



# **DIVISION OF UNDERGROUND STORAGE TANKS**

## **REIMBURSEMENT GUIDANCE DOCUMENT (RGD) – 002**

**Control Number UST-REIM-G-02-RGD-002-052022**

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UST-REIM-G-02-RGD-002-052022  
Reimbursement Guidance Document (RGD) - 002

**SIGNATURES:**

Stanley R. Boyd, Director  
Division of Underground Storage Tanks

Genevia Guillory-Coward, Program Administrator/Cost Chairwoman  
Drafter / Preparer

Geina Skinner (Apr 3, 2022 12:05 CDT)

Geina Skinner, Corrective Action Deputy Director  
Reviewer

**REVISION HISTORY TABLE**

<b>Revision Number</b>	<b>Date</b>	<b>Brief Summary of Change</b>
0	04/15/2014	Issuance of Guidance
1	05/20/2022	Costs updated and tasks added

## **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 underground storage tank (UST) system closure, hazard management, investigation, and cleanup of petroleum contaminated sites where tank owners, tank 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.

Rule 0400-18-01-.09 Petroleum Underground Storage Tank Fund can be located at <https://publications.tnsosfiles.com/rules/0400/0400-18/0400-18-01.20210615.pdf>.

T.C.A. § 68-215-111 Use of the Fund can be located at <http://www.lexisnexis.com/hottopic/tncode/>.

### **B. Applicability**

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

Rule 0400-18-01-.09(3)(d) states "Except as provided for in subparagraph (5)(d) of this rule, before the tank owner or operator or petroleum site owner will receive fund benefit, the applicable deductible amount shall be expended as approved costs by the tank owner or operator or petroleum site owner. The applicable deductible amount is set forth in subparagraph (6)(b) of this rule."

Rule 0400-18-01-.09(4)(a) states: "If the Division determines that fund eligibility was not established at the time of discovery of a release in accordance with subparagraph (3)(a) or (b) of this rule, corrective action costs and third-party damages associated with that release are not eligible for reimbursement by the fund."

Rule 0400-18-01-.09(4)(b) 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 90 days of the discovery of evidence of a suspected release that is subsequently

confirmed in accordance with Rules 0400-18-01-.04 or 0400-18-01-.05. The 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 60 days of a release that was identified in any manner other than the process for confirmation of a suspected release in accordance with Rules 0400-18-01-.04 or 0400-18-01-.05, for example, during closure activities performed in accordance with Rule 0400-18-01-.07.”

Rule 0400-18-01-.09(6)(c) states: “The fund shall reimburse eligible tank owners or operators or petroleum site owners, who satisfy the requirements of paragraphs (10) and (11) of this rule, for eligible corrective action costs above the deductible to the fund in an amount not to exceed:

1. \$2,000,000 per site per occurrence for sites still undergoing corrective action on July 1, 2015, or releases that occur on or after July 1, 2015;
2. \$1,000,000 per site per occurrence for site cleanups closed on or before June 30, 2015; or
3. \$1,000,000 per site per occurrence for court awards involving third-party claims.”

Rule 0400-18-01-.09(8)(c) states: “The tank owner 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 tank owner 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 0400-18-01-.09(9)(c) 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 0400-18-01-.09(10)(b) states: “Upon confirmation 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 tank owner or operator or petroleum site owner shall select a contractor from the Division's list of approved contractors if the tank owner or operator or petroleum site owner expects to apply for reimbursement from the fund. The tank owner or operator or petroleum site owner shall notify the Division in writing of such a selection within 30 days or another time frame specified by the Division. A contractual agreement shall be established between the tank owner or operator or petroleum site owner and the contractor in accordance with the requirements of T.C.A. § 68-215-129. The tank

owner or operator or petroleum site owner shall provide the Division 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 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: “Contingent upon availability of funds, the Division shall process all applications for payment as soon as possible upon receipt of application. If the Division determines all costs are reasonable and eligible for reimbursement, payment will be issued within 90 days once costs have been determined to be reasonable and eligible for reimbursement. If the Division determines that certain costs not reasonable or eligible for reimbursement, the Division may issue a check for the amount of the approved costs and provide a 45-day period in which the tank owner 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 tank owner or operator or petroleum site owner may petition the Board for a hearing on the disallowance pursuant to Rule 0400-18-01-.11.”

Rule 0400-18-01-.09(15)(a) states: “The CAC is the person responsible for conducting and overseeing the corrective action at a petroleum underground storage tank site. There shall be only one CAC for each site.”

Rule 0400-18-01-.09(15)(b)5 states in part: “The CAC shall submit a list of CAC’s employees that will be utilized by the CAC as a part of the assessment and remediation of UST sites in Tennessee.”

Rule 0400-18-01-.09(15)(b)5(ii) states: “The list of the employees shall be submitted with the application described in part 1 of this subparagraph and annually with a due date of April 1 of each year thereafter.”

Rule 0400-18-01-.09(15)(b)5(iii) states: “When a new employee begins working for a CAC, within 15 days of the first day of employment or as soon as their work time will be submitted to the Division for reimbursement, the CAC shall submit the employee information required in subpart (i) of this part to the Division.”

**C. Application for Fund Eligibility Determination and Reimbursement Application Format**

T.C.A. 68-215-111(f)(5)(B) states: "Notwithstanding subdivision (f)(5)(A), the fund shall be responsible for up to a maximum of two million dollars (\$2,000,000) of cleanup costs for sites still undergoing corrective action on July 1, 2015, and releases that occur on or after July 1, 2015. The sum of the deductible and the maximum reimbursement shall not exceed two million dollars (\$2,000,000). The fund shall be responsible for cleanup of contamination due to releases from petroleum underground storage tanks on a per-site, per-occurrence basis."

T.C.A. 68-215-111(f)(7)(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)(7)(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)(7)(A)(i) or (f)(7)(A)(ii) shall make the release ineligible for reimbursement from the fund."

T.C.A. 68-215-111(f)(8) 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."

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## II. DEFINITIONS AND ACRONYMS

### A. Definitions

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

Contamination	Laboratory confