractor shall maintain documentation for all charges under this Contract. The books, records, and documents of the Contractor, insofar as they relate to work performed or money received under this Contract, shall be maintained for a period of three (3) full years from the date of the final payment and shall be subject to audit at any reasonable time and upon reasonable notice by the State, the Comptroller of the Treasury, or their duly appointed representatives. The financial statements shall be prepared in accordance with generally accepted accounting principles.

D.10. Monitoring. The Contractor's activities conducted and records maintained pursuant to this Contract shall be subject to monitoring and evaluation by the State, the Comptroller of the Treasury, or their duly appointed representatives.

D.11. Progress Reports. The Contractor shall submit brief, periodic, progress reports to the State as requested.

D.12. Strict Performance. Failure by any party to this Contract to insist in any one or more cases upon the strict performance of any of the terms, covenants, conditions, or provisions of this Contract shall not be construed as a waiver or relinquishment of any such term, covenant, condition, or provision. No term or condition of this Contract shall be held to be waived, modified, or deleted except by a written amendment signed by the parties hereto.

D.13. Independent Contractor. The parties hereto, in the performance of this Contract, shall not act as employees, partners, joint venturers, or associates of one another. It is expressly acknowledged by the parties hereto that such parties are independent contracting entities and that nothing in this Contract shall be construed to create an employer/employee relationship or to allow either to exercise control or direction over the manner or method by which the other transacts its business affairs or provides its usual services. The employees or agents of one party shall not be deemed or construed to be the employees or agents of the other party for any purpose whatsoever.

The Contractor, being an independent contractor and not an employee of the State, agrees to carry adequate public liability and other appropriate forms of insurance, including adequate public liability and other appropriate forms of insurance on the Contractor's employees, and to pay all applicable taxes incident to this Contract.

D.14. State Liability. The State shall have no liability except as specifically provided in this Contract.

D.15. Force Majeure. The obligations of the parties to this Contract are subject to prevention by causes beyond the parties' control that could not be avoided by the exercise of due care including, but not limited to, natural disasters, riots, wars, epidemics, or any other similar cause.

D.16. State and Federal Compliance. The Contractor shall comply with all applicable State and Federal laws and regulations in the performance of this Contract.

D.17. Governing Law. This Contract shall be governed by and construed in accordance with the laws of the State of Tennessee. The Contractor agrees that it will be subject to the exclusive jurisdiction of the courts of the State of Tennessee in actions that may arise under this Contract. The Contractor acknowledges and agrees that any rights or claims against the State of Tennessee or its employees hereunder, and any remedies arising therefrom, shall be subject to and limited to those rights and remedies, if any, available under *Tennessee Code Annotated*, Sections 9-8-101 through 9-8-407.

D.18. Completeness. This Contract is complete and contains the entire understanding between the parties relating to the subject matter contained herein, including all the terms and conditions of the parties' agreement. This Contract supersedes any and all prior understandings,

representations, negotiations, and agreements between the parties relating hereto, whether written or oral.

D.19. Severability. If any terms and conditions of this Contract are held to be invalid or unenforceable as a matter of law, the other terms and conditions hereof shall not be affected thereby and shall remain in full force and effect. To this end, the terms and conditions of this Contract are declared severable.

D.20. Headings. Section headings of this Contract are for reference purposes only and shall not be construed as part of this Contract.

E. SPECIAL TERMS AND CONDITIONS:

E.1. Conflicting Terms and Conditions. Should any of these special terms and conditions conflict with any other terms and conditions of this Contract, these special terms and conditions shall control.

E.2. Communications and Contacts. All instructions, notices, consents, demands, or other communications required or contemplated by this Contract shall be in writing and shall be made by certified, first class mail, return receipt requested and postage prepaid, by overnight courier service with an asset tracking system, or by EMAIL or facsimile transmission with recipient confirmation. Any such communications, regardless of method of transmission, shall be addressed to the respective party at the appropriate mailing address, facsimile number, or EMAIL address as set forth below or to that of such other party or address, as may be hereafter specified by written notice.

The State:
Cindy Greene, Corrective Action Program Manager
Division of Underground Storage Tanks
Department of Environment and Conservation
401 Church Street, 4th Floor L & C Tower
Nashville, Tennessee 37243
Cindy.Greene@tn.gov
Phone: 615-532-0988
FAX: 615-532-9759

The Contractor:
Dave Schmidt, Vice President
Pangean-CMD Associates, Inc.
3144 Stage Post Drive, #112
Bartlett, TN 38133
dschmidt@pangean-cmd.com
Telephone # 901-259-2362
FAX # 901-259-2364

All instructions, notices, consents, demands, or other communications shall be considered effectively given upon receipt or recipient confirmation as may be required.

E.3. Subject to Funds Availability. The Contract is subject to the appropriation and availability of State and/or Federal funds. In the event that the funds are not appropriated or are otherwise unavailable, the State reserves the right to terminate the Contract upon written notice to the Contractor. Said termination shall not be deemed a breach of Contract by the State. Upon receipt of the written notice, the Contractor shall cease all work associated with the Contract. Should such an event occur, the Contractor shall be entitled to compensation for all satisfactory and authorized services completed as of the termination date. Upon such termination, the Contractor shall have no right to recover from the State any actual, general, special, incidental, consequential, or any other damages whatsoever of any description or amount.

E.4. Tennessee Consolidated Retirement System. The Contractor acknowledges and understands that, subject to statutory exceptions contained in *Tennessee Code Annotated*, Section 8-36-801, *et. seq.*, the law governing the Tennessee Consolidated Retirement System (TCRS), provides that if a retired member of TCRS, or of any superseded system administered by TCRS, or of any local retirement fund established pursuant to *Tennessee Code Annotated*, Title 8, Chapter 35, Part 3 accepts state employment, the member's retirement allowance is suspended during the period of the employment. Accordingly and notwithstanding any provision of this Contract to the contrary, the Contractor agrees that if it is later determined that the true nature of the working relationship between the Contractor and the State under this Contract is that of "employee/employer" and not that of an independent contractor, the Contractor, if a retired

member of TCRS, may be required to repay to TCRS the amount of retirement benefits the Contractor received from TCRS during the period of this Contract.

E.5. Insurance. The Contractor(s) shall maintain the appropriate forms of liability insurance, which include but are not limited to, Worker's Compensation, Employer's Liability, Automobile Liability and General Liability. The limits of liability for these policies must meet or exceed the requirements for a Tennessee UST Division Approved Corrective Action Contractor, as outlined in Rule 0400-18-01-.09(15)(b) part 4, as amended from time to time. The Tennessee Department of Environment and Conservation - Division of Underground Storage Tanks shall be listed as the certificate holder on the Contractors' insurance certifications.

E.6. Competitive Procurements. This Contract provides for reimbursement of the cost of goods, materials, supplies, equipment, or contracted services. Such procurements shall be made on a competitive basis, where practical. The Contractor shall maintain documentation for the basis of each procurement for which reimbursement is paid pursuant to this Contract. In each instance where it is determined that use of a competitive procurement method was not practical, said documentation shall include a written justification, approved by the Commissioner of Environment and Conservation, for such decision and non-competitive procurement.

E.7. State Furnished Property. The Contractor shall be responsible for the correct use, maintenance, and protection of all articles of nonexpendable, tangible, personal property furnished by the State for the Contractor's temporary use under this Contract. This includes the State owned corrective action systems installed at sites assigned to contractor. Upon termination of this Contract, all property furnished shall be returned to the State in good order and condition as when received, reasonable use and wear thereof excepted. Should the property be destroyed, lost, or stolen, the Contractor shall be responsible to the State for the residual value of the property at the time of loss.

E.8. Incorporation of Additional Documents. Each of the following documents is included as a part of this Contract by reference. In the event of a discrepancy or ambiguity regarding the Contractor's duties, responsibilities, and performance under this Contract, these items shall govern in order of precedence below.

a. this Contract document with any attachments or exhibits (excluding the items listed at subsections b. through e., below);

b. any clarifications of or addenda to the Contractor's proposal seeking this Contract;

c. the State solicitation, as may be amended, requesting proposals in competition for this Contract;

d. any technical specifications provided to proposers during the procurement process to award this Contract;

d. the Contractor's proposal seeking this Contract.

E.9. Lobbying. The Contractor certifies, to the best of its knowledge and belief, that:

a. No federally appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

b. If any funds other than federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this contract, grant, loan, or cooperative agreement, the Contractor shall complete and submit Standard Form-LLL, ``Disclosure Form to Report Lobbying," in accordance with its instructions.

c. The Contractor shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into and is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, *U.S. Code*.

E.10. Debarment and Suspension. The Contractor certifies, to the best of its knowledge and belief, that it, its current and future principals, its current and future subcontractors and their principals:

a. are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal or state department or agency;

b. have not within a three (3) year period preceding this Contract been convicted of, or had a civil judgment rendered against them from commission of fraud, or a criminal offence in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or grant under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;

c. are not presently indicted or otherwise criminally or civilly charged by a government entity (federal, state, or local) with commission of any of the offenses detailed in section b. of this certification; and

d. have not within a three (3) year period preceding this Contract had one or more public transactions (federal, state, or local) terminated for cause or default.

The Contractor shall provide immediate written notice to the State if at any time it learns that there was an earlier failure to disclose information or that due to changed circumstances, its principals or the principals of its subcontractors are excluded or disqualified.

E.11. Contractor Commitment to Diversity. The Contractor shall comply with and make reasonable business efforts to exceed the commitment to diversity represented by the Contractor's proposal responding to RFP 32701-00714 (Attachment 6.2., Section B, Item B.15) and resulting in this Contract.

The Contractor shall assist the State in monitoring the Contractor's performance of this commitment by providing, as requested, a quarterly report of participation in the performance of this Contract by small business enterprises and businesses owned by minorities, women, and persons with a disability. Such reports shall be provided to the state of Tennessee Governor's Office of Diversity Business Enterprise in form and substance as required by said office.

E.12. Performance Bond. The Contractor shall provide to the State a performance bond guaranteeing full and faithful performance of all undertakings and obligations under this Contract and in the amount equal to three hundred seventy-five thousand dollars ($375,000.00). The Contractor shall submit the bond no later than the day immediately preceding the Contract start date and in the manner and form prescribed by the State (at Attachment 4 hereto), and the bond shall be

issued through a company licensed to issue such a bond in the state of Tennessee. The performance bond shall guarantee full and faithful performance of all undertakings and obligations under this Contract for:

a. the Contract term and all extensions thereof; or

b. the first, calendar year of the Contract (ending December 31st following the Contract start date) in the amount of three hundred seventy-five thousand dollars ($375,000.00) and, thereafter, a new performance bond in the amount of three hundred seventy-five thousand dollars ($375,000.00) covering each subsequent calendar year of the contract period. In which case, the Contractor shall provide such performance bonds to the State no later than each December 10th preceding the calendar year period covered beginning on January 1st of each year.

Failure to provide to the State the performance bond(s) as required herein prior to the Contract start date and, as applicable, no later than December 10th preceding each calendar year period covered beginning on January 1st of each year, shall result in contract termination. The Contractor understands that the stated amount of the performance bond required hereunder shall not be reduced during the contract period for any reason.

E.13. Hold Harmless. The Contractor agrees to indemnify and hold harmless the State of Tennessee as well as its officers, agents, and employees from and against any and all claims, liabilities, losses, and causes of action which may arise, accrue, or result to any person, firm, corporation, or other entity which may be injured or damaged as a result of acts, omissions, or negligence on the part of the Contractor, its employees, or any person acting for or on its or their behalf relating to this Contract. The Contractor further agrees it shall be liable for the reasonable cost of attorneys for the State in the event such service is necessitated to enforce the terms of this Contract or otherwise enforce the obligations of the Contractor to the State.

In the event of any such suit or claim, the Contractor shall give the State immediate notice thereof and shall provide all assistance required by the State in the State's defense. The State shall give the Contractor written notice of any such claim or suit, and the Contractor shall have full right and obligation to conduct the Contractor's own defense thereof. Nothing contained herein shall be deemed to accord to the Contractor, through its attorney(s), the right to represent the State of Tennessee in any legal matter, such rights being governed by *Tennessee Code Annotated*, Section 8-6-106.

E.14. Partial Takeover. The State may, at its convenience and without cause, exercise a partial takeover of any service which the Contractor is obligated to perform under this Contract, including but not limited to any service which is the subject of a subcontract between Contractor and a third party, although the Contractor is not in breach (hereinafter referred to as "Partial Takeover"). Said Partial Takeover shall not be deemed a Breach of Contract by the State. Contractor shall be given at least 30 days prior written notice of said Partial Takeover with said notice to specify the area(s) of service the State will assume and the date of said assumption. Any Partial Takeover by the State shall not alter in any way Contractor's other obligations under this Contract. The State may withhold from amounts due the Contractor the amount the Contractor would have been paid to deliver the service as determined by the State. The amounts shall be withheld effective as of the date the State assumes the service. Upon Partial Takeover, the Contractor shall have no right to recover from the State any actual, general, special, incidental, consequential, or any other damages whatsoever of any description or amount.

E.15. Federal Funding Accountability and Transparency Act (FFATA). This Contract requires the Contractor to provide supplies and/or services that are funded in whole or in part by federal funds that are subject to FFATA. The Contractor is responsible for ensuring that all applicable requirements, including but not limited to those set forth herein, of FFATA are met and that the Contractor provides information to the State as required.

The Contractor shall comply with the following:

a. Reporting of Total Compensation of the Contractor's Executives.

(1) The Contractor shall report the names and total compensation of each of its five most highly compensated executives for the Contractor's preceding completed fiscal year, if in the Contractor's preceding fiscal year it received:

i. 80 percent or more of the Contractor's annual gross revenues from Federal procurement contracts and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

ii. $25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and

iii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm.).

Executive means officers, managing partners, or any other employees in management positions.

(2) Total compensation means the cash and noncash dollar value earned by the executive during the Contractor's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)):

i. Salary and bonus.

ii. Awards of stock, stock options, and stock appreciation rights. Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.

iii. Earnings for services under non-equity incentive plans. This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.

iv. Change in pension value. This is the change in present value of defined benefit and actuarial pension plans.

v. Above-market earnings on deferred compensation which is not tax qualified.

vi. Other compensation, if the aggregate value of all such other compensation (e.g. severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds $10,000.

b. The Contractor must report executive total compensation described above to the State by the end of the month during which this Contract is awarded.

c. If this Contract is amended to extend its term, the Contractor must submit an executive total compensation report to the State by the end of the month in which the amendment to this Contract becomes effective.

d. The Contractor will obtain a Data Universal Numbering System (DUNS) number and maintain its DUNS number for the term of this Contract. More information about obtaining a DUNS Number can be found at: http://fedgov.dnb.com/webform/

The Contractor's failure to comply with the above requirements is a material breach of this Contract for which the State may terminate this Contract for cause. The State will not be obligated to pay any outstanding invoice received from the Contractor unless and until the Contractor is in full compliance with the above requirements.

E.16. UST Approved Corrective Action Contractor Status. The Contractor must be an Approved Corrective Action Contractor as defined in Rule 0400-18-01-.09(15) and remain same during the entire contract period. Failure to maintain this requirement shall result in the immediate termination of the contract at the discretion of the State.

E.17. Authorized Individuals. Each party hereto has provided the other party hereto with a list identifying the individuals from whom the other party is authorized to accept any notices, requests, demands, or other advice which may be given hereunder by the party providing such list. Said lists, which are attached hereto as Attachment 2, shall be valid until revoked or amended by further written notice. The parties hereto shall only be entitled to rely on notices, requests, demands, or other advice given by such individuals.

E.18. Reference Materials. The Contractor must have a complete copy (paper or electronic) of the following documents any time they are at a Contract site:

a. The Tennessee Petroleum Underground Storage Tank ("UST") Act, TCA 68-215-101 et. seq. (http://tn.gov/environment/ust/act_rules.shtml),

b. The Tennessee Petroleum Underground Storage Tank rules (Rule 0400-18-01) (http://www.tn.gov/sos/rules/0400/0400-18/0400-18-01.20120307.pdf),

c. The Tennessee Petroleum Underground Storage Tank Technical Guidance Documents (TGD) (http://tn.gov/environment/ust/guidance/#tgds)

d. The Tennessee Petroleum Underground Storage Tank Environmental Assessment Guidelines (http://www.tn.gov/environment/ust/docs/eag.pdf),

e. The Tennessee Petroleum Underground Storage Tank Site Check Report Guidelines (http://www.tn.gov/environment/ust/docs/scrg.pdf),

f. The Tennessee Petroleum Underground Storage Tank Initial Response and Hazard Management Report Guidelines (http://www.tn.gov/environment/ust/docs/irhmr.pdf),

g. The Tennessee Petroleum Underground Storage Tank Initial Site Characterization Report Guidelines (http://www.tn.gov/environment/ust/docs/iscr.pdf),

h. The Tennessee Petroleum Underground Storage Tank Corrective Action System Field Log http://www.tn.gov/environment/ust/docs/CAPtables.xls),

i. The Tennessee Petroleum Underground Storage Tank Reimbursement Guidance Document (RGD)-002 (http://www.tn.gov/environment/ust/docs/rgd002.pdf) and

j. The Tennessee Petroleum Underground Storage Tank Reimbursement Guidance Document (RGD)-002 Task Cost Sheets (http://www.tn.gov/environment/ust/docs/rgd002_task_%20cost_sheets.xls)

E.19. Work Products. The Contractor must submit electronic copies of work products submitted to the State under this Contract at any time requested by the State for the duration of the Contract

E.20. Contractor Personnel. The State reserves the right to require the Contractor to replace Contractor and/or subcontractor employees whom the State deems to be incompetent, unsuitable or otherwise objectionable, or whose continued use is deemed contrary to the best interests of

the State. Before a written request is issued, authorized representatives of the State and the Contractor will discuss the circumstances. Upon receipt of a written request from an authorized representative of the State, the Contractor shall be required to proceed with the replacement. The Contractor shall use its best efforts to effect the replacement in a manner that does not degrade service quality. This provision will not be deemed to give the State the right to require the Contractor to terminate any Contractor employee's employment. Rather, this provision is intended to give the State only the right to require that the Contractor discontinue using an employee in the performance of services to the State.

IN WITNESS WHEREOF,

PANGEAN-CMD ASSOCIATES, INC.:

	Friday, June 15, 2012
CONTRACTOR SIGNATURE	**DATE**

DARREN MOORE, PRESIDENT

PRINTED NAME AND TITLE OF CONTRACTOR SIGNATORY (above)

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION:

Robert J. Martineau, Jr. KLK	6/26/12
KLK **ROBERT J. MARTINEAU, JR., COMMISSIONER**	**DATE**

STATE OF TENNESSEE

DEPARTMENT OF ENVIRONMENT AND CONSERVATION

DIVISION OF UNDERGROUND STORAGE TANKS

REIMBURSEMENT GUIDANCE DOCUMENT – 002

Effective Date April 1, 2012

RE: Pre-approved Cost Tasks, Descriptions, Maximum Costs and Reimbursement Guidance

I. GENERAL GUIDANCE

A. Purpose

The purpose of this Reimbursement Guidance Document (RGD) is to provide detailed descriptions and maximum costs for routine tasks associated with UST system closure, hazard management, investigation and clean-up of petroleum contaminated sites where owners/operators or petroleum site owners may apply for reimbursement of eligible expenses from the Petroleum Underground Storage Tank Fund (Fund). This document contains unit rates that the Division of Underground Storage Tanks (Division) considers to be reasonable. Only these rates or lower will be reimbursed unless prior written Division approval is granted. The Division will review reimbursement applications based on this guidance.

B. Applicability

This document replaces all previous published guidance affecting the reimbursement process.

Rule 0400-18-01-.09(3)(a) states in part: "Before the owner and/or operator or petroleum site owner will receive fund benefit, the applicable entry level amount to the fund must be expended as approved costs by the owner and/or operator and/or financial assurance provider. The applicable entry level is the entry level in effect on the date of the release." The entry level amount is determined by the Division.

Rule 0400-18-01-.09(3)(b) states in part: "Every owner or operator of an UST is required to maintain fund Eligibility."

Rule 0400-18-01-.09(4)(a) states: "If at the time of a release, the division determines that an owner and/or operator has failed to establish fund eligibility in accordance with subparagraph (3)(a) or has lost fund eligibility in accordance with subparagraph (4)(b), corrective action costs and/or third party damages associated with that release are not eligible for coverage by the fund."

Rule 0400-18-01-.09(7)(c) states: "The fund shall be responsible to eligible UST owners and/or operators or petroleum site owners for eligible corrective action costs above the entry level in an amount not to exceed one million dollars ($1,000,000) per site per occurrence."

Rule 0400-18-01-.09(8)(c) states: "The owner and/or operator or petroleum site owner financial responsibility requirement amounts as specified in subparagraph (7)(b) of this rule are not eligible for reimbursement from the fund. Proof of payment of these initial amounts is required prior to reimbursement of any costs. The owner and/or operator or petroleum site owner financial responsibility requirement for taking corrective action cannot include any costs defined as fund ineligible in subparagraphs (a) and (b)."

Rule 0400-18-01-.09(9)(d) states: "All claims against the fund are clearly obligations only of the fund and not of the State, and any amounts required to be paid under this part are subject to the availability of sufficient monies in the fund."

Rule 0400-18-01-.09(10)(b) states: "Upon confirmation and reporting of a release in accordance with the requirements of rule 0400-18-01-.05(1) through rule 0400-18-01-.05(3), the owner and/or operator or petroleum site owner shall select a contractor from the division's list of approved contractors if the owner and/or operator or petroleum site owner expects to apply for fund benefits. The division shall be notified in writing of such a selection within thirty (30) days or other time frame specified by the division. A contractual agreement shall be established between the owner and/or operator or petroleum site owner and the contractor. The division shall be provided a copy of the contractual agreement."

Rule 0400-18-01-.09(12)(e) states: "All payments shall be subject to approval by the division. Should a site inspection or other information available to the division reveal a discrepancy between the work performed and the work addressed by a payment application, the division may deny payment or may require the fund to be reimbursed."

Rule 0400-18-01-.09(12)(f) states: "All applications for payment of costs of cleanup shall be received by the division within one (1) year of performance of the task or tasks covered by that application in order to be eligible for payment from the fund."

Rule 0400-18-01-.09(14)(d) states in part: "If certain costs are considered as not being reasonable or eligible for reimbursement, the division may issue a check for the amount of the application not in question and provide a forty-five (45) day period in which the owner and/or operator or petroleum site owner or contractor may present such information as is necessary to justify the disallowed costs. Following review of such information, the division may agree to pay the previously disallowed costs, or any portion thereof, or may again disallow the costs for payment."

C. Application for Fund Eligibility Determination and Reimbursement Application Format

T.C.A. 68-215-111(f)(6)(A)* states: "If there is evidence of a suspected or a confirmed release on or after July 1, 2004, in order for the tank owner, tank operator or petroleum site owner to receive reimbursement from the fund, an application for fund eligibility shall be filed:

(i) Within ninety (90) days of the discovery of evidence of a suspected release which is subsequently confirmed in accordance with the rules promulgated pursuant to this part; or

(ii) Within sixty (60) days of a release which was identified in any manner other than the process for confirmation of a suspected release stated in the rules promulgated pursuant to this part.

T.C.A. 68-215-111(f)(6)(B)* states: "The tank owner or tank operator shall send notification to the petroleum site owner by certified mail, return receipt requested, within seven (7) days of confirmation of a release. Failure to comply with the applicable deadline of subdivision (f)(6)(A)(i) or (ii) shall make the release ineligible for reimbursement from the fund."

T.C.A. 68-215-111(f)(7)* states: "On or after July 1, 2004, all applications for payment of costs of cleanup shall be received by the division within one (1) year of the performance of the task or tasks covered by that application in order to be eligible for payment from the fund."

*See Public Chapter No 794 of the Public Acts of 2008

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II. DEFINITIONS AND ACRONYMS

A. Definitions

For the purposes of this RGD only, the following definitions apply:

Contamination- Soil and/or ground water analytical results with regulated petroleum constituents exceeding the Division's Initial Screening Levels (ISLs) as identified during closure activities, Phase II investigation, etc. or Division's approved Site-Specific Clean-up Levels (SSCLs).

Deductible- The entry level or amount of financial responsibility that must be expended as approved costs by the responsible party prior to any reimbursement of eligible expenses. All releases that occurred after July 1, 2005 have a deductible of $20,000.00 (twenty thousand dollars) unless granted a reduced deductible. See the application for fund eligibility for further instructions about reduced deductibles.

Proof of payment- The acceptable evidence that the invoices included in the reimbursement application have been paid. The acceptable methods include copies of canceled checks or affidavits signed by the contractors stating they have received payment.

Reasonable cost- The monetary amount or range, as determined by the Division, to be commensurate with a corrective action activity. The Division's determination is based on an evaluation of typical expected costs. This evaluation considers the scope and complexity of the particular corrective action activity involved.

Week- Rental equipment is often rented on a weekly basis. A week is defined as three (3) to five (5) consecutive days.

B. Acronyms Used in this Document

BTEX	Benzene, toluene, ethylbenzene, and total xylenes
CAC	Corrective action contractor
CAD	Computer aided design
CAP	Corrective Action Plan
CFM	Cubic feet per minute
DMR	Discharge Monitoring Report
EAG	Environmental Assessment Guidelines
FID	Flame ionization detector
FP	Free product
FPIR	Free Product Investigation Report
FPRP	Free Product Removal Plan
GPM	Gallons per minute
HMR	Hazard Management Report
HNR	Hazard Notification Report

IRHMR	Initial Response and Hazard Management Report
ISCR	Initial Site Characterization Report
MCL	Maximum contaminant level
MEME	Mobile enhanced multi-phase extraction
MtBE	Methyl tertiary butyl ether
NAPH	Naphthalene
NOD	Notice of deficiency
NOV	Notice of violation
NPDES	National pollution discharge elimination system
OSHA	Occupational Safety and Health Administration
OVD	Organic vapor detector
PID	Photoionization detector
POTW	Publicly owned treatment works
QA/QC	Quality assurance and quality control
RGD	Reimbursement guidance document
SGS	Soil gas survey
SOW	Scope of work
TCLP	Toxicity characteristic leaching procedure
TGD	Technical guidance document
TRBCA	Tennessee risk-based corrective action
UST	Underground storage tank

III. REIMBURSEMENT APPLICATION DATABASE INSTRUCTIONS

An Access® database has been developed to prepare and submit electronic applications. The database is available for download from the Division's website:
http://www.state.tn.us/environment/ust/

IV. REIMBURSEMENT APPLICATION GUIDELINES

In order to receive reimbursement, all reimbursement applications must be submitted within one (1) year of the date the work is performed.

A. Initial Reimbursement Application

After a new release has been confirmed, a Fund eligibility application shall be prepared and submitted. The initial reimbursement application shall not be submitted until Fund eligibility has been determined. If Fund eligibility is approved, then the Division will send a confirmation letter and include the applicable deductible. At this point, an initial reimbursement application may be submitted. If Fund eligibility is denied, then the Division will notify the responsible party with a denial letter. This letter will also include information on the appeal process. If Fund eligibility is denied, then an initial application may be submitted during the Fund eligibility appeal process, but will not be reviewed by the Division. Some sites may not require corrective action that would result in the submittal of subsequent applications.

B. Subsequent Reimbursement Applications

Subsequent applications may be submitted at the completion of each cleanup activity provided they are submitted within one (1) year from the date performed.

C. Final Reimbursement Application

The final application shall be submitted within one (1) year of contamination case closure issued by the Division.

V. ELIGIBLE COSTS

The following processes include common tasks that are eligible for reimbursement with Division approval.

A. UST System Closure Process

1. Overexcavation of contaminated material after the first 100 cubic yards of native material has been removed
2. Sample collection after overexcavation and/or recharge of groundwater into the tank pit
3. Soil and water laboratory analysis, including routine shipping charges, after overexcavation and/or recharge of groundwater into the tank pit
4. Disposal of contaminated soil (including contaminated backfill), contaminated water, and/or free product
5. Installation and sampling of monitoring well required for risk-based closure
6. Preparation of a risk-based closure report

B. Hazard Management Process

1. Alternate water supply — installing water taps, hookup to public water supply, filtration system, and/or drilling a new well. This also includes abandonment of public or private water supplies that are no longer in use.
2. Rental of equipment that deals with emergency response (i.e., vapor abatement)
3. Recovery of free product
4. Sample collection
5. Soil, water, and air laboratory analysis, including routine shipping charges
6. Disposal of contaminated soil, contaminated water, and/or free product
7. Preparation of required submittals

C. Release Investigation Process

1. Installation of soil borings and/or monitoring wells
2. Rental of equipment relative to the investigation of the contaminated site
3. Tank tightness tests (if used for a required investigation by the Division)
4. Sample collection
5. Soil and water laboratory analysis, including routine shipping charges
6. Disposal of contaminated soil, contaminated water, and/or free product
7. Preparation of required submittals

D. Risk Management and Corrective Action Process

1. Public notice advertisements for corrective action
2. Construction, operation, and maintenance of approved treatment systems
3. Telephone charges associated with a telemetry system (must be plainly stated on the reimbursement application)
4. Rental of equipment that deals with remediation of the contaminated site

5. Installation of recovery wells, trenches, and associated piping
6. Sample collection
7. Soil, water, and air laboratory analysis, including routine shipping charges
8. Disposal of contaminated soil, contaminated water, and/or free product
9. Preparation of required submittals
10. Preparation of required permits
11. Obtaining necessary utility connections and service

E. Final Site Closure Process

1. Public notice advertisements for termination of a corrective action plan
2. Deactivation of the treatment system
3. Well abandonment
4. Decommissioning the treatment system
5. Site rehabilitation
6. Preparation of required submittals

F. Miscellaneous

1. Annual well fees (Shelby County) (no markup)
2. Color copy of topographic map (third party invoice required)
3. Bonds required by government agencies (no markup)
4. Preparation of required submittals

VI. INELIGIBLE COSTS

The following processes include common tasks and specific activities or costs that are not eligible for reimbursement.

A. UST System Closure Process

1. Activities associated with preparing, removing, and disposing of the tank system, including breaking and removing concrete, removing product from tanks, de-gassing tanks, etc.
2. Replacement backfill material for the volume of the excavated tank(s)
3. Completing an Application for Permanent Closure of Underground Storage Tank Systems, Permanent Closure Report (non risk-based report), Application for Fund Eligibility, and/or the Reimbursement Application
4. Expedited or rush charges for laboratory analysis of samples without prior Division approval
5. Field screening activities for the underground storage tank backfill material and the first 100 cubic yards of stockpiled soil
6. Rental/lease charges that exceed the purchase price of the equipment
7. Removal of backfill material in the tank pit and the first 100 cubic yards of overexcavated contaminated native material
8. Replacement of asphalt or concrete
9. Replacement, repair, maintenance, removal, and retrofitting of any UST system or interceptor trench
10. Samples required for tank closure

B. Hazard Management Process

1. Monthly water utility bills (if a public water connection was made in response to a release)
2. Utility deposits
3. Markup on utility bills and/or permits
4. Expedited or rush charges for laboratory analysis of samples without prior Division approval
5. Rental/lease charges that exceed the purchase price of the equipment
6. Replacement of asphalt or concrete (except for trenching with a corrective action system or interceptor trench)
7. Completing the Reimbursement Application

C. Release Investigation Process

1. Expedited or rush charges for laboratory analysis of samples without prior Division approval
2. Rental/lease charges that exceed the purchase price of the equipment
3. Completing the Reimbursement Application

D. Risk Management and Corrective Action Process

1. Monthly water utility bills (if a public water connection was made in response to a release)
2. Utility deposits
3. Markup on utility bills and/or permits
4. Expedited or rush charges for laboratory analysis of samples without prior Division approval
5. Rental/lease charges that exceed the purchase price of the equipment
6. Replacement of asphalt or concrete (except for trenching with a corrective action system)
7. Telephone charges not associated with a telemetry system
8. Completing the Reimbursement Application

E. Final Site Closure Process

5.1 Well abandonment permit (Shelby County)
5.2 Completing the Reimbursement Application

F. Miscellaneous

1. Any service for which the applicant will receive reimbursement from a commercial insurance carrier
2. Corrective action contractor costs
   a. Any type of reference book, technical book, and/or guideline
   b. Application or appeals for denied costs
   c. Cellular or portable phone charges
   d. Computer time, software, hardware, etc.
   e. Copy machine and copies
   f. Fax transmittals
   g. General office supplies
   h. Insurance
   i. Notary services

j. Office equipment and miscellaneous office items
k. Overtime charges
l. Personnel protective equipment (chemical resistant suits, respirators, etc.)
m. Postage or express shipping of maps, photographs, reports, etc.
n. Property title searches
o. Rental equipment insurance
p. Telephone charges not associated with a telemetry system
q. Video camcorder
r. Mark up on sales tax

3. Durable items which are not totally expended on one site such as raincoats, tools, shovels, etc.
4. Installation of leak detection
5. Legal fees
6. Loss of business revenues (business interruption)
7. Loss of petroleum product
8. Monthly water utility bills where the Division paid for connection to a public water supply
9. Responsible Party Costs
   a. Administration costs including management, office time, and supplies
   b. Any type of reference book, technical book, and/or guideline
   c. Application or appeals for denied costs
   d. Cellular or portable phone charges
   e. Change of Corrective Action Contractor (CAC) and any costs associated with initial project set-up review, site reconnaissance, etc. including file reviews
   f. Computer time, software, hardware, etc.
   g. Copy machine and copies
   h. Fax transmittals
   i. General office supplies
   j. Insurance
   k. Notary services
   l. Office equipment and miscellaneous office items
   m. Overtime charges
   n. Personnel protective equipment (chemical resistant suits, respirators, etc.)
   o. Postage or express shipping of maps, photographs, reports, etc.
   p. Property tax
   q. Property title searches
   r. Rental equipment insurance
   s. Telephone charges not associated with a telemetry system
   t. Video camcorder
   u. Mark up on sales tax
10. Tank tightness tests used for routine release detection
11. Technical Guidance Document - 013, Fund Eligibility site check
12. Travel
    a. Any travel outside of the state of Tennessee
    b. Mileage within Tennessee over 250 miles per round trip
    c. Airfare and/or car rentals
    d. Company car and/or truck rental
    e. Markup on per diem
13. Underground locator services (unless service is guaranteed)

VII. PERSONNEL DESCRIPTIONS AND RATES

A. Staff Descriptions

Only the job titles and classifications listed below may be used for reimbursement purposes. **Any qualified professional who performs a task of a lesser-qualified person should be billed at the rate of that job task.** For example, a person who meets the experience and education of a Geologist, but performs the task of digging a trench, hand augering, bailing wells, etc. should be billed at the rate of a Technician. All onsite personnel shall have the appropriate health and safety certifications. Prior to beginning any task, the Excel® cost tasks and associated cost spreadsheets should be consulted to ensure that the proper personnel and equipment will be used in order to be Fund reimbursable. See section IX for cost task descriptions.

CAD Operator: This person must have the ability to develop scaled maps, engineering drawings, and contour maps using CAD computer programming software. The CAD computer operator must have a degree in information systems analysis, CAD computer programming, or possess CAD technical certification.

CAS Specialist: This person must have attended, received and maintain satisfactory certification from a Division approved manufacturer of high vacuum dual phase remediation systems. Annual recertification is required to bill this title.

Construction Foreman: This person must have completed all appropriate personal protection and safety courses, have three (3) years experience in UST or hazardous substance site work, field supervision experience, and be supervising a construction crew.

Contract Administrator: This person must have a degree in business, accounting, or other degree approved by the Division. Alternatively, this person may have an Associates degree in business or accounting and two (2) years experience in contract administration.

Engineer: This person must be a professional engineer licensed in the State of Tennessee.

Environmental Specialist: This person must have a Bachelor of Engineering (BE) or Bachelor of Science (BS) or postgraduate degree in biology, engineering, environmental science, geology, industrial hygiene, soil science, or another science field acceptable to the Division from an accredited four (4) year college.

General Laborer: This person must have completed the appropriate personal health and safety courses. General laborer includes surveyor helpers, construction workers, and other site workers that have not been included in other billing classifications.

Geologist: This person must be a professional geologist licensed in the State of Tennessee.

Heavy Equipment Operator: This person must be knowledgeable of the capabilities and limitations of the equipment being used and is familiar with all applicable laws and regulations governing its use. Equipment operators must have current health and safety training.

Project Manager: This person must have five (5) years full-time experience in investigation, remedial planning or design phases of environmental project management. This person must have a BE, BS or postgraduate degree in engineering, geology, or other appropriate science. This person must also have supervisory and project management experience. Postgraduate work in an appropriate science may be substituted on a year for year basis for experience for a maximum of two (2) years.

Secretary: This person must possess computer skills and carry out general clerical duties. Clerical support and other office workers shall be included in this category.

Senior Environmental Specialist: This person must have a BE, BS or postgraduate degree in biology, engineering, environmental science, industrial hygiene, soil science, or another science field acceptable to the Division from an accredited four (4) year college and have at least five (5) years of UST related work and/or hazardous substance remedial activities.

Senior Technician: This person must have completed appropriate personal safety and sampling courses and have at least three (3) years of experience working in the environmental field at hazardous substance or UST sites. All technicians must be high school graduates or have passed the general equivalency diploma (GED) test.

Surveyor: This person must have the ability to take linear and angular measurements and apply the principles of geometry and trigonometry to delineate the form, extent, position, etc., of a tract of land. This person must be licensed in Tennessee as a surveyor.

Technician: This person must have completed appropriate personal safety and sampling courses and have at least one (1) year of experience working in the environmental field at hazardous substance or UST sites. All technicians must be high school graduates or have passed the general equivalency diploma (GED) test.

Truck Driver: This person must be knowledgeable of all Tennessee motor vehicle laws and regulations as well as hold all licenses required for the type of motor vehicle operated.

B. Table of Reimbursable Tasks

Field Staff Description	Reimbursable Tasks
CAS Specialist	Routine and non-routine O & M of Corrective Action System
Engineer	Assessment of remedial activities, oversight of aquifer testing (MEME), overseeing drilling and monitoring well installation, sampling (soil and water) through the initial investigation phase, compiling/analyzing environmental data
Environmental Specialist	Assessment of remedial activities, sampling (soil and water) through the initial investigation phase, oversight of aquifer testing (MEME), compiling/analyzing environmental data

Geologist	Assessment of remedial activities, overseeing drill and monitoring well installation, sampling (soil and water) through the initial investigation phase, oversight of aquifer testing (MEME), compiling/analyzing environmental data
Senior Environmental Specialist	Assessment of remedial activities, sampling (soil and water) through the initial investigation phase, oversight of aquifer testing (MEME), compiling/analyzing environmental data
Senior Technician	Routine sampling (monthly, quarterly, etc.) (groundwater, soil, vapors), free product removal (hand bailing), deactivation and dismantling of systems, monitoring well abandonment oversight, installation/maintenance of skimmer pumps, O & M of Corrective Action System (routine and non-routine)
Technician	Tilling/disking, gauging, installation/replacements of booms/pads, deactivation and dismantling of systems, site restoration, O & M of Corrective Action System (routine and non-routine - with prior Division approval)

C. Table of Staff Rates

Field Operations Staff	**Maximum Hourly Rate**
Surveyor	$55.00
Construction foreman, Senior technician	$45.00
Technician	$35.00
Heavy equipment operator, Truck driver	$30.00
General laborer	$25.00

Technical Staff	**Maximum Hourly Rate**
Project Manager	$80.00
Engineer, Geologist, Senior Environmental Specialist	$65.00
Environmental Specialist	$55.00
CAS Specialist	$55.00
CAD Operator	$40.00

Administrative Staff	**Maximum Hourly Rate**
Contract Administrator	$45.00
Secretary	$25.00

VIII. REASONABLE REIMBURSEMENT RATES

A. Equipment

Construction equipment rental rates already include allowances for peripheral equipment attachments, depreciation, maintenance, field repairs, fuel, permits, lubricants, tires, OSHA equipment, insurance, equipment shelter and security, overhead, markup, and administrative costs. If the equipment size is not specified, then the lowest rate will be applied.

Excavating Equipment	Per Day	Per Week	> 1 Week per day
Trencher (walk behind)	$140.00	$420.00	$84.00
Trencher (ride on)	$213.00	$639.00	$128.00
Skid steer loader (bobcat)	$180.00	$540.00	$108.00
Pavement/concrete breaker for bobcat	$200.00	$525.00	
Backhoe (all types)	$230.00	$690.00	$138.00
Pavement/concrete breaker for backhoe	$750.00		
Trackhoe ½ yd^3	$560.00	$1,680.00	$336.00
Trackhoe ¾ yd^3	$630.00	$1,890.00	$378.00
Trackhoe 1 yd^3	$750.00	$2,250.00	$450.00
Crawler loader 1 yd^3	$400.00	$1,200.00	$240.00
Dozer	$400.00	$1,200.00	$240.00
Field tractor and attachment	$150.00	$450.00	$90.00
Dump truck 15 yd^3 and larger (w/o driver)	$35.00/hr		
Mobilization and Demobilization			**Rate**
Excavation equipment (cost/mile)			$1.00
Maximum billing (250 miles round trip)			$250.00

Support Equipment	Per Day	Per Week	> 1 Week per day
5 kW generator	$65.00	$195.00	$39.00
50 kW generator	$210.00	$630.00	$126.00
3,000 psi pressure washer	$55.00	$165.00	$33.00
Explosion proof evacuation fan (12,000 ft^3/min air movement) (mobilization included in daily rate)	$75.00	$125.00	$45.00

Miscellaneous Tools And Supplies	Per Day	Per Week	> 1 Week per day
Air jackhammer with bit and hose	$50.00		
Electric jackhammer with bit	$75.00		
Slide hammer and vapor probe kit	$100.00		
Hammer drill and vapor probe kit	$170.00		
Crane (17-ton skyhook)	$650.00	$2000.00	
Plate compactor/tamper	$75.00	$200.00	
Boom truck (cherry picker)	$500.00		
Utility trailer	$25.00		
Compressor 100 CFM, gas powered	$70.00		

Compressor 175 CFM, gas powered	$105.00		
Concrete saw with blade	$80.00		
Hydrocarbon skimmer pump (self leveling)	$40.00	$120.00	$24.00
Submersible sampling pump (electric) 2-inch diameter 4-inch diameter	 $65.00 $35.00		
Self-priming centrifugal pump (trash) 2-inch discharge 3-inch discharge 4-inch discharge	 $35.00 $50.00 $65.00		
Welder/supplies/fuel	$55.00		

Portable Field Instruments	**Per Day**	**Per Week**	**> 1 Week per day**
Combustible gas indicator (LEL)	$20.00		
Combustible gas indicator/with oxygen meter	$25.00		
Oxygen meter (dissolved/reduced)	$25.00		
OVD - PID	$65.00		
OVD - FID	$85.00		
Multi-gas meter (O_2, CO_2, CH_4, DO)	$45.00		
Oil/water interface probe	$30.00		
Turbidity meter (approved CAP only)	$25.00		
Electronic water-level indicator	$20.00		
Electronic water-level recorder/transducer (two well capability)	$50.00		
Electronic water-level recorder/transducer (four well capability)	$100.00		
Manometer	$25.00		
pH meter (approved CAP only)	$10.00		
Velocity meter	$45.00		
Flow regulator (air samples only)	$40.00		
SUMMA Canister	$40.00		
Mobile GC laboratory (*actual cost as approved by Division)	*		
Continuous Toxicity Sampler	$200.00		

Equipment/Supplies	**Unit Cost**
Disposable bailer	$10.00
Petroleum absorbent booms (8 inch diameter, 10 ft. sections)	$50.00
Petroleum absorbent pads (3/16", 18" x 18", 100 count)	$60.00
Petroleum absorbent pads (3/8", 18" x 18", 100 count)	$75.00
Petroleum absorbent sweeps (18" x 100' x 3/8")	$95.00
Reconditioned drums (17-H, 55-gallon)	$30.00
Soil and well sampling supplies (includes, but not limited to, ice, disposal of samples, twine or string, latex gloves, and decontamination materials. These supply costs are per sampling event and not per well.)	$20.00
0.45 micron water filter (PAHs and metals sampling)	$20.00
Safety cones, barricades, caution tape	$10.00 per day

Straw bales	$5.00
Grass seed (contractor – 10 lb)	$10.00
Digital camera	$5.00

B. Vehicles

Reimbursement is only for mileage within Tennessee with a **maximum** 250 miles round trip. If the vehicle size is not specified, the lowest rate will be applied.

Vehicle	Rate
Autos/pick-up trucks (cost/mile)	$0.47*
Three/quarter (3/4) ton truck (cost/mile)	$0.75
Vacuum truck/with driver	
cost/hour	$120.00
cost/week 25 - 40 hours	$2,880.00
cost/hour over 40 hours	$72.00

*Mileage shall be reimbursed in accordance with the state of TN travel regulations in effect at the time that work was performed. Current travel regulations can be found at: www.tn.gov/finance/act/documents/policy8.pdf

Mobilization and Demobilization	Rate
Vacuum truck with driver (cost/mile)	$2.00
Maximum billing (250 miles round trip)	$500.00

C. Disposal and Treatment of Contaminated Soil

Contaminated soil and clean soil must be segregated. **Disposal of soil with contaminant concentrations below the Division's Site Specific Clean-up Levels will not be reimbursed.** All invoices and weight tickets shall be submitted regardless of the treatment method. **Reimbursement will be limited to actual costs plus a maximum 5% markup not to exceed the following rates:**

Treatment	Per Ton
Land farming	$28.00
Landfill	cost + 5%
Transportation (less than 50 miles one way)	$8.00
Transportation (50 – 100 miles one way)	$11.00
Transportation (over 100 miles one way)	$13.00

D. Disposal and Treatment of Contaminated Water

Reimbursement is limited to water treated at a permitted water treatment facility**.** The Fund will not pay a per gallon rate for water treated on site. **Disposal and/or treatment of water with contaminant concentrations below the Division's Initial Screening Levels will not be reimbursed.** Original invoices and manifests, including the volume of water treated shall be submitted. **Reimbursement will be limited to actual costs plus a maximum 5% markup not to exceed the following rate (rate already includes transportation):**

Contents	Per Gallon
Water	$0.50

E. Drum Disposal of Contaminated Soil and/or Water

Soil and water that is drummed is not considered the most efficient way of handling contamination and will be scrutinized. **Disposal and/or treatment of soil and/or water with contaminant concentrations below the Division's Site Specific Clean-up Levels will not be reimbursed. Reimbursement will be limited to actual costs plus a maximum 5% markup not to exceed the following rates (rates already include transportation):**

Contents	Per Drum
Water	$85.00
Soil	$85.00
Used booms, pads, etc.	$85.00

F. Drilling

Equipment included in mobilization/demobilization costs are: rig, support vehicles, steam cleaner, grout plant, trailers, and crew. Price per foot costs include: drill rig, set up fee, installation, development, sand, bentonite, cement, flush mount manhole, lock, end plug, casing, and screen. CACs should negotiate prices with drillers prior to drilling. **Reimbursement will be limited to actual costs plus a maximum 15% markup not to exceed the following rates:**

Drilling Method and Equipment	Rate
Auger rig/core rig/wash rotary rig (cost/mile with a maximum of 250 miles round trip)	$2.50
Air Rotary Rig (cost/mile with a maximum of 250 miles round trip)	$3.75
Auger drilling [cost/foot including two (2) man crew] Two (2) inch wells Four (4) inch wells	 $31.00 $39.00
Air rotary drilling [cost/foot including two (2) man crew] Two (2) inch wells Four (4) inch wells	 $42.00 $50.00
Double cased well [cost/foot to drill and install outside casing including two (2) man crew, steel casing, and grouting] Six (6) inch Eight (8) inch	 $55.00 $65.00
Well abandonment (includes licensed well driller, equipment, and supplies) (cost/foot)	$10.00
Borings (cost/foot)	$13.00
Decontamination of rig and tools (cost/boring includes steam cleaner rental)	$100.00
Standby time not due to the driller (cost/day with maximum of 1 hour)	$150.00
Third man for drilling (cost/hour)	$25.00
Water truck (only if water is not available at facility) (cost/day)	$200.00
Water tight bolt down manhole (one per well - all sizes)	$50.00
Centralizers-stainless steel (cost/per unit) Two (2) inch Four (4) inch	 $21.00 $23.00

Concrete penetration (cost/hole)	$50.00
Removal of manhole cover and well pad (cost/well) Recovery well vaults (2'x2'x2') (must actually be removed)	$125.00 $300.00
Freight charges on well installation, drilling supplies, casing, screen, bentonite, etc.	Actual cost

Direct Push Technology and Equipment	**Rate**
Mobilization/demobilization (cost/mile with a maximum of 250 miles round trip)	$2.00
Direct push [cost/day including a two (2) man crew]	$1,300.00
Direct push [cost/half-day including a two (2) man crew]	$975.00
Soil sample liners (cost/unit)	$4.25
Soil gas survey sample train using nylon tubing (cost/sample train)	$25.00
Expendable probe points (cost/unit)	$8.75
Expendable soil gas probe points (cost/unit)	$19.00
Temporary well (cost/foot)	$4.00
Bentonite (cost/50-lb bag)	$10.00

Sampling Method	**Rate**
Split spoon sampling (ASTM-D1586) [cost/two (2) foot sampler]	$15.00
Continuous sampling [cost/five (5) foot sampler]	$37.50

G. Laboratory Analyses

Invoices must include the Facility ID number. Only analytical results required by the Division will be reimbursed. NPDES, POTW, TCLP, and other required costs associated with approved Division activities will also be reimbursed. **If GRO and/or EPH are required to be sampled for permit requirements, then you must submit a copy of the discharge approval letter with the reimbursement application.**

The chain of custody for the samples should always be submitted with any analytical charges. Samples received by the laboratory above the required temperature of 4 degrees Celsius will not be reimbursed. When sampling a drinking water supply, the detection limit shall not exceed the established MCL for that constituent. Any sample that fails to meet minimum detection limits will not be reimbursed. **The following analytical results will be reimbursed at actual cost plus a maximum $10.00 markup not to exceed the following rates:**

Soil Samples		**Maximum Rate**
Chemical of Concern	**Method**	
BTEX, MtBE, Naphthalene	Method 8260B	$90.00
BTEX, MtBE, Naphthalene, EDB, EDC	Method 8260B	$130.00
Metals (Cd, Cr, Pb, Ag, Zn)	Method 6010/3050	$75.00
Lead (Pb) only	Method 6010/3050	$15.00
TCLP	Method 1311	$400.00
Extractable Petroleum Hydrocarbons (EPH)	TN EPH	$52.00

Water Samples		Maximum Rate
Chemical of Concern	**Method**	
BTEX, MtBE, Naphthalene	Method 8260B	$90.00
BTEX, MtBE, Naphthalene, EDB, EDC	Method 8260B	$110.00
EDB only	Method 8011	$55.00
PAHs	Method 8270C-SIM or 8310	$130.00
Metals (Cd, Cr, Pb, Ag, Zn)	Method 200.7	$75.00
Metals (Cd, Cr, Pb) only	Method 200.7	$45.00
Lead (Pb) only	Method 200.7	$15.00
Oil & Grease	Method 413.1 or 418.1	$37.00
Total suspended solids	Method 160.2	$17.00
Natural attenuation parameters	Various	$175.00
LC50 Toxicity Test	Method LC50	$400.00
IC25 Toxicity Test	Method IC25	$950.00

Air Samples		Maximum Rate
Chemical of Concern	**Method**	
BTEX, MtBE, Naphthalene, Isopropyl Alcohol	Method TO-15	$200.00
Percent O_2 and CO_2 (must be analyzed concurrently from SUMMA® sample above)	Method TO-15	$100.00
BTEX, MtBE, Naphthalene, Isopropyl Alcohol, Percent O_2 and CO_2 **Portable Field Instruments – Mobile GC Lab. Sample analysis is not covered. The actual cost of the portable GC is what will be reimbursed.	Method 8260B	**

H. Travel Expenses and Per Diem

Meals will not be reimbursed without a corresponding hotel/motel receipt. Only one (1) day of meals will be reimbursed per overnight stay. Maximum lodging rates include taxes.

Professional Travel/per-diem*	Maximum Lodging Costs	Maximum Meals & Incidental Costs
Davidson (Nashville)	$107.00	$66.00
Shelby (Memphis)	$93.00	$61.00
Williamson (Brentwood/Franklin)	$97.00	$56.00
Hamilton (Chattanooga)	$94.00	$56.00
Knox (Knoxville)	$86.00	$56.00
Anderson (Oak Ridge)	$91.00	$46.00
All other counties	$77.00	$46.00

Professional Travel Time	Maximum Hours
One-way per trip based on professional staff description and rate	2
Round trip based on professional staff description and rate	4

*Lodging and meals shall be reimbursed in accordance with the state of TN travel regulations in effect at the time that work was performed. Current travel regulations can be found at: www.tn.gov/finance/act/documents/policy8.pdf

I. Other

Each task provides a maximum cost. This cost represents the maximum the Division may reimburse if the work is acceptable and conducted as approved. Only actual charges, not the maximum, will be reimbursed. For example, a task may provide a maximum of up to ten (10) hours to conduct the work but the actual work performed by contractor personnel was five (5) hours. Only five (5) hours may be requested for reimbursement.

IX. TASK DESCRIPTIONS

1.0 UST SYSTEM CLOSURE PROCESS

TASK 1.1 OVEREXCAVATION

1.1.a Cost for excavating soil and stockpiling during UST Closure

This SOW will include all necessary personnel and labor, equipment and supplies to excavate, screen, collect samples and properly stockpile contaminated soil during an UST system closure as per Closure Assessment Guidelines. Cost includes all sampling supplies. This SOW includes personnel time to coordinate this task and to manage laboratory services (i.e. Chain of Custody, sample preparation, sample QA/QC, and invoice managing). Reimbursement is limited to excavation and stockpiling of contaminated soil. **Soil contamination as defined by the applicable Closure Guidelines must be documented by an approved state of Tennessee laboratory method.** Routine overexcavation shall not exceed three (3) workdays (maximum 10-hour workday) without prior approval from the appropriate Field Office.
Maximum cost is $150.00 per hour for on-site personnel (or $1500.00 per day) and $2000.00 per day equipment rental.

1.1.b Cost for mobilization and demobilization of heavy equipment

This SOW will include mobilization and demobilization of the trackhoe or backhoe to and from the site.
Maximum cost is limited to $1.00 per mile per piece of equipment not to exceed $250.00.

1.1.c Cost for loading stockpiled contaminated soil for disposal

This SOW will include all necessary personnel and labor, equipment, and supplies for loading petroleum contaminated soil for proper disposal at a permitted facility. **The volume of the contaminated material requested for reimbursement must agree with the volume of the contaminated area during the closure as reported in the Permanent Closure Report.** Routine loading shall not exceed one (1) workday (maximum 10-hour workday).
Maximum cost is $150.00 per hour for on-site personnel (or $1500.00 per day) and $1425.00 per day equipment rental.

1.1.d Cost for laboratory services

This SOW will include any soil laboratory analysis not associated with a boring or monitoring well installation. These samples may include, but are not necessarily limited to, samples from a tank pit, samples of a stockpile for disposal or treatment, interceptor trench, or samples that are obtained by hand augering. Consultant must attach the laboratory invoice to the reimbursement form. The cost of laboratory analyses will be reimbursed at cost plus $10.00 not to exceed the rates listed. A markup will not be allowed if the consultant uses their own lab. Transportation costs to the laboratory should be included in this task.

Maximum costs shall not exceed the reasonable reimbursable rates as determined by the applicable laboratory method, established in Reference 1.

1.1.e Cost for replacement backfill material during any type of overexcavation

This SOW consists of the cost for replacement backfill material to properly backfill the contaminated area(s) of the tank pit and/or associated piping trench(s) with a like material. **The volume of the backfill material requested for reimbursement must agree with the volume of the contaminated area during the closure as reported in the Permanent Closure Report minus the volume of the tank void.**
Maximum cost is $20.00 per ton which includes transportation costs.

1.1.f Cost for backfilling the tank pit and/or associated piping trench(s) during overexcavation

This SOW consists of all necessary personnel and labor, equipment and materials to properly backfill the contaminated area(s) of the tank pit and/or associated piping trench(s). Routine backfilling shall not exceed one (1) workday (maximum 10-hour workday) without prior approval from the appropriate Field Office.
Maximum cost is $150.00 per hour for on-site personnel (or $1500.00 per day) and $2000.00 per day equipment rental.

1.0 UST SYSTEM CLOSURE PROCESS

Task 1.2 Ground Water/Free Product Removal

1.2.a Cost for removing contaminated ground water and/or free product using a vacuum/pump truck

This SOW will include all necessary equipment (such as a vacuum or pump truck) and personnel time (such as truck driver, and CAC or technician), to monitor the removal of contaminated ground water and/or free product from a tank excavation, pit, trench, vault, etc. **Ground water contamination as defined by the applicable Closure Guidelines must be documented by an approved state of Tennessee laboratory method.** This SOW does not include the cost of laboratory analyses of samples collected. Routine ground water/free product removal shall not exceed eight (8) hours without prior Division approval.
Maximum cost is $185.00 per hour (or $1480.00 per day).

1.2.b Cost for mobilization and demobilization of vacuum/pump truck

This SOW will include mobilization and demobilization of the vacuum truck or pump truck to and from site for ground water/free product removal.
Maximum cost is limited to $2.00 per mile per piece of equipment not to exceed $250.00. Total maximum cost of $500.00.

1.2.c Cost for inspecting/sampling tank pit for ground water recharge

This SOW will include any personnel time and all sampling supplies to inspect and/or collect a ground water sample for laboratory analysis from a tank pit, utility trench, or interceptor trench. This SOW includes personnel time to coordinate this task and to manage laboratory services (i.e. Chain of Custody, sample preparation, sample QA/QC, and invoice managing). Maximum on-site personnel time limited to two (2) hours. (Do not use the Sampling button in the cost database to enter costs for this task).
Maximum number of samples is two (2) per tank pit and/or two (2) per installation.
Maximum cost is $130.00 per event.

1.2.d Cost for laboratory services

This SOW will include any ground water laboratory analysis not associated with a boring or monitoring well installation. Consultant must attach the laboratory invoice to the reimbursement form. The cost of laboratory analyses will be reimbursed at cost plus $10.00 not to exceed the rates listed. A markup will not be allowed if the consultant uses their own lab. Transportation costs to the laboratory should be included in this task.
Maximum costs shall not exceed the reasonable reimbursable rates as determined by the applicable laboratory method established in Reference 1.

1.2.e Cost for disposal of free product and/or ground water contaminated with petroleum product

This SOW consists of hauling and disposal of free product and/or ground water contaminated with petroleum product removed from a tank pit, trench, etc. **The volume of free product and/or ground water contaminated with petroleum product requested for reimbursement must agree with the volume documented in the Permanent Closure Report.** Ground water contamination as defined by the applicable Closure Guidelines must be documented by an approved state of Tennessee laboratory method. The Fund will not pay a per gallon rate for water treated on site.
Reimbursement will be limited to actual costs plus a maximum of 5% markup not to exceed $0.50 per gallon.

1.0 UST SYSTEM CLOSURE PROCESS

Task 1.3 Soil Treatment/Disposal

Task 1.3.a Soil Treatment by Aeration

1.3.a.1 Cost for mobilization and setup for treatment of contaminated soil by aeration

This SOW will include either on-site or off-site natural attenuation of petroleum-contaminated soil by aeration. This SOW will include all necessary hauling, personnel and labor, equipment, and supplies (i.e. plastic sheeting, straw bales, etc.). **The volume of the contaminated material requested for reimbursement must agree with the volume of the contaminated area during the closure as reported in the Permanent Closure Report.**
Maximum cost is $1530.00 per closure event and/or approved application.

1.3.a.2 Cost for tilling and/or disking of contaminated soil

This SOW consists of tilling and/or disking the petroleum contaminated soil generated at underground storage tank sites. Tilling and/or disking shall be conducted at a minimum of once per month and not to exceed two (2) times a month. Routine tilling and/or disking shall not exceed four hours on site time. Cost includes personnel and equipment.
Maximum cost is $350.00.

1.3.a.3 Cost for inspecting and maintaining the integrity of the treatment cell

This SOW will include all personnel time and equipment necessary to inspect and maintain the integrity of the treatment cell not to exceed one (1) time per month. Routine inspecting and/or maintaining shall not exceed two (2) hours on site technician time. Cost includes all personnel time, replacement of plastic sheeting, straw bales, etc.
Maximum cost is $340.00 per event.

1.3.a.4 Cost for sampling soil treated by aeration

This SOW will include sampling the treated soil in accordance with TGD–009 and the approved application. This SOW includes personnel time to coordinate this task and to manage laboratory services (i.e. Chain of Custody, sample preparation, sample QA/QC, and invoice managing). Sampling events shall be performed at a minimum, semi-annually and have prior written approval by the Division. Routine sampling shall not exceed two (2) hours on site personnel time. Cost includes all personnel time, a PID/FID, and all sampling supplies.
Maximum cost is $195.00 per event.

1.3.a.5 Cost for laboratory services

This SOW will include any soil laboratory analysis from a treated stockpile. Consultant must attach the laboratory invoice to the reimbursement form. The cost of laboratory analyses will be reimbursed at cost plus $10.00 not to exceed the rates listed. A markup will not be allowed if the consultant uses their own lab. Transportation costs to the laboratory should be included in this task.
Maximum costs shall not exceed the reasonable reimbursable rates as determined by the applicable laboratory method, established in Reference 1.

1.0 UST SYSTEM CLOSURE PROCESS

Task 1.3 Soil Treatment/ Disposal

Task 1.3.b Hauling and Soil Disposal by Landfilling

This task may also be used anytime excavated petroleum contaminated soil is disposed at a landfill.

1.3.b.1 Cost of scheduling for hauling and landfilling petroleum contaminated soil

This SOW will include all necessary contracting and scheduling for disposal of petroleum contaminated soil at a permitted landfill facility. Work shall not exceed two (2) hours. Maximum cost is $80.00 per hour.
Maximum cost is $160.00 per event.

1.3.b.2 Cost for hauling petroleum contaminated soil

This SOW will include all costs necessary for hauling (including driver) petroleum contaminated soil to a permitted landfill. **Disposal of soil with contamination levels below the Division's site-specific cleanup levels will not be reimbursed.** The most cost effective alternative (including transportation) must be chosen. Backup documentation must include original invoices and weight tickets.

Treatment	Per Ton
Transportation (less than 50 miles)	$8.00
Transportation (50 – 100 miles)	$11.00
Transportation (over 100 miles)	$13.00

1.3.b.3 Cost for disposal of petroleum contaminated soil

This SOW will include all costs necessary for disposal of petroleum contaminated soil at a permitted landfill. **Disposal of soil with contamination levels below the Division's site-specific cleanup levels will not be reimbursed. Reimbursement will be limited to actual costs plus a maximum 5% markup.**

1.3.b.4 Cost for hauling and disposal of petroleum contaminated soil in drums

This SOW will include all necessary personnel and labor, equipment and supplies to properly haul and dispose petroleum contaminated soil in drums at a permitted disposal facility.
Maximum cost is $85.00 per drum.

1.0 UST SYSTEM CLOSURE PROCESS

Task 1.3 Soil Treatment/ Disposal

Task 1.3.c Soil Treatment by Landfarming

1.3.c.1 Cost of scheduling for landfarming petroleum contaminated soil

This SOW will include all necessary contracting and scheduling for disposal of petroleum contaminated soil at a permitted landfarm facility. Work not to exceed two (2) hours. Maximum cost is $80.00 per hour.
Maximum cost is $160.00 per event.

1.3.c.2 Cost for hauling petroleum contaminated soil

This SOW will include all necessary hauling, personnel and labor, equipment, and supplies for landfarming petroleum contaminated soil at a permitted landfarm. **The volume of the contaminated material requested for reimbursement must agree with the volume of the contaminated area during the closure as reported in the Permanent Closure Report**.

Treatment	Per Ton
Transportation (less than 50 miles)	$8.00
Transportation (50 – 100 miles)	$11.00
Transportation (over 100 miles)	$13.00

1.3.c.3 Cost for landfarming of petroleum contaminated soil

This SOW will include all costs necessary for landfarming of petroleum contaminated soil at a permitted facility.
Maximum cost is $28.00 per ton.

1.0 UST SYSTEM CLOSURE PROCESS

Task 1.4 TRBCA Closure Process

1.4.a Cost for scheduling drilling event

This SOW will include all necessary contracting and scheduling for a driller to perform all phases of drilling (i.e. soil borings, installation of monitoring wells, perform well development, boring abandonment, and various other drilling tasks as needed). This SOW shall include the scheduling of field activities associated with the drilling event, including locating all underground utilities. This SOW shall also include all personnel cost necessary to acquire all well permits from the appropriate agency.
Maximum cost is $240.00.

1.4.b Cost for supervision of fieldwork

This SOW shall include oversight of field activities as well as office support and coordination. This SOW includes one (1) field person, either a licensed professional geologist under the Tennessee Geologist Licensure Act of 2007 (*T.C.A. §62-36-101 et seq.*), or registered professional engineer under the Tennessee Architects, Engineers, Landscape Architects, and Interior Designers Law and Rules (T.C.A. *§62-2-101 et seq.*), and the necessary equipment to supervise and manage drilling activities. Cost includes all personnel time, PID/FID, water level indicator/interface probe, and all sampling supplies. Included in the SOW, the consultant is required to complete all boring logs, well construction records, and collect all necessary soil samples including samples for soil disposal. Supervisory time should not exceed drilling time.
Maximum cost per day is $865.00.

1.4.c Cost for mobilization/demobilization of drill rig

This SOW will include mobilization and demobilization of the drill rig to and from the site. Mobilization/demobilization is not to exceed 250 miles round trip.
Maximum cost is limited to $2.50 per mile not to exceed a total cost of $625.00 for an auger rig. Maximum cost is limited to $3.75 per mile not to exceed a total cost of $937.50 for an air rotary rig.

1.4.d Cost for drilling

This SOW will include support vehicles, steam cleaner, grout plant, trailers, and crew. Along with the invoice, the consultant must submit the appropriate reimbursement forms. All monitoring wells shall be installed and abandoned by a licensed well driller. In order to simplify and speed reimbursement, it is recommended that drilling companies itemize their invoices to reflect the reasonable rate document form format. The cost of drilling will be reimbursed at cost plus 15% markup not to exceed the reasonable rate schedule. A markup will not be allowed if the consultant uses their own driller. All wells are required to be properly developed prior to sampling. This includes surge blocking where needed.

1.4.e Cost for well development

This SOW will include all necessary personnel, labor, equipment and supplies to properly develop wells in accordance with the EAG twenty-four (24) hours after installation.
Maximum cost per day is $385.00.

1.4.f Cost for ground water sampling

This SOW includes all personnel time to purge and sample wells of any depth or diameter. This SOW includes static water level measurements and purge volume calculations. This SOW includes all ground water sampling for primary and secondary Drinking Water Standards as required in the EAG. This SOW includes sampling of purge water for disposal. This SOW includes personnel time and supplies to coordinate this task and to manage the laboratory services (i.e. Chain of custody, sample preparation, sample QA/QC, and invoice managing). Includes cost of drum.
Maximum cost is $212.50 for one (1) well.

1.4.g Cost for laboratory services

SOW includes laboratory costs associated with all sampling of soil and/or water. Consultant must attach the laboratory invoice to the reimbursement form. **Only analytical test(s) required by the current Closure Assessment Guidelines will be reimbursed.** The cost of laboratory analyses will be reimbursed at cost plus $10.00 not to exceed the rates listed. A markup will not be allowed if the consultant uses their own lab. Transportation costs to the laboratory should be included in this task.
Maximum cost shall not exceed the reasonable reimbursable rates as determined by the applicable laboratory method established in Reference 1.

1.4.h Cost for water use and Karst survey

This SOW includes preparation of a water use and Karst survey in accordance with the EAG. This SOW includes all fieldwork, telephone contacts and records search. This SOW includes the completion of the Water Use Survey Sheets. **This task is not repeatable unless requested/approved by the Division.**
Maximum cost is $725.00.

1.4.i Cost for hauling and disposal of free product and/or ground water contaminated with petroleum product

This SOW will include all necessary personnel and labor, equipment and supplies to properly haul and dispose of free product and/or ground water contaminated with petroleum product removed from a monitoring well. Ground water contamination must be documented by an approved state of Tennessee laboratory method. This cost is for disposal only.
Maximum cost is $85.00 per drum.

1.4.j Cost for disposal of petroleum contaminated soil

This SOW will include all costs necessary for disposal of petroleum contaminated soil at a permitted landfill. **Disposal of soil with contamination levels below the Division's site-specific cleanup levels will not be reimbursed. Reimbursement will be limited to actual costs plus a maximum 5% markup.**

1.4.k Cost for hauling and disposal of petroleum contaminated soil in drums

This SOW will include all necessary personnel and labor, equipment and supplies to properly haul and dispose petroleum contaminated soil in drums at a permitted disposal facility.
Maximum cost is $85.00 per drum.

2.0 HAZARD MANAGEMENT PROCESS

Task 2.1 Interceptor/Recovery Trench Installation (with Division approval only)

2.1.a Cost for interceptor/recovery trench design and approval

This SOW will include all personnel time to prepare a map for the proposed interceptor/recovery trench layout, plus cross sections and details as needed for proper construction. This SOW will include any project coordination time including cost estimates, equipment procurement/rental, and meeting with the responsible party and state regulators.
Maximum cost is $495.00.

2.1.b Cost for mobilization and demobilization of heavy equipment

This SOW will include mobilization and demobilization of the trackhoe or backhoe to and from the site.
Maximum cost is limited to $1.00 per mile per piece of equipment not to exceed $250.00.

2.1.c Cost for interceptor/recovery trench installation

This SOW will include all necessary personnel and labor, equipment and supplies to excavate, properly install and collect samples from a passive interceptor/recovery trench. Cost includes location of utilities and removal of any concrete, asphalt and/or soil during installation. Cost also includes all sampling supplies, and equipment and trench supplies such as a trackhoe or backhoe, well screens, piping, and sumps. Routine installation shall not exceed one (1) workday (maximum 10-hour work day) without prior approval from the appropriate Field Office.
Maximum cost is $150.00 per hour for on-site personnel (or $1500.00 per day) and $2150.00 per day equipment.

2.1.d Cost for loading stockpiled contaminated soil for disposal

This SOW will include all necessary personnel and labor, equipment, and supplies for loading petroleum contaminated soil for proper disposal at a permitted facility. **The volume of the contaminated material requested for reimbursement must agree with the volume of the contaminated area during the installation as reported in the Initial Response and Hazard Management Report.** Routine loading shall not exceed one (1) workday (maximum 10-hour work day).
Maximum cost is $150.00 per hour for on-site personnel (or $1500.00 per day) and $1425.00 per day equipment rental.

2.1.e Cost for replacement backfill material during any type of excavation

This SOW consists of the cost for replacement backfill material to properly backfill the contaminated area(s) of the tank pit and/or associated piping trench(s) with a like material. **The volume of the backfill material requested for reimbursement must agree with the volume of the contaminated area**

during the closure as reported in the Permanent Closure Report minus the volume of the tank void.
Maximum cost is $20.00 per ton which includes transportation costs.

2.1.f Cost for repair/replacement of asphalt after interceptor/recovery trench installation

This SOW will include all personnel and labor, equipment and supplies to properly restore trench location to a condition comparable to the original condition.
Maximum cost is $2.32 per square foot for asphalt.

2.1.g Cost for repair/replacement of concrete after interceptor/recovery trench installation

This SOW will include all personnel and labor, equipment and supplies to properly restore trench location to a condition comparable to the original condition.
Maximum cost is $3.55 per square foot for concrete.

2.1.h Cost for repair/replacement of landscaping after interceptor/recovery trench installation

This SOW will include all personnel and labor, equipment and supplies to properly restore trench location to a condition comparable to the original condition utilizing seed, mulch and straw by hand.
Maximum cost is $180.00.

2.1.i Cost for backfilling the void and/or associated trench(s) during excavation

This SOW consists of all necessary personnel and labor, equipment and materials to properly backfill the void area(s) and/or associated trench(s). Routine backfilling shall not exceed one (1) workday (maximum 10-hour workday) without prior approval from the appropriate Field Office.
Maximum cost is $150.00 per hour for on-site personnel (or $1500.00 per day) and $2000.00 per day equipment rental.

2.0 HAZARD MANAGEMENT PROCESS

Task 2.2 Ground Water/Free Product Removal from an Interceptor/Recovery Trench (with Division approval only)

2.2.a Cost for removing contaminated ground water and/or free product using a vacuum/pump truck from an interceptor/recovery trench

This SOW will include all necessary equipment (such as a vacuum or pump truck) and personnel (such as truck driver, CAC or technician), to monitor the removal of contaminated ground water and/or free product from an interceptor/recovery trench installation. **Ground water contamination must be documented by an approved state of Tennessee laboratory method.** This SOW does not include the cost of laboratory analyses of samples collected.
Maximum cost is $165.00 per hour (or $1,320.00 per day).

2.2.b Cost for mobilization and demobilization of vacuum/pump truck

This SOW will include mobilization and demobilization of the vacuum truck or pump truck to and from site.
Maximum cost is limited to $2.00 per mile per piece of equipment not to exceed $250.00. Total maximum cost of $500.00.

2.2.c Cost for ground water sample collected for laboratory analysis and supplies (not associated with a boring/monitoring well)

This SOW will include any personnel time and sampling supplies to collect a ground water sample for laboratory analysis during interceptor/recovery trench installation. This SOW includes personnel time to coordinate this task and to manage laboratory services (i.e. Chain of Custody, sample preparation, sample QA/QC, and invoice managing). Maximum on-site personnel time limited to two (2) hours.
Maximum number of samples is two (2) per tank pit and/or two (2) per installation.
Maximum cost is $130.00 per event.

2.2.d Cost for laboratory services

This SOW will include any ground water laboratory analysis collected during interceptor/recovery trench installation. Consultant must attach the laboratory invoice to the reimbursement form. The cost of laboratory analyses will be reimbursed at cost plus $10.00 not to exceed the rates listed. A markup will not be allowed if the consultant uses their own lab. Maximum costs shall not exceed the reasonable reimbursable rates as determined by the applicable laboratory method established in Reference 1. Transportation costs to the laboratory should be included in this task.
Maximum number of samples is two (2) per tank pit and/or two (2) per installation.

2.2.e Cost for disposal of free product and/or ground water contaminated with petroleum product

This SOW consists of hauling and disposal of free product and/or ground water contaminated with petroleum product removed from a tank pit, trench, etc. **The volume of free product and/or ground water contaminated as defined by the applicable Closure Guidelines requested for reimbursement must agree with the volume documented in the Initial Response and Hazard Management Report**. Ground water contamination must be documented by an approved state of Tennessee laboratory method. This cost is for disposal only. The Fund will not pay a per gallon rate for water treated on site.
Reimbursement will be limited to actual costs plus a maximum of 5% markup not to exceed $0.50 per gallon.

2.2.f Cost for obtaining a temporary permit to POTW

This SOW will include all personnel and labor to coordinate and prepare a permit application required by local POTW for temporary discharge of contaminated petroleum ground water.
Maximum cost is based on the actual permit fee required per municipality plus a maximum of two (2) hours personnel time (not to exceed $130.00).

2.2.g Cost for obtaining a ground water sample collected to meet POTW discharge requirements

This SOW will include all personnel and labor to collect a ground water sample for laboratory analysis to meet/establish POTW discharge permit requirements. This SOW includes personnel time to coordinate this task and to manage laboratory services (i.e. Chain of Custody, sample preparation, sample QA/QC, and invoice managing). The frequency and sampling requirements for discharge permits shall be performed according to the approved federal, state, and/or local government agency requirements. Maximum number is one (1) sample per discharge.
Maximum cost is $45.00 per required sample.

2.2.h Cost for discharge to POTW

This SOW will include all costs associated with the discharge of ground water/free product under the approved POTW permit. **The amount requested for reimbursement should agree with the volume (in gallons) reported discharged in the POTW report.**
Maximum cost is based on the actual discharge fee per gallon as charged by the POTW.

2.0 HAZARD MANAGEMENT PROCESS

Task 2.3 Free Product Removal by Hand Bailing/Hand Pumping (with Division approval only)

2.3.a Cost for removing free product by hand bailing/hand pumping

This SOW will include all necessary personnel and labor, equipment (such as a hand pump, gloves, bailers, twine, oil-water interface probe, and 55-gallon reconditioned drum) and labor (technician) to remove free product from a monitoring well or observation well and properly store when encountered. This SOW includes measurement and recording of ground water depths and product thickness in each well. **Work is not to exceed 8 hours. Task is limited to a maximum of two (2) events per month. Duration is not to exceed three (3) months unless otherwise directed by the Division.**
Maximum cost is $45.00 per hour (or a maximum of $555.00 per event).

2.3.b Cost for disposal of free product

This SOW consists of transportation and disposal of contaminated petroleum product removed from a monitoring well or observation well. This cost is for disposal only.
Maximum cost is $85.00 per drum.

2.0 HAZARD MANAGEMENT PROCESS

Task 2.4 Mobile Enhanced Multi-phase Extraction (MEME)

2.4.a Cost for initial project setup

This SOW will consist of review of the existing site data, and coordination and scheduling the MEME event.
Maximum cost is $130.00 per event.

2.4.b Cost for mobilization and demobilization of vacuum truck

This SOW will include mobilization and demobilization of the vacuum truck to and from site. Mobilization/demobilization is not to exceed 250 miles round trip.
Maximum cost is limited to $2.00 per mile per piece of equipment. Total maximum cost of $500.00.

2.4.c Cost for supervision of field work

This SOW will include all personnel time for the supervision of one (1) complete MEME event. This SOW includes one (1) field person to oversee MEME activities for a maximum of two (2) hours onsite.
Maximum cost is $130.00 per event.

2.4.d Cost for performing an 8-hour MEME event

This SOW will include the setup and performance of one (1) 8-hour MEME event according to the approved application. This SOW will include personnel and equipment to perform one (1) eight (8) hour MEME event. This SOW includes tabulating results (free product and ground water measurements before and after the event plus vacuum pressure on affected wells during the event), recording the amount of product and water recovered, vacuum radius of influence, etc. Required equipment also includes instrumentation for measuring temperature, velocity, relative humidity, and the concentration of emissions. Cost includes one (1) senior technician onsite for 10 hours: two (2) hours allowed for set-up and shut down and eight (8) hours for the actual MEME event.
Maximum cost is $2800.00 per 8-hour event.

2.4.e Cost for performing a 24-hour MEME event

This SOW will include the setup and performance of one (1) 24-hour MEME event according to the approved application. This SOW will include personnel and equipment to perform one (1) twenty four hour MEME event. This SOW includes tabulating results (free product and ground water measurements before and after the event plus vacuum pressure on affected wells during the event), recording the amount of product and water recovered, vacuum radius of influence, etc. Required equipment also includes instrumentation for measuring temperature, velocity, relative humidity, and the concentration of emissions. Cost includes one (1) senior technician onsite for 26 hours: two (2) hours allowed for set-up and shut down and 24 hours for the actual MEME event.
Maximum cost is $5760.00 per 24-hour event.

2.4.f Cost for disposal of free product and/or ground water contaminated with petroleum product

This SOW consists of hauling and disposal of free product and/or ground water contaminated with petroleum product removed during a MEME event. **The volume of free product and/or ground water contaminated with petroleum product requested for reimbursement must agree with the volume documented in the MEME Report**.
Reimbursement will be limited to actual costs plus a maximum of 5% markup not to exceed $0.50 per gallon.

2.4.g Cost for free product assessment after an 8-hour MEME event

This SOW includes measurement and recording of ground water depth and product thickness of each well after a free product recovery event. The intent of this SOW is to determine if the free product recovery method should be continued. A recommendation shall be provided as to the status of free product in the wells and the most appropriate course of further action. Cost includes personnel and labor, equipment and supplies.
Maximum cost is $285.00 per event.

2.4.h Cost for laboratory services

This SOW includes laboratory costs associated with all sampling of influent groundwater. Consultant must attach the laboratory invoice to the reimbursement form. The cost of laboratory analyses will be reimbursed at cost plus $10.00 not to exceed the rates listed. A markup will not be allowed if the consultant uses their own lab. Transportation costs to the laboratory should be included in this task.
Maximum cost shall not exceed the reasonable reimbursable rates as determined by the applicable laboratory method established in Reference 1.

2.0 HAZARD MANAGEMENT PROCESS

Task 2.5 Free Product Recovery on Surface Water

2.5.a Cost for installation of absorbent pads and/or booms on surface water

This SOW will include all personnel time to install/lay booms or absorbent pads (up to 50) to recover free-floating product from impacted surface waters. Personnel time includes time for two (2) employees [one (1) senior technician and one (1) technician]. This SOW includes all field materials used including absorbent booms, absorbent pads, polypropylene rope, steel fence posts, and field supplies.
Maximum cost is $230.00 per event.

2.5.b Cost for boom inspection and replacement

This SOW will include all personnel time [for one (1) senior technician and one (1) technician] and materials to replace and/or repair absorbent booms placed on surface water to recover free product. **Task is limited to two (2) times per month. Duration is not to exceed three months unless otherwise directed by the Division.**
Maximum cost is $180.00 per event.

2.5.c Cost of drums for spent booms and/or absorbent pads

This SOW will include all personnel time for purchasing and delivery of required drums to store used booms and/or absorbent pads. This SOW includes cost of drum. This SOW also includes properly sealing and labeling drums.
Maximum cost is $75.00 for initial drum and $30.00 per additional drums.

2.5.d Cost for hauling and disposal of drums filled with spent booms and/or absorbent pads

This SOW will include all necessary personnel and labor, equipment and supplies to properly haul and dispose of drums filled with spent booms and/or absorbent pads at a permitted disposal facility.
Maximum cost is $85.00 per drum.

2.5.e Cost for specifying and purchasing a passive skimmer

This SOW will include all necessary personnel time to properly specify and purchase a passive skimmer system to remove free product from surface water. Professional hours are limited to engineers, geologists, or environmental specialists not to exceed two (2) hours. **Cost of skimmer system is not to exceed $1300/each.**
Maximum cost is $1430.00.

2.5.f Cost for installation of a passive skimmer

This SOW will include all necessary personnel (senior technician) and equipment to install a passive skimmer system to remove free product from surface water. **Work is not to exceed 2 hours.**
Maximum cost is $90.00.

2.5.g Cost for servicing a passive skimmer

This SOW will include emptying free product and properly storing recovered product from surface water. This SOW includes all personnel (senior technician), miscellaneous equipment, and supplies. Task is limited to a maximum of two (2) events per month. **Work is not to exceed 2 hours. Maximum cost is $90.00.**

2.0 HAZARD MANAGEMENT PROCESS

Task 2.6 Continuous Free Product Removal (with Division approval only)

2.6.a Cost for specifying and purchasing a passive skimmer

This SOW will include all necessary personnel time to properly specify and purchase a passive skimmer system to remove free product from a monitoring well. Professional hours are not to exceed two (2) hours. **Cost of skimmer system is not to exceed $800/each.**
Maximum cost is $930.00.

2.6.b Cost for installation of a passive skimmer or absorbent pad/sock

This SOW will include all necessary personnel (senior technician) and equipment to install a passive skimmer system or absorbent pad/sock to remove free product from a monitoring well. This SOW includes measurement and recording of ground water depths and product thickness in each well. **Work is not to exceed two (2) hours.**
Maximum cost is $90.00.

2.6.c Cost for servicing a passive skimmer

This SOW will include emptying free product and properly storing recovered product from a monitoring well. This SOW includes all personnel (senior technician), miscellaneous equipment, and supplies. **Work not to exceed two (2) hours. Task is limited to a maximum of two (2) events per month.**
Maximum cost is $90.00.

2.0 HAZARD MANAGEMENT PROCESS

Task 2.7 Impacted Drinking Water Management

2.7.a Cost for temporary response activities

This SOW will consist of notifying the groundwater user of impact to their water supply and delivery of bottled water or installation of a temporary purification system.
Maximum cost is $2,500 without an approved cost proposal. With an approved cost proposal, the maximum cost is equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing.

2.7.b Cost for permanent response activities

This SOW will include the cost of the bid presented in the Permanent Source of Potable Water (PSPW) proposal, and change order(s) if applicable, approved in writing by the Division.
Maximum cost is equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing.

2.0 HAZARD MANAGEMENT PROCESS

Task 2.8 Petroleum Vapor Impact Management

2.8.a Cost for temporary response activities

This SOW will consist of notifying the affected occupants and/or property owners of impacted buildings or utility districts of impacted utilities concerning the vapor hazard and proposed temporary actions. This SOW also included implementation of temporary response actions.
Maximum cost is $2,500 without an approved cost proposal. With an approved cost proposal, the maximum cost is equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing.

2.8.b Cost for permanent response activities

This SOW will include the cost of the bid presented in the Petroleum Vapor Permanent Abatement (PVPA) System Proposal, and change order(s) if applicable, approved in writing by the Division.
Maximum cost is equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing.

2.8.c Cost for permit and/or utility service

This SOW includes all personnel time necessary to secure permits and/or utility connections with federal, state, and/or local government agency requirements.
Maximum cost is $130.00.

3.0 RELEASE INVESTIGATION PROCESS

Task 3.1 Project Management

3.1.a Cost for initial project setup and review

This SOW will include all personnel time to review existing site data, including incident information, past site history, agency requirements (NOD, NOV, etc.), previous assessments and remediation (closure reports, IRHMR, ISCR, etc.). This SOW assumes client will provide consultant with all available information plus all reimbursement documentation. **This task is not repeatable per release.**
Maximum cost is $515.00.

3.1.b Cost for site reconnaissance

This SOW will include all personnel time to locate and identify potential receptors such as water wells, surface waters, basements, public utilities, and to locate and identify all potentially affected parties, including names and addresses. This SOW will also consist of gathering information about the site so that a detailed site map and site vicinity map can be later generated from field observation (i.e. location of discharge and extent, identification of all receptors, monitoring wells, and other site features). This SOW includes project manager oversight and staff level persons (or equal) to perform fieldwork, telephone coordination with property owners and local city and state government agencies. This SOW includes data review, evaluation and reporting (client, property owners, appropriate Field Office). If a previous consultant has already completed this task, then it should not be duplicated unless requested by the Division.
Maximum cost is $690.00.

3.1.c Cost for grant of access

This SOW will include all personnel time to acquire a grant-of-access from adjacent and nearby property owners. Access purposes may include, but are not limited to borings and soil sampling, monitoring and recovery well installation, city or county waterline hookup, easements, etc.
Maximum cost is $260.00 per agreement.

3.1.d Cost for pre-Corrective Action Plan meeting

This SOW will include the meeting held between Division personnel, the CAC and/or the responsible party, as deemed necessary by the Division prior to submission of a CAP. Topics for discussion shall include but not be limited to measured drawdown and radius of influence during the 24 hour MEME event, extraction rates for soil vapor and groundwater, number of extraction wells and number with free product, permit requirements (treated water, air, construction, etc.), electrical supply available and local requirements, and site obstructions. Maximum cost includes the time required for oversight by the Project Manager and a maximum of two (2) geologists/engineers to schedule, plan, and attend the meeting.
Maximum cost is $1120.00 per meeting.

3.0 RELEASE INVESTIGATION PROCESS

Task 3.2 System Test

3.2.a Cost for system test

The UST system tightness testing is reimbursable for release investigations only. An approved tightness test for a release investigation will follow Rule 0400-18-01-.04(3)(c). All tightness test methods must be third party certified. **System tightness testing for system compliance is not reimbursable**. **Maximum cost is actual invoice cost from tightness tester.**

3.0 RELEASE INVESTIGATION PROCESS

Task 3.3 Drilling

3.3.a Cost for scheduling drilling event

This SOW will include all necessary contracting and scheduling for a driller to perform all phases of drilling (i.e. soil borings, installation of monitoring wells, vertical wells, remedial wells, perform well development, boring abandonment, and various other drilling tasks as needed). This SOW shall include the scheduling of field activities associated with the drilling event. This SOW shall include locating all underground utilities. This SOW shall also include all personnel time necessary to acquire all well permits from the appropriate agency.
Maximum allowable cost is $240.00.

3.3.b. Cost for mobilization/demobilization of drill rig

This SOW will include mobilization and demobilization of the drill rig to and from the site. Mobilization/demobilization is not to exceed 250 miles round trip.
Maximum cost is limited to $2.00 per mile not to exceed a total cost of $500.00 for a direct push technology rig. Maximum cost is limited to $2.50 per mile not to exceed a total cost of $625.00 for an auger rig. Maximum cost is limited to $3.75 per mile not to exceed a total cost of $937.50 for an air rotary rig.

3.3.c Cost for supervision of field work

This SOW will include oversight of field activities as well as office support and coordination. This SOW includes one (1) field person, either a licensed professional geologist under the Tennessee Geologist Licensure Act of 2007 (*T.C.A. §62-36-101 et seq.*), or registered professional engineer under the Tennessee Architects, Engineers, Landscape Architects, and Interior Designers Law and Rules (T.C.A. *§62-2-101 et seq.*), and the necessary equipment to supervise and manage drilling activities. Cost includes all personnel time, equipment and supplies. Included in the SOW, the consultant is required to complete all boring logs, well construction records, and collect all necessary soil samples including samples for soil disposal. Supervisory time should not exceed drilling time.
Maximum allowable cost per day is $795.00.

3.3.d Cost for drilling

This SOW will include support vehicles, steam cleaner, grout plant, trailers, and crew. All monitoring wells shall be installed and abandoned by a licensed well driller. Along with the invoice, the consultant must submit the appropriate reimbursement forms. In order to simplify and speed reimbursement, it is recommended that drilling companies itemize their invoices to reflect the reasonable rate document form format. The cost of drilling will be reimbursed at cost plus 15% markup not to exceed the reasonable rate schedule. A markup will not be allowed if the consultant uses their own driller. All wells are required to be properly developed prior to sampling. This includes surge blocking where needed.

3.3.e Cost for well development

This SOW will include all necessary personnel, labor, equipment and supplies to properly develop wells in accordance with the EAG twenty-four (24) hours after installation.
Maximum cost per day is $905.00.

3.3.f Cost for hauling and disposal of petroleum contaminated soil in drums

This SOW will include all necessary personnel, labor, equipment and supplies to properly haul and dispose petroleum contaminated soil in drums at a permitted disposal facility.
Maximum cost is $85.00 per drum.

3.0 RELEASE INVESTIGATION PROCESS

Task 3.4 Sampling

3.4.a Cost for ground water sampling

This SOW includes all personnel time to purge and sample wells of any depth or diameter. This SOW includes static water level measurements and purge volume calculations. This SOW includes all ground water sampling for primary and secondary Drinking Water Standards as required in the EAG. This SOW includes sampling of purge water for disposal. This SOW includes personnel time to coordinate this task and to manage the laboratory services (i.e. Chain of custody, sample preparation, sample QA/QC, and invoice managing). Includes cost of drum.
Maximum cost is $212.50 for one (1) well and $100.00 per well for each additional well sampled.

3.4.b Cost for water supply well sampling

This SOW includes all personnel and sampling supplies to purge and sample a water supply well (i.e. indoor or outdoor spigot). This SOW includes all necessary equipment, personnel and sampling supplies to perform well purging (by letting spigot run for an adequate time) followed by sampling. This SOW includes sampling of purge water for disposal. This SOW includes the time to coordinate this task and to manage the laboratory services (i.e. Chain of custody, sample preparation, sample QA/QC, and invoice managing).
Maximum cost is $65.00 for one (1) well and $45.00 for each additional well sampled.

3.4.c Cost for surface water sampling

This SOW includes sampling of various types of surface waters (i.e. includes ponds, streams, creeks, etc.) to verify contamination. This SOW includes all necessary equipment, personnel and sampling supplies to perform sampling. This SOW includes personnel time to coordinate this task and to manage the laboratory services (i.e. Chain of custody, sample preparation, sample QA/QC, and invoice managing).
Maximum cost is $65.00 for one (1) sample point and $45.00 for each additional sample point.

3.4.d Cost for soil sampling (not associated with drilling activities)

This SOW includes various types of soil sampling not associated with drilling activities, closure activities, stockpile sampling or overexcavation sampling. (i.e. includes surface sampling, etc.) to verify contamination. This SOW includes all necessary equipment, personnel, and sampling supplies to perform sampling. This SOW includes personnel time to coordinate this task and to manage the laboratory services (i.e. Chain of custody, sample preparation, sample QA/QC, and invoice managing).
Maximum cost is $150.00 for one (1) sample point by hand augering and $45.00 for each additional sample point.

3.4.e Cost for laboratory services

This SOW includes laboratory costs associated with all sampling of soil and/or water. Consultant must attach the laboratory invoice to the reimbursement form. The cost of laboratory analyses will be reimbursed at cost plus $10.00 not to exceed the rates listed. A markup will not be allowed if the consultant uses their own lab. Transportation costs to the laboratory should be included in this task.
Maximum cost shall not exceed the reasonable reimbursable rates as determined by the applicable laboratory method established in Reference 1.

3.4.f Cost for disposal of free product and/or ground water contaminated with petroleum product

This SOW consists of disposal of free product and/or ground water contaminated with petroleum product removed from a monitoring well. Ground water contamination must be documented by an approved state of Tennessee laboratory method. This cost is for disposal only.
Maximum cost is $85.00 per drum.

3.4.g Cost for collection of thirty (30) day static ground water levels

This SOW includes all personnel and equipment to properly collect thirty (30) day static water level measurements in accordance with the current Environmental Assessment Guidelines as required to develop potentiometric maps in the Initial Site Characterization Report.
Maximum cost is $155.00.

3.0 RELEASE INVESTIGATION PROCESS

Task 3.5 Receptor and Water Use Survey

3.5.a Cost for receptor survey

This SOW includes preparation of a receptor survey in accordance with the EAG. This SOW includes all fieldwork, telephone contacts and records search. This SOW includes the completion of the Water Use Survey Sheets. **This task is not repeatable unless requested/approved by the Division.**
Maximum cost is $270.00.

3.5.b Cost for water use and Karst survey

This SOW includes preparation of a water use and Karst survey in accordance with the EAG. This SOW includes all fieldwork, telephone contacts and record searches. This SOW includes the completion of the Water Use Survey Sheets. **This task is not repeatable unless requested/approved by the Division.**
Maximum cost is $725.00.

3.0 RELEASE INVESTIGATION PROCESS

Task 3.6 Site Survey

3.6.a Cost for site survey by a licensed professional surveyor

This SOW will include all personnel time to coordinate and schedule field activities associated with the survey event, collect, and record all data required to complete an acceptable monitoring well location map. This SOW shall include surveying the elevation of the established and documented point on the top of each well casing correlated with a mean sea level datum.
Maximum cost not to exceed $645.00 for the initial four (4) wells. Maximum cost is $120.00 for each additional well.

3.0 RELEASE INVESTIGATION PROCESS

Task 3.7 Vapor Monitoring

3.7.a Cost for vapor monitoring

This SOW includes monitoring of various types of above ground structures and subsurface structures (i.e. includes buildings, basements, crawl spaces, utility vaults, etc.) for petroleum vapors. This SOW includes all necessary equipment and personnel to coordinate and conduct this task. This SOW should be performed in conjunction with any monitoring or sampling task when personnel is already on site and not performed as a separate event, unless otherwise directed by the Division.
Maximum cost is $175.00 per day.

3.0 RELEASE INVESTIGATION PROCESS

Task 3.8 Soil Gas Survey

Task 3.8.a Soil Gas Survey Using Direct Push Technology

3.8.a.1 Cost for scheduling soil gas survey event

This SOW will include all necessary contracting and scheduling to perform all phases of the soil gas survey (i.e. soil borings and various other drilling tasks as needed). This SOW will include the scheduling of field activities associated with the soil gas survey event. This SOW will include locating all underground utilities.
Maximum allowable cost is $240.00.

3.8.a.2 Cost for mobilization/demobilization of direct push technology

This SOW will include mobilization and demobilization of the drill rig to and from the site. Mobilization/demobilization is not to exceed 250 miles round trip.
Maximum cost is limited to $2.00 per mile not to exceed a total cost of $500.00.

3.8.a.3 Cost for supervision of fieldwork using a direct push technology (4 hours)

This SOW will include oversight of field activities as well as office support and coordination. This SOW includes one (1) field person, either a licensed professional geologist under the Tennessee Geologist Licensure Act of 2007 (*T.C.A. §62-36-101 et seq*.), or registered professional engineer under the Tennessee Architects, Engineers, Landscape Architects, and Interior Designers Law and Rules (T.C.A. *§62-2-101 et seq*.), and the necessary equipment to supervise and manage drilling activities. Cost includes all personnel time, sample train, assembly and testing of sample train and sample supplies. Included in the SOW the CAC is required to complete all field forms and collect all necessary samples. Supervisory time should not exceed drilling time.
Maximum allowable cost per half day is $900.00 (4 hours).

3.8.a.4 Cost for supervision of fieldwork using a direct push technology (8 hours)

This SOW will include oversight of field activities as well as office support and coordination. This SOW includes one (1) field person, either a licensed professional geologist under the Tennessee Geologist Licensure Act of 2007 (*T.C.A. §62-36-101 et seq*.), or registered professional engineer under the Tennessee Architects, Engineers, Landscape Architects, and Interior Designers Law and Rules (T.C.A. *§62-2-101 et seq*.), and the necessary equipment to supervise and manage drilling activities. Cost includes all personnel time, sample train, assembly and testing of sample train and sample supplies. Included in the SOW, the CAC is required to complete all field forms and collect all necessary samples. Supervisory time should not exceed drilling time.
Maximum allowable cost per full day is $1,725.00 (8 hours).

3.8.a.5 Cost for drilling using direct push technology (4 hours)

This SOW will include support vehicles, steam cleaner, trailers, and a two (2) person crew. Along with the invoice, the CAC must submit the appropriate reimbursement forms. In order to simplify and speed reimbursement, it is recommended that drilling companies itemize their invoices to reflect the reasonable rate document form format. The cost of drilling will be reimbursed at cost plus 15% markup not to exceed the reasonable rate schedule. A markup will not be allowed if the consultant uses their own driller.
Maximum allowable cost per half day is $1,150.00 (4 hours).

3.8.a.6 Cost for drilling using direct push technology (8 hours)

This SOW will include support vehicles, steam cleaner, trailers, and a two (2) person crew. Along with the invoice, the CAC must submit the appropriate reimbursement forms. In order to simplify and speed reimbursement, it is recommended that drilling companies itemize their invoices to reflect the reasonable rate document form format. The cost of drilling will be reimbursed at cost plus 15% markup not to exceed the reasonable rate schedule. A markup will not be allowed if the consultant uses their own driller.
Maximum allowable cost per full day is $1,500.00 (8 hours).

3.8.a.7 Cost for laboratory services

SOW includes laboratory costs associated with all air or soil gas sampling. Consultant must attach the laboratory invoice to the reimbursement form. The cost of laboratory analyses will be reimbursed at cost plus $10.00 not to exceed the rates listed. A markup will not be allowed if the consultant uses their own lab. Transportation costs to the laboratory should be included in this task.
Maximum cost shall not exceed the reasonable reimbursable rates as determined by the applicable laboratory method established in Reference 1.

3.0 RELEASE INVESTIGATION PROCESS

Task 3.8 Soil Gas Survey

Task 3.8.b Soil Gas Survey Using Hammer Drill or Slide Hammer

3.8.b.1 Cost for scheduling soil gas survey event

This SOW will include all necessary contracting and scheduling to perform all phases of the soil gas survey (i.e. soil borings and various other drilling tasks as needed). This SOW will include the scheduling of field activities associated with the soil gas survey event. This SOW will include locating all underground utilities.
Maximum allowable cost is $240.00.

3.8.b.2 Cost for fieldwork using a hammer drill or slide hammer (4 hours)

This SOW will include oversight of field activities as well as office and field support and coordination. This SOW includes two (2) field people, either a senior technician or technician and either a licensed professional geologist under the Tennessee Geologist Licensure Act of 2007 (*T.C.A. §62-36-101 et seq*.), or registered professional engineer under the Tennessee Architects, Engineers, Landscape Architects, and Interior Designers Law and Rules (T.C.A. *§62-2-101 et seq*.), and the necessary equipment to supervise and conduct field activities. Cost includes all personnel time, sample train, assembly and testing of sample train and sample supplies. Included in the SOW, the consultant is required to complete all field forms and collect all necessary samples. **Maximum allowable cost per half day is $1300.00 (4 hours)**.

3.8.b.3 Cost for fieldwork using a hammer drill or slide hammer (8 hours)

This SOW will include oversight of field activities as well as office and field support and coordination. This SOW includes two (2) field people, either a senior technician or technician and either a licensed professional geologist under the Tennessee Geologist Licensure Act of 2007 (*T.C.A. §62-36-101 et seq*.), or registered professional engineer under the Tennessee Architects, Engineers, Landscape Architects, and Interior Designers Law and Rules (T.C.A. *§62-2-101 et seq*.), and the necessary equipment to supervise and conduct field activities. Cost includes all personnel time, sample train, assembly and testing of sample train and sample supplies. Included in the SOW, the consultant is required to complete all field forms and collect all necessary samples. **Maximum allowable cost per full day is $2300.00 (8 hours)**.

3.8.b.4 Cost for laboratory services

SOW includes laboratory costs associated with all air or soil gas sampling. Consultant must attach the laboratory invoice to the reimbursement form. The cost of laboratory analyses will be reimbursed at cost plus $10.00 not to exceed the rates listed. A markup will not be allowed if the consultant uses their own lab. Transportation costs to the laboratory should be included in this task. **Maximum cost shall not exceed the reasonable reimbursable rates as determined by the applicable laboratory method established in Reference 1.**

4.0 RISK MANAGEMENT AND CORRECTIVE ACTION PROCESS

Task 4.1 Risk Reduction

4.1.a Cost for risk reduction implementation

This SOW will include the cost of the bid, and change order(s) if applicable, approved in writing by the Division.
Maximum cost is equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing.

4.1.b Cost for disconnection of private water supply well

This SOW will include all necessary personnel and labor, equipment and materials to properly disconnect a private water supply well. Required activities include, but are not limited to, termination and disconnection of the power supply and disconnection and capping of any associated piping from the well to the building.
Maximum cost is equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing.

4.1.c Cost for supervision of private water supply well abandonment

This SOW includes all necessary personnel time to properly abandon a private water supply well in accordance with the Water Well Licensing Regulations and Well Construction Standards (rule 1200-4-9-.16). This SOW includes field activities and supervision, project scheduling and oversight.
Maximum cost is $490.00 per event.

4.1.d Cost for private water supply well abandonment

This SOW includes the proper abandonment of a private water supply well performed by a licensed well driller in accordance with the Water Well Licensing Regulations and Well Construction Standards (rule 1200-4-9-.16). All private water supply wells shall be installed and abandoned by a licensed well driller. Along with the invoice, the consultant must submit the appropriate reimbursement forms. In order to simplify and speed reimbursement, it is recommended that drilling companies itemize their invoices to reflect the reasonable rate document form format. The cost of well abandonment will be reimbursed at cost plus 15% markup not to exceed the reasonable rate schedule. A markup will not be allowed if the consultant uses their own driller.
Maximum cost is not to exceed $10.00 per foot.

4.0 RISK MANAGEMENT AND CORRECTIVE ACTION PROCESS

Task 4.2 Institutional Controls

4.2.a Cost for institutional control implementation

This SOW will include the cost of the bid, and change order(s) if applicable, approved in writing by the Division.
Maximum cost is equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing.

4.0 RISK MANAGEMENT AND CORRECTIVE ACTION PROCESS

Task 4.3 Engineering Controls

4.3.a Cost for engineering control implementation

This SOW will include the cost of the bid, and change order(s) if applicable, approved in writing by the Division.
Maximum cost is equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing.

4.0 RISK MANAGEMENT AND CORRECTIVE ACTION PROCESS

Task 4.4 Corrective Action

Task 4.4.a Corrective Action System Installation

4.4.a.1 Cost for public notice advertisement

This SOW includes all personnel time and charges associated with placing public notice of impending corrective action in the newspaper, the state register, sending certified letters to property owners, and/or personal contacts.
Personnel time is limited to one (1) hour. Maximum cost is limited to the actual amount of advertisement or postage cost plus personnel time.

4.4.a.2 Cost for permit and/or utility service

This SOW includes all personnel time necessary to secure permits and/or utility connections with federal, state, and/or local government agency requirements.
Maximum cost is $130.00.

4.4.a.3 Cost for oversight of corrective action system delivery

This SOW includes all personnel time to coordinate, schedule and oversee delivery of the corrective action system. Cost includes crane rental with operator or forklift for offloading.
Maximum cost is $970.00.

4.4.a.4 Cost for soil excavation and soil source removal

This SOW will include all personnel, equipment and supplies to complete soil excavation and source removal in accordance with an approved Corrective Action Plan. All costs shall be proposed and will be reimbursed in accordance with task 1.1.a.–e.
Maximum cost is equal to the cost of the proposal and any modifications made by the Division, and change orders if applicable, submitted to the Division in the CAP and approved in writing.

4.4.a.5 Cost for recovery well trench installation

This SOW will include all personnel, equipment and supplies to complete recovery well and contingent piping and trenching in accordance with an approved Corrective Action Plan. This includes any personnel time (not travel time or mileage) required to purchase necessary supplies.
Maximum cost for recovery well trench installation, including piping and fittings, is $65.00/ linear foot.

4.4.a.6 Cost for recovery wellhead manifold, extraction vault and tubing installation

This SOW will include all personnel, equipment and supplies to construct and install recovery well heads and vaults for each recovery well in accordance with an approved Corrective Action Plan.
Maximum cost is $1300/wellhead.

4.4.a.7 Cost for corrective action system inlet piping manifold

This SOW will include all personnel, equipment and supplies to construct and install the corrective action system inlet piping manifold in accordance with an approved Corrective Action Plan. This includes any personnel time (not travel time or mileage) required to purchase necessary supplies.
Maximum cost for one (1) recovery well inlet is $300. Maximum cost for each additional recovery well inlet is $125.00.

4.4.a.8 Cost for concrete pad installation

This SOW includes all personnel, equipment and supplies to properly construct and pour a ten (10) foot wide by fourteen (14) foot long by four (4) inch thick concrete pad for the corrective action system to be placed on in accordance with the current Corrective Action Plan Guidelines CAS Figure Packages. **Maximum cost is $1600.00 per installation.**

4.4.a.9 Cost for mobilization/demobilization of heavy equipment

This SOW will include mobilization and demobilization of any heavy equipment to and from the site for corrective action system offloading from the delivery truck.
Maximum cost is limited to $1.00 per mile per piece of equipment not to exceed $250.00.

4.4.a.10 Cost for corrective action system discharge trench installation

This SOW will include all personnel, equipment and supplies to complete CAS discharge piping and trenching in accordance with an approved Corrective Action Plan.
Maximum cost for discharge trench installation, including piping and fittings, is $25.00/linear foot.

4.4.a.11 Cost for wet test of system and CAC training for operation and maintenance of system

This SOW will include personnel, equipment, and supplies to ensure that 500 gallons of potable water are at the site so that the corrective action system may be properly wet tested after delivery and prior to start-up. These activities include, but are not limited to pre-diagnostic testing, electrical and telephone line connections, hydrating the carbon filters, and CAS troubleshooting. Cost also includes on-site training time for CAC personnel to be properly trained in system operation and maintenance by system manufacturer. This is a one-time cost unless otherwise approved by the Division and includes completing the MK pre-startup checklist.
Maximum cost is $1000.00 per wet test and training.

4.4.a.12 Cost for electrical service installation

This SOW will include the cost of the bid by a licensed electrician, and change order(s) if applicable, approved in writing by the Division.
Maximum cost is equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing.

4.0 CORRECTIVE ACTION PROCESS

Task 4.4 Corrective Action

Task 4.4.b Corrective Action System Operation and Maintenance

4.4.b.1 Cost for routine operation and maintenance

This SOW will include routine, scheduled site visits. This is limited to one (1) visit per month. If additional visits are required, then they must be requested in advance and approved by the case manager. Onsite personnel shall inspect and document system performance. This includes, but is not limited to, the tabulation of gauge and meter readings, inspection for leaks, excessive equipment heat and noise, and equipment wear. Onsite personnel shall perform routine and scheduled repairs during the site visit. Other routine activities may include but are not necessarily limited to: checking recovery well pumps and components, changing out filters, hoses, lubricating oil, pressure washer, backwashing system to remove fouling and iron buildup, and the repair or replacement of gauges, lubricants, and belts. The maximum cost includes all personnel and equipment to service and maintain the system equipment. Price does not include major repairs or extensive troubleshooting which may be covered by the manufacturer. Office coordination, scheduling, and telemetry time is included in the daily rate. Routine operation and maintenance shall not exceed one (1) workday (maximum 10-hour workday) without prior approval from the appropriate field office. All field work shall be completed by a senior technician.
Maximum cost is $975.00 per day. All routine O&M conducted on a state owned system shall be performed by a CAS Specialist.

4.4.b.2 Cost for non-scheduled maintenance

This SOW will include a nonscheduled site visit as a result of a system shutdown or failure. This SOW includes all personnel and equipment to perform the tasks troubleshooting, and repairing of the system. It excludes costs for supplies, components, and equipment replacement. Office coordination and scheduling time is included in the daily price rate and therefore, only the actual time spent onsite is to be reimbursed. This task will only be reimbursed if the field office is notified no later than one (1) working day after any non-routine field activity after the system shutdown or failure. All work shall be completed by a senior technician.
Maximum cost is $760.00 per day not including supplies, components, and equipment replacement. All non-scheduled O&M conducted on a state owned system shall be performed by a CAS Specialist.

4.4.b.3 Cost for evaluation of performance meeting

This SOW will include the meeting held between Division personnel, the CAC and/or the responsible party, as deemed necessary by the Division to evaluate the performance of the corrective action system. Topics for discussion shall include but not be limited to COC concentration reduction, plume dynamics, system operational performance, system repair history, and recommendations for system and/or CAP modifications to increase system performance.

Maximum cost includes the time required for oversight by the Project Manager and a maximum of two (2) geologists/engineers to schedule, plan, and attend the meeting.
Maximum cost is $1120.00 per meeting.

4.4.b.4 Cost for utilities and payment of bills

This SOW includes all personnel time necessary to process and pay bills associated with utility connection and corrective action system usage including electric, natural gas, telephone, sanitary sewer (POTW), and water.
Maximum cost is $90.00 per month.

4.4.b.5 Cost for charges for utility service

This SOW includes all costs for utility service necessary to operate an approved corrective action system including electric, natural gas, telephone, sanitary sewer (POTW), and water usage.
Maximum cost is limited to the actual amount of the utility bill.

4.4.b.6 Cost for additional technician during operation and/or maintenance

This SOW will include all personnel time necessary for an additional technician to assist with operation and/or maintenance as described in tasks 4.4.b.1 and 4.4.b.2. **This task must be requested in advance and approved by the case manager.** Operation and/or maintenance shall not exceed one (1) workday (maximum 10-hour workday) without prior approval from the appropriate field office. This is limited to one (1) visit per month. If additional visits are required, then they must be requested in advance and approved by the case manager.
Maximum cost is $350.00 per day.

4.4.b.7 Cost for review of telemetry report

This SOW includes all personnel time necessary to review and interpret all telemetry alarms, data and reports associated with the corrective action system.
Maximum cost is $160.00 per month.

4.4.b.8 Cost for annual routine operation and maintenance

This SOW will include a routine scheduled site visit for annual operation and maintenance as outlined in the manufacturers' operating manual. This task is limited to one (1) workday per twelve (12) month period and shall not exceed one (1) workday (maximum 10-hour workday) without prior approval from the appropriate field office. The maximum cost includes all personnel and equipment to service and maintain the system equipment and completion of all tasks and paperwork required by the Division's Corrective Action System Field Log (CASFL). Price does not include major repairs or extensive troubleshooting which may be covered by the manufacturer. Office coordination, scheduling, and telemetry time is included in the daily rate. All field work shall be completed by a senior technician and technician.
Maximum cost is $3125.00 per day. All annual routine O&M conducted on a state owned system shall be performed by a CAS Specialist.

4.0 CORRECTIVE ACTION PROCESS

Task 4.4 Corrective Action

Task 4.4.c Corrective Action Sampling

4.4.c.1 Cost for ground water sampling

This SOW will include all personnel time and sampling supplies to purge and sample wells of any depth or diameter. This SOW includes static water level measurements, purge volume calculations, sampling of purge water for disposal, personnel time to coordinate this task and to manage the laboratory services (i.e. chain of custody, sample preparation, sample QA/QC, and invoice managing). The schedule for ground water monitoring shall be performed in accordance with the schedule in the approved CAP. Wells to be sampled shall be in accordance with the approved CAP. Includes cost of drum**.**
Maximum cost is $212.50 for one (1) well and $100.00 per well for each additional well sampled.

4.4.c.2 Cost for water supply well sampling

This SOW includes all personnel and sampling supplies to purge and sample a water supply well (i.e. indoor or outdoor spigot). This SOW includes all necessary equipment, personnel and sampling supplies to perform well purging (by letting spigot run for an adequate time) followed by sampling. This SOW includes sampling of purge water for disposal. This SOW includes the time to coordinate this task and to manage the laboratory services (i.e. Chain of custody, sample preparation, sample QA/QC, and invoice managing).
Maximum cost is $65.00 for one (1) well and $45.00 for each additional well sampled.

4.4.c.3 Cost for surface water sampling

This SOW includes sampling of various types of surface waters (i.e. includes ponds, streams, creeks, etc.) to verify contamination. This SOW includes all necessary equipment, personnel and sampling supplies to perform sampling. This SOW includes personnel time to coordinate this task and to manage the laboratory services (i.e. Chain of custody, sample preparation, sample QA/QC, and invoice managing).
Maximum cost is $65.00 for one (1) sample point and $45.00 for each additional sample point.

4.4.c.4 Cost for soil sampling (not associated with drilling activities)

This SOW includes various types of soil sampling not associated with drilling activities, closure activities, stockpile sampling or overexcavation sampling. (i.e. includes surface sampling, etc.) to verify contamination. This SOW includes all necessary equipment, personnel, and sampling supplies to perform sampling. This SOW includes personnel time to coordinate this task and to manage the laboratory services (i.e. Chain of custody, sample preparation, sample QA/QC, and invoice managing).
Maximum cost is $150.00 for one (1) sample point by hand augering and $45.00 for each additional sample point.

4.4.c.5 Cost for laboratory services

This SOW will include any soil laboratory analysis performed for corrective action monitoring. Consultant must attach the laboratory invoice to the reimbursement form. The cost of laboratory analyses will be reimbursed at cost plus $10.00 not to exceed the rates listed. A markup will not be allowed if the consultant uses their own lab. Transportation costs to the laboratory should be included in this task.
Maximum costs shall not exceed the reasonable reimbursable rates as determined by the applicable laboratory method established in Reference 1.

4.4.c.6 Cost for monitored natural attenuation

This SOW includes the collection of geochemical and/or biological samples and evaluation of parameters that support intrinsic remediation such as dissolved oxygen, nitrate, sulfate, total dissolved iron, methane, and total organic carbon. Sampling and laboratory analysis for the appropriate COCs shall also be a part of this task. This SOW includes personnel time to coordinate this task and to manage the laboratory services (i.e. Chain of custody, sample preparation, sample QA/QC, and invoice managing).
Maximum cost is $175.00 for one (1) well (all parameters) or $100.00 per well if more than one (1) well is sampled.

4.4.c.7 Cost for land and receptor monitoring

This SOW shall consist of monitoring for changes in land, surface, and/or ground water use surrounding the site. Compare receptors used during preparation of the approved Exposure Assessment to any changes observed on site or surrounding the site. This SOW should be performed in conjunction with any monitoring or sampling task when personnel is already on site and not performed as a separate event, unless otherwise directed by the Division.
Maximum cost is $130.00.

4.4.c.8 Cost for Publicly Owned Treatment Works (POTW) sampling

This SOW will include all personnel and labor to collect corrective action system water samples for laboratory analysis to meet/establish POTW discharge permit requirements. This SOW includes personnel time to coordinate this task and to manage laboratory services (i.e. Chain of Custody, sample preparation, sample QA/QC, and invoice managing). The frequency and sampling requirements for discharge permits shall be performed according to the approved federal, state, and/or local government agency requirements. Maximum number is one (1) sample per influent and one (1) sample per discharge. Influent samples should be collected for the COCs approved in the SSSR. Effluent samples should be collected for the COCs approved in the permit. This SOW should be performed in conjunction with any monitoring or sampling task when personnel is already on site and not performed as a separate event, unless otherwise directed by the Division.

Maximum cost is $65.00 for the first sample and $45.00 for each additional sample collected.

4.4.c.9 Cost for National Pollutant Discharge Elimination System (NPDES) sampling

This SOW includes all personnel time and labor costs to collect corrective action system water samples for laboratory analysis to meet/establish NPDES discharge permit requirements. This SOW includes personnel time to coordinate this task and to manage laboratory services (i.e. Chain of Custody, sample preparation, sample QA/QC, and invoice managing). The frequency and sampling requirements for discharge permits shall be performed according to the approved federal, state, and/or local government agency requirements. Maximum number is one (1) sample per influent and one (1) sample per discharge. Influent samples should be collected for the COCs approved in the SSSR. Effluent samples should be collected for the COCs approved in the permit. This SOW should be performed in conjunction with any monitoring or sampling task when personnel is already on site and not performed as a separate event, unless otherwise directed by the Division. This task shall also be used for automatic sampling for NPDES permits requirements (other than Task 4.4.c.10 for initial set-up and final retrieval).
Maximum cost is $65.00 for the first sample and $45.00 for each additional sample collected.

4.4.c.10 Cost for effluent toxicity sampling (NPDES) by automatic sampler

This SOW includes all personnel time and labor costs to set up an automatic sampler for NPDES toxicity sampling and return to retrieve the sample and disassemble the sampler.
Maximum automatic sampler and set up cost is $465.00 for combined IC25 toxicity test and LC50 toxicity test per required sample.
Maximum cost is the approved analytical costs per required sample.

4.4.c.11 Cost for corrective action system air monitoring

This SOW includes all personnel time and labor to monitor effluent air concentrations on site for compliance with permitted limits. The frequency requirements for discharge monitoring shall be performed according to the approved federal, state, and/or local government agency requirements. This SOW should be performed in conjunction with any monitoring task when personnel is already on site and not performed as a separate event, unless otherwise directed by the Division.
Maximum cost is $210.00.

4.4.c.12 Cost for disposal of free product and/or ground water contaminated with petroleum product

This SOW consists of disposal of free product and/or ground water contaminated with petroleum product removed from a monitoring well. Ground water contamination must be documented by an approved state of Tennessee laboratory method. This cost is for disposal only.
Maximum cost is $85.00 per drum.

4.4.c.13 Cost for hauling and disposal of petroleum contaminated soil in drums

This SOW will include all necessary personnel and labor, equipment and supplies to properly haul and dispose petroleum contaminated soil in drums at a permitted disposal facility.
Maximum cost is $85.00 per drum.

4.4.c.14 Cost for vacuum monitoring of CAS

This SOW includes all personnel time and labor to obtain and document vacuum measurements during each monitoring event as required by the Corrective Action System Field Log (CASFL). All vacuum measurements shall be documented in the CASFL and submitted with the applicable report. This SOW should be performed in conjunction with any monitoring task when personnel is already on site and not performed as a separate event, unless otherwise directed by the Division.
Maximum cost is $100.00.

4.0 CORRECTIVE ACTION PROCESS

Task 4.4 Corrective Action

Task 4.4.d Corrective Action System Closure

4.4.d.1 Cost for deactivation of corrective action system

This SOW includes all personnel and equipment to properly deactivate corrective action system in accordance with the current Division Corrective Action System Deactivation Checklist and local, state and federal laws and guidelines.
Maximum cost is $1,525.00.

4.4.d.2 Cost for hauling and disposal of petroleum contaminated waste in drums

This SOW will include all necessary personnel and labor, equipment and supplies to properly haul and dispose petroleum contaminated water, product and sediments in drums, which are generated during deactivation activities. The drums shall be disposed of at a permitted disposal facility in accordance with local, state and federal laws and guidelines.
Maximum cost is $85.00 per drum.

4.4.d.3 Cost for permit and/or utility connection termination

This SOW includes all personnel time necessary to terminate permits and/or utility connections with federal, state, and/or local government agency requirements.
Maximum cost is $130.00 for oversight. Maximum cost for subcontracted electrician (if required by utility district) not to exceed the cost of the bid submitted to the Division and approved in writing.

4.4.d.4 Cost for preparation of the corrective action system for removal from the site for refurbishment

This SOW includes all personnel and equipment to properly sever tie downs, piping and electrical wiring from the corrective action system, and to remove unusable power poles, exposed piping, fencing and enclosures in accordance with the current local, state and federal laws and guidelines. This cost also includes oversight during the loading of the corrective action system and associated equipment for transport to a Division approved system vendor for refurbishing.
Maximum cost not to exceed $270.00.

4.4.d.5 Cost for decommissioning a corrective action system

This SOW includes all personnel and equipment to properly dismantle and remove unusable corrective action systems and associated equipment, and to remove unusable power poles, exposed piping, fencing and enclosures in accordance with the current local, state and federal laws and guidelines. This SOW includes hauling unusable equipment and debris to a disposal or recycling facility. This cost does not include the disposal costs for equipment or debris.
Maximum cost is not to exceed $1,950.00.

4.4.d.6 Cost for mobilization and demobilization of heavy equipment

This SOW will include mobilization and demobilization of the backhoe and/or skid-steer loader and concrete breaker to and from the site for decommissioning or following removal of corrective action system that is being refurbished.
Maximum cost is limited to $1.00 per mile per piece of equipment not to exceed $250.00.

4.4.d.7 Cost for oversight of the corrective action system pick-up for refurbishment by the state contractor

This SOW includes all personnel for oversight by the state contractor of pick-up and loading of the corrective action system for transport for refurbishment. This cost also includes inspection to determine that all tie downs have been properly severed and piping and wiring have been properly disconnected and capped from the corrective action system. **This task will only be reimbursed if requested/approved by the Division.**
Maximum cost not to exceed $270.00.

5.0 FINAL SITE CLOSURE PROCESS

Task 5.1 Well Abandonment

5.1.a Cost for supervision of well abandonment

This SOW includes all necessary personnel time to properly abandon wells in accordance with the EAG. This SOW includes field activities and supervision, project scheduling and oversight.
Maximum cost is $310.00 per event.

5.1.b Cost for well abandonment

This SOW includes the proper abandonment in accordance with the EAG and performed by a licensed well driller. All monitoring wells shall be installed and abandoned by a licensed well driller. Along with the invoice, the consultant must submit the appropriate reimbursement forms. In order to simplify and speed reimbursement, it is recommended that drilling companies itemize their invoices to reflect the reasonable rate document form format. The cost of well abandonment will be reimbursed at cost plus 15% markup not to exceed the reasonable rate schedule. A markup will not be allowed if the consultant uses their own driller.
Maximum cost is not to exceed $10.00 per foot. Maximum cost for manhole covers and concrete pad removal is $125 per well.

5.1.c Cost for mobilization/demobilization of support truck

This SOW will include mobilization and demobilization of a support truck (equipped to properly abandon monitoring wells) to and from the site. Mobilization/demobilization is not to exceed 250 miles round trip.
Maximum cost is limited to $0.75 per mile not to exceed a total cost of $187.50.

NOTE: If a drill rig is thought to be required to properly abandon the monitoring wells, then **prior approval** must be obtained from the Division. Otherwise, the cost will not be considered to be reasonable and will not be reimbursed.

5.0 FINAL SITE CLOSURE PROCESS

Task 5.2 Site Restoration

5.2.a Cost for scheduling for site restoration activities

This SOW will include all necessary contracting and scheduling for site restoration activities. Work is not to exceed two (2) hours. Maximum cost is $80.00 per hour. **Maximum cost is $160.00 per event.**

5.2.b Cost for supervision of site restoration

This SOW will include oversight of field activities as well as office support and coordination. Work not to exceed two (2) hours. Maximum cost is $65.00 per hour. **Maximum cost is $130.00 per event.**

5.2.c Site restoration

This SOW will include all personnel and labor, equipment and supplies to properly restore the site to a condition comparable to the original condition utilizing seed, mulch, and straw by hand. This SOW does not include tank(s), line(s), asphalt and/or concrete replacement.
Maximum cost is $345.00.

6.0 SUBMITTED DOCUMENTS MAXIMUM COST TABLE

The following application, proposal, report, and submittal costs are limited to these maximum reimbursable amounts.

Task Code	Submitted Documents (Applications/Proposals/Reports/Submittals)		Maximum Cost
6.1	**UST Closure**		
	6.1.a	TRBCA Closure Report	$500.00
	6.1.b	Soil Stockpile Sampling Report (TGD-005)	$280.00
	6.1.c	Overexcavation Report	$760.00
	6.1.d	Application to Treat Petroleum Contaminated Soil (TGD-009)	$150.00
	6.1.e	Soil Treatment and Disposal Report	$280.00
6.2	**Hazard Notification Report**		$65.00
6.3	**Site Check Report (TGD-012)**		$2,200.00
6.4	**Initial Response and Hazard Management Report (IRHMR)**		$1,400.00
	6.4.a	Hazard Management Report	$300.00
	6.4.b	Health and Safety Plan (if not included with IRHMR)	$260.00
6.5	**Impacted Drinking Water Management (TGD-019)**		
	6.5.a	Impacted Drinking Water - Hazard Management Report (TGD-019)	$340.00
	6.5.b	Impacted Drinking Water Supply Temporary Response – Proposal (if costs anticipated to exceed $2500.00)	$300.00
	6.5.c	Impacted Drinking Water Supply Permanent Response – Proposal	$600.00
6.6	**Petroleum Vapor Impact Management (TGD-020)**		
	6.6.a	Petroleum Vapor Impact - Hazard Management Report (TGD-020)	$340.00
	6.6.b	Petroleum Vapor Impact Temporary Response – Proposal (if costs anticipated to exceed $2500.00)	$300.00
	6.6.c	Petroleum Vapor Impact Permanent Response – Proposal	$600.00
6.7	**Mobile Enhanced Multi-phase Extraction (MEME) (TGD-016)**		
	6.7.a	Application to Perform MEME	$300.00
	6.7.b	8-hour MEME Report	$300.00
	6.7.c	24-hour MEME Report	$500.00

Task Code	Submitted Documents (Applications/Proposals/Reports/Submittals)		Maximum Cost
6.8	**Free Product Removal**		
	6.8.a	Free Product - Hazard Management Report (TGD-004)	$405.00
	6.8.b	Free Product Investigation Proposal	$620.00
	6.8.c	Free Product Investigation Report	$1,300.00
	6.8.d	Free Product Removal Plan	$4,300.00
6.9	**Initial Site Characterization Report**		$4,000.00
	6.9.a	Additional Monitoring Well Installation Proposal	$130.00
	6.9.b	Additional Monitoring Well Installation Report	$300.00
6.10	**Exposure Assessment Report (TGD-017)**		$1,000.00
	6.10.a	Additional Remediation and/or Risk Management Response Submittal	$65.00
	6.10.b	Additional Remediation and/or Risk Management Evaluation – with Division approval	$600.00
	6.10.c	Risk Analysis Report (newer version)	$250.00
6.11	**Soil Gas Survey (TGD-018)**		
	6.11.a	Soil Gas Survey Application	$300.00
	6.11.b	Soil Gas Survey Report	$520.00
6.12	**Source Removal (Overexcavation)**		
	6.12.a	Source Removal Proposal	$195.00
	6.12.b	Source Removal Report	$760.00
6.13	**Risk Reduction**		
	6.13.a	Risk Reduction Proposal	$195.00
	6.13.b	Risk Reduction Report	$520.00
6.14	**Institutional Controls**		
	6.14.a	Institutional Control Proposal	$195.00
	6.14.b	Institutional Control Report	$80.00
6.15	**Engineering Controls**		
	6.15.a	Engineering Control Proposal	$195.00
	6.15.b	Engineering Control Report	$185.00
6.16	**Advanced Risk Model**		
	6.16.a	Advanced Risk Model Proposal	$195.00
	6.16.b	Advanced Risk Model Report	$1,500.00
6.17	**Corrective Action Plan (CAP)**		
	6.17.a	CAP On-property Soil Contamination	$3,200.00
	6.17.b	CAP On-property and Off-property Ground Water Contamination	$4,300.00
	6.17.c	CAP On-property and Off-property Contamination	$5000.00

Task Code	Submitted Documents (Applications/Proposals/Reports/Submittals)		Maximum Cost
6.18	**Monitoring Reports (TGD-007)**		
	6.18.a	Risk Monitoring Report (RMR)	$900.00
	6.18.b	Closure Monitoring Report (CMR)	$900.00
	6.18.c	(Cell left blank intentionally)	
	6.18.d	(Cell left blank intentionally)	
	6.18.e	(Cell left blank intentionally)	
	6.18.f	(Cell left blank intentionally)	
	6.18.g	Corrective Action Baseline Monitoring Report (CABMR)	$1,400.00
	6.18.h	Corrective Action Monitoring Report with as-built diagrams (CAMR-ab)	$1,800.00
	6.18.i	Corrective Action Monitoring Report (CAMR)	$1,600.00
	6.18.j	Corrective Action Closure Monitoring Report (CACMR)	$1,000.00
6.19	**Permit Applications and Discharge Monitoring Reports**		
	6.19.a	NPDES Permit Application	$370.00
	6.19.b	Discharge Monitoring Report (DMR)	$130.00
	6.19.c	POTW Application	$370.00
	6.19.d	POTW Report	$130.00
	6.19.e.	Air Emissions Application	$260.00
	6.19.f	Air Exceedance Report	$130.00
	6.19.g	Annual Air Emissions Report	$260.00
	6.19.h	Monitoring Well Maintenance Fee	$100.00
	6.19.i	Class V Underground Injection Well Application (TGD-003)	$370.00
	6.19.j	Monitoring Well Permit – no markup	$125.00
	6.19.k	Right-of-way Bond – no markup	actual cost
6.20	**Miscellaneous Application/Proposals/Reports/Submittals**		
	6.20.a	Field Work Notification	$25.00
	6.20.b	Boring Log Installation submittal	$65.00
	6.20.c	Public Notice of Corrective Action	$65.00
	6.20.z	Other report as required by the Division	actual cost
6.21	**Corrective Action System Deactivation Report**		$65.00
6.22	**Monitoring Well Abandonment Report**		$65.00

REFERENCE 1 – January 2, 2012

Product Released	Chemicals To Sample Drinking Water	Chemicals To Sample Non-Drinking Water	Chemicals To Sample Surface Drinking Water***	Chemicals To Sample Surface Non-Drinking Water***
Gasoline	Benzene Ethylbenzene Toluene Totals Xylenes MtBE Naphthalene	Benzene Ethylbenzene Toluene Totals Xylenes MtBE Naphthalene	Benzene Ethylbenzene Toluene Totals Xylenes	Benzene Ethylbenzene Toluene
Diesel* Jet Fuel Kerosene	Benzene Ethylbenzene Toluene Totals Xylenes MtBE PAHs	Benzene Ethylbenzene Toluene Totals Xylenes MtBE Naphthalene	Benzene Ethylbenzene Toluene Totals Xylenes Benzo(a)pyrene	Benzene Ethylbenzene Toluene Modified PAHs****
Waste Oil* Used Oil	PAHs Cadmium Chromium, Total Lead, Total Silver Zinc	Naphthalene	Benzo(a)pyrene Cadmium Chromium, Total Lead, Total	Modified PAHs****
Aviation* Fuel	Benzene Ethylbenzene Toluene Totals Xylenes MtBE EDB***** EDC PAHs Lead, Total	Benzene Ethylbenzene Toluene Totals Xylenes MtBE Naphthalene EDB EDC	Benzene Ethylbenzene Toluene Totals Xylenes EDB***** EDC Benzo(a)pyrene Lead, Total	Benzene Ethylbenzene Toluene EDC Modified PAHs****
Unknown**	Aviation+Waste Oil	Aviation+Waste Oil	Aviation+Waste Oil	Aviation+Waste Oil

*EPH to be sampled only during tank closure and analyzed by TN Extractable Petroleum Hydrocarbons (EPH) Method; GRO no longer required

**Tanks with unknown contents will be required to analyze all COCs

***Chemicals to be sampled **only** at the surface water receptor

****Modified PAHs – Reference 2 list minus Acenaphthylene, Benzo(g,h,i)perylene, Naphthalene, and Phenanthrene. Include these COCs in all ground water sample analysis if a surface water is a potential receptor. Do NOT add to soil analysis.

*****EDB ground water samples shall be analyzed by EPA method 8011

BTEX, MtBE, Naphthalene, EDB, and EDC shall be analyzed by EPA method 8260B

PAHs in water shall be analyzed by either EPA method 8270C SIM or EPA method 8310 (water samples shall be field filtered using a 0.45 micron filter); PAHs in soil no longer required

Metals shall be analyzed by EPA method 200.7 for water and EPA method 6010/3050 for soil (water samples shall be field filtered using a 0.45 micron filter)

REFERENCE 2 – January 2, 2012

Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Chrysene
Dibenz (a,h)anthracene
Fluoranthene
Fluorene
Indeno(1,2,3-c,d)pyrene
Naphthalene
Phenanthrene
Pyrene

7.0 PER DIEM AND LODGING PROCESS

Task 7.1 Per Diem

7.1.a Cost for per diem charges

This SOW will include the cost of all per diem charges accrued performing site remediation tasks as requested by the Division. Date(s) and time(s) must not exceed time for being onsite plus travel. Meals will not be reimbursed without a corresponding lodging receipt. No mark-up allowed. **Maximum cost** shall be reimbursed in accordance with the state of Tennessee travel regulations at the time that work was performed. Current travel regulations can be found at: www.tn.gov/finance/act/documents/policy8.pdf

7.0 PER DIEM AND LODGING PROCESS

Task 7.2 Lodging

7.2.a Cost for lodging charges

This SOW will include the cost of all lodging charges accrued performing site remediation tasks as requested by the Division. Date(s) must not exceed time for being onsite. Hotel invoice must be submitted with reimbursement request. No mark-up allowed. **Maximum cost** shall be reimbursed in accordance with the state of Tennessee travel regulations at the time that work was performed. Current travel regulations can be found at: www.tn.gov/finance/act/documents/policy8.pdf

X. INSTRUCTIONS FOR COMPLETING REIMBURSEMENT APPLICATIONS IN THE COST DATABASE

The Division of Underground Storage Tanks (Division) has developed a new process for reimbursement involving electronic applications. This process consists of three (3) parts: cost task descriptions, cost task spreadsheets, and a cost database. The cost task descriptions provide details of commonly performed tasks at contaminated UST sites (see Section IX). The cost spreadsheets provide the breakdown of routine maximum cost for performing each task. The cost database is a Microsoft Access® program and requires you to use version Access® 2007 or higher.

Question, comments, etc. should be addressed to: **ust.reimbursement@tn.gov**

A. UST COST DATABASE INSTRUCTIONS

Before beginning any electronic invoice, it is a good idea to become familiar with the task description and associated cost spreadsheet to determine: 1) what job titles are allowed to be billed and 2) what type of equipment is reimbursable for each task. At first, it may not be obvious where certain tasks should be entered. It may be useful to scan through several sheets before beginning any data entry.

Always use the tab key to exit data boxes and always tab out to save information.

B. TO BEGIN THE INVOICE

The terms on the first page of the application database must be agreed to by clicking the box. Click on the "Start UST database" button to begin. On the next page, click on the map of the state of Tennessee in any location to open the database.

C. COST DATABASE MAIN PAGE

Click on the "ENTER NEW FACILITY ID/INVOICE NUMBER" button to begin. A pop up box will appear for the entry of the seven-digit UST facility ID number not including dash. After entry of the UST facility ID number, click ok. Another pop up box will appear for entry of the invoice number. After entry of the invoice number, click ok. The program is set up with an automatic clock and calendar function. If you do not want to use this feature, then click on the "Pop-up and Other Options" button to disable it. Also in the "Pop-up and Other Options" button you may turn on/off the auto-complete function and also set the mileage, lodging and per diem rates for the database. Additionally, there are new buttons to remove duplicate records from the tblGeneralInformation table and a button to remove a zero numbered task in the tblReimbursement table.

D. INVOICE ENTRY PAGE

It is important that all information on this page be correct. The facility ID number will appear as a default on this next page. Enter the appropriate information in all fields. If any field is left blank, a pop up box will identify the field that needs to be completed. If the case number is not known, enter "Unk". It is recommended that you contact the case manager to obtain this number. All work that is to be entered for this invoice must be within the time period entered in "Work Start Date" to "Work End Date" or an error message will occur.

NA or Unk is acceptable in phone number box for the facility phone number only.
If the site does not have a corrective action system, then leave the start up date field blank and click "No" in the "SAVE" pop up box. If you accidentally enter a date, hit the delete key. After all fields are completed, click the "Save/Close" button. This will store all background information that can be used for any future applications for this facility.

E. GENERAL INFORMATION PAGE

To begin entering task information/cost, go to the UST cost database main page and click enter/edit task information after selecting a Facility ID and invoice number on the Main page.

1. Entering or deleting employee names

   Click the "Enter/Delete CAC Employee Names" button. Enter all employee names and titles. After entering all employees click the "Close Employee" button.

2. Entering or editing detail task information

   Click the "Enter/Edit Detail Task Information" button.

F. PROCESS AND TASK PAGE

Click the "Enter New Task" button. Enter a process task, and subtask, and sub sub task by using the drop down boxes provided. The appropriate buttons applicable to the task will be enabled for data entry.

G. BUTTONS

Only the buttons applicable to each process/task/sub task/sub sub task will be enabled for data entry. At this time, it is encouraged that you familiarize yourself with each task description and cost spreadsheet before beginning database entry.

TRENCHING - Enter costs associated with recovery well trenching or discharge trenching approved by the Division not to exceed the reasonable rates in RGD-002.

PERSONNEL – Personnel hours can be billed as on-site, office, travel to or travel from time. Refer to each task cost description. **NOTE:** Travel time is a separate, billable expense and is **NOT** included in any task description. Each approved field activity is allowed a maximum of two (2) hours travel to the site and two (2) hours travel from the site.

RENTALS – A drop down menu is available of the most commonly encountered rental equipment and items. If a piece of equipment does not appear that accompanies the application, then it must be entered on the "Miscellaneous" button and an explanation attached why the piece of equipment was necessary. It is highly recommended that you obtain prior approval from the case manager for any rental equipment not listed in the drop down menu.

SUPPLIES – A drop down menu is available of the most commonly encountered supplies and items. If a supply does not appear that accompanies the application, then it must be entered on the "Miscellaneous" button. It is highly recommended that you obtain prior approval from the case manager for any supplies not listed in the drop down menu.

MILEAGE - The starting location should include, at a minimum, the name of the city and the ending location should be the name of the city where the site is located. On the return trip, the ending location should either be the CAC office or another UST site where work has been approved by the Division. If the destination is another UST site, then please enter the seven digit facility ID # and city. **NOTE:** Mileage is a separate, billable expense and is **NOT** included in any task description. Each approved field activity is allowed a maximum of 250 miles total round trip at a rate of $0.47/mile for automobiles and at a rate of $0.75/mile for large (diesel) trucks.

SAMPLING - Reimbursed costs include all necessary equipment, personnel and sampling supplies. **DO NOT** itemize separately for personnel time on site. **This task is all inclusive.** The first well must be entered separately and identified by location number (i.e. MW-1; One well @ $212.50). Any additional wells sampled may be entered on the same page (i.e. MW-2 thru MW-6; 5 wells @ $100/each).

WELL SURVEYING – Reimbursed costs include all necessary equipment, personnel and sampling supplies. **DO NOT** itemize separately for personnel time on site. **This task is all inclusive.** The first four (4) wells must be entered together (i.e. MW-1 – MW-4 @ $645.00). Any additional wells surveyed may be entered on the same page (i.e. MW-5 and MW-6; 2 wells @ $120/each).

ANALYSIS – Reimbursed at cost plus $10.00 not to exceed the rates listed in the RGD-002. A mark-up will not be allowed if the consultant uses their own lab.

MEME – Enter costs associated with any mobile enhanced multi-phase extraction event that has been approved by the Division.

CAS INSTALL - Enter costs associated with wellhead vault installation, manifold installation or concrete pad installation approved by the Division not to exceed the reasonable rates in RGD-002.

WELL INSTALLATION - Enter costs associated with any drilling activity such as direct push, slide hammer, or hammer drill (soil gas survey) or augering or air rotary (monitoring well installation) event that has been approved by the Division.

WELL ABANDONMENT - Enter costs associated with any monitoring well abandonment event that has been approved by the Division.

MISCELLANEOUS – This button should be used sparingly and **only** as an exception. It can not be used for reports.

HAULING/DISPOSAL – Costs for properly disposing of contaminated soil and/or groundwater in accordance with local, state and federal laws and guidelines as approved by the Division not to exceed the reasonable rates in RGD-002.

REPORTS – After selection of the appropriate report, enter the date the report was submitted to the Division and the cost. The database will automatically enter the Division's approved cost for the applicable report.

UTILITIES – Enter costs associated with payment of utilities when a corrective action system has been approved by the Division and is installed.

LODGING/PER DIEM– Enter costs associated with lodging and per diem for Division approved work in accordance with the state of Tennessee travel regulations at the time that the work was performed.

H. PREVIEWING THE INFORMATION (GENERAL INFORMATION PAGE)

The "Print Preview and Printing" button may be used any time prior to creating a file for submittal to the state for review purposes as needed. This is a useful tool and it is recommended that you review the information entered prior to creating a file for submittal to the state. In this manner, you can determine if the costs will be reimbursed as entered or if there are any disallowable costs.

I. CREATE FILE FOR SUBMITTAL TO STATE OF TENNESSEE

After all entries have been completed and the file is ready to be created, go to the General Information page and click on the button labeled "3. Create File for State Submittal". A Browse for Folder box will appear to provide a choice of where the file is to be stored. Click on the appropriate folder for the file to be stored. After the file has been successfully saved, the message "The export file was successfully created" will appear. Click "Ok".

J. BACK-UP DOCUMENTATION TO APPLICATION

Back-up documentation including invoices, receipts, etc. may be scanned and submitted as a pdf file.

K. SUGGESTED PRACTICES

Always make a back-up copy after each session of data entry in a secure and separate file location for problem situations that may arise. Database maintenance should be performed occasionally as needed using the Microsoft Access® manage tool, compact and repair.

L. SIGNATURE PAGES

At this time, the Division does not have a process in place to accept electronic signatures. However, applications must be signed by both the Responsible Party and the CAC to verify the costs submitted represent actual costs accrued during the cost of cleanup. The preferred method is for the person completing the application to provide a copy of the application to the Responsible Party and attach the certification pages. After the Responsible Party has reviewed the application, it must be signed and notarized. The CAC should also complete the applicable certification page in the same manner. Both original, notarized certification pages must be submitted with the electronic submittal. **Electronic copies of these pages will not be accepted**. Applications will not be forwarded to the fiscal office for payment without both certification pages. Blank copies of these pages are attached at the end of this document.

RESPONSIBLE PARTY CERTIFICATION AFFIDAVIT

I certify to the best of my knowledge and belief that the costs presented herein represent actual costs incurred in the performance of response actions at this site during the period of time indicated on this application; that an accidental release has occurred from a petroleum underground storage tank system at this site; and that no charges are presented as part of this application that do not directly relate to the performance of corrective actions related to the release of petroleum at this site.

I warrant that I have not received any fees, commission, percentage, gift, or other consideration as a result of my employment of a person, company, corporation, individual, or firm for purposes of site rehabilitation.

_____, I concur that a dual party check should be issued between _____and _____ _____
(Responsible Party) (CAC)
(Yes/No)

Indicate if any financial, familial, or other beneficial relationship exists between the site owner or operator, the "person responsible for site rehabilitation," and the cleanup contractor.

YES ___ NO ___

If such a beneficial relationship exists, attach a detailed explanation to this affidavit.

THE REIMBURSEMENT CHECK WILL BE MAILED TO THE ADDRESS LISTED ON THIS PAGE

Facility Name	Facility ID #
Name of Responsible Party (RP) Company	Address
City, State, Zip	Phone
Print Name of RP Representative	Title
Signature of RP Representative	Date

STATE OF _____ COUNTY OF _____

Before me personally appeared _____, who executed said instrument for the purposes therein expressed.

Witness my hand and official seal, this _____ day of _____, 20_____

Notary Public (print name)	Notary Public Signature

My commission expires _____. *Stamp*

CN-0923 (Rev. 05/08) RDA 2299

CORRECTIVE ACTION CONTRACTOR CERTIFICATION AFFIDAVIT

I certify to the best of my knowledge and belief that the costs presented herein represent actual costs incurred in the performance of response actions at this site during the period of time indicated on this application; that an accidental release has occurred from a petroleum underground storage tank system at this site; and that no charges are presented as part of this application that do not directly relate to the performance of corrective actions related to the release of petroleum at this site.

I further certify that _____ has received payment from
(CAC Company Name)

_____ for the invoice(s) presented in this reimbursement application.
(Responsible Party)

Payment Received Category*	Enter $ amount for the applicable category (select one)
Full payment	
10% deductible	
20% deductible	
Reduced deductible for upgrade incentive	
$20,000.00 deductible	
Partial payment received and request a dual party check be issued	
No payment received and request a dual party check	

*Must match deductible amount included in the fund eligibility approval letter

_____ Facility Name

_____ Facility ID #

_____ Name of CAC Company

_____ Address

_____ City, State, Zip

_____ Phone

_____ Print Name of CAC Representative

_____ Title

_____ Signature of CAC Representative

_____ Date

STATE OF _____ COUNTY OF _____

Before me personally appeared _____, who executed said instrument for the purposes therein expressed.

Witness my hand and official seal, this _____ day of _____, 20____

_____ Notary Public (print name)

_____ Notary Public Signature

My commission expires _____.

Stamp

CN-0923 (Rev. 05/08)

RDA 2299

PANGEAN

CMD
ASSOCIATES

ATTACHMENT 2

Authorized Individuals

Darren Moore (President)	Project Manager / Senior Environmental Specialist
David A. Schmidt (VP)	Project Manager / Engineer
Bethanne Weyenberg, PE	Project Manager / Engineer
Dan Ayres, P.G.	Project Manager / Geologist
Keith Yarrow, P.G.	Project Manager / Geologist
Karen Genesy	Contract Administrator
Dean McCartney, P.G.	Project Geologist
Allyson Sikes	Senior Technician / CAS Specialist
Dorothy Pollich	Contract Administrator / Secretary

State's Authorized Representatives

Contact Address:	Tennessee Department of Environment & Conservation Division of Underground Storage Tanks 401 Church Street, 4th Floor L&C Tower Nashville, TN 37243
Contact Main Phone:	615-532-0945
Primary Contact:	Susan E. Watts, Environmental Specialist 6 615-532-0958 susan.watts@tn.gov

Additional Contacts:

Stan Boyd, Director
615-532-0945
stan.boyd@tn.gov

Cindy Greene, Corrective Action Program Manager
615-532-0988
cindy.greene@tn.gov

Nona Bryant, Fund Manager
615-532-0971
nona.bryant@tn.gov

Geina Skinner, Environmental Protection Specialist 5
615-532-0981
geina.skinner@tn.gov

Jerry Loftin, Environmental Protection Specialist 4
615-532-0961
jerry.loftin@tn.gov

Ricky Cathey, Environmental Specialist 6
615-532-0950
ricky.cathey@tn.gov

Gloria Buehler, Environmental Protection Specialist 1
615-532-0959
gloria.buehler@tn.gov

Drew Storm, Nashville Environmental Specialist 5
615-687-7095
drew.storm@tn.gov

Cookeville UST Field Office Staff
931-432-4015

Nashville UST Field Office Staff
615-687-7000

ATTACHMENT 3

ATTESTATION RE PERSONNEL USED IN CONTRACT PERFORMANCE

SUBJECT CONTRACT NUMBER:	
CONTRACTOR LEGAL ENTITY NAME:	
FEDERAL EMPLOYER IDENTIFICATION NUMBER: (or Social Security Number)	

The Contractor, identified above, does hereby attest, certify, warrant, and assure that the Contractor shall not knowingly utilize the services of an illegal immigrant in the performance of this Contract and shall not knowingly utilize the services of any subcontractor who will utilize the services of an illegal immigrant in the performance of this Contract.

CONTRACTOR SIGNATURE

NOTICE: This attestation MUST be signed by an individual empowered to contractually bind the Contractor. If said individual is not the chief executive or president, this document shall attach evidence showing the individual's authority to contractually bind the Contractor.

PRINTED NAME AND TITLE OF SIGNATORY

DATE OF ATTESTATION

PERFORMANCE BOND

KNOW ALL BY THESE PRESENTS:

That we,

_____
(Name of Principal)

_____
(Address of Principal)

as Principal, hereinafter called the Principal, and

_____
(Name of Surety)

_____
(Address of Surety)

as Surety, hereinafter called the Surety, do hereby acknowledge ourselves indebted and securely bound and held unto the State of Tennessee as Obligee, hereinafter called the Obligee, in the penal sum of

_____
(Dollar Amount of Bond)

good and lawful money of the United States of America, for the use and benefit of those entitled thereto, for the payment of which, well and truly to be made, we bind ourselves, our heirs, our administrators, executors, successors, and assigns, jointly and severally, firmly by these presents.

BUT THE CONDITION OF THE FOREGOING OBLIGATION OR BOND IS THIS:

WHEREAS, the Obligee has engaged the Principle for a sum not to exceed

_____
(Contract Maximum Liability)

to complete Work detailed in the Scope of Services in a written Contract bearing the Contract Number (assigned by the State of Tennessee):

_____
(Contract Number)

a copy of which said Contract is by reference hereby made a part hereof, as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, if the Principal shall fully and faithfully perform all undertakings and obligations under the Contract hereinbefore referred to and shall fully indemnify and hold

harmless the Obligee from all costs and damage whatsoever which it may suffer by reason of any failure on the part of the Principle to do so, and shall fully reimburse and repay the Obligee any and all outlay and expense which it may incur in making good any such default, and shall fully pay for all of the labor, material, and Work used by the Principal and any immediate or remote sub-contractor or furnisher of material under the Principal in the performance of said Contract, in lawful money of the United States of America, as the same shall become due, then this obligation or bond shall be null and void, otherwise to remain in full force and effect.

AND for value received, it is hereby stipulated and agreed that no change, extension of time, alteration, or addition to the terms of the Contract or the Work to be performed thereunder or the specifications accompanying the same shall in any wise affect the obligation under this bond, and notice is hereby waived of any such change, extension of time, alteration, or addition to the terms of the Contract or the Work or the specifications.

IN WITNESS WHEREOF the Principal has hereunto affixed its signature and Surety has hereunto caused to be affixed its corporate signature and seal, by its duly authorized officers,

on this _____ day of _____, 20_____.

WITNESS:

(Name of Principal)	(Name of Surety)
(Authorized Signature of Principal)	(Signature of Attorney-in-Fact)
(Name of Signatory)	(Name of Attorney-in-Fact)
(Title of Signatory)	(Tennessee License Number of Agent or Attorney-in-Fact)
	(Counter Signature of Resident Agent if not same as Attorney-in-Fact)

The Surety Company issuing bond shall be licensed to transact business in the State of Tennessee by the Tennessee Department of Commerce and Insurance. Bonds shall have certified and current Power-of-Attorney for the Surety's Attorney-in-Fact attached. The Attorney-in-Fact who executes bond on or on behalf of the Surety shall be licensed by and a resident of the State of Tennessee, and the Attorney-in-Fact's license number shall be affixed to the bond; or, countersignature by a licensed Agent who is a resident of the State of Tennessee, and the Agent's license number shall be affixed to the bond in addition to the signature of the Attorney-in-Fact.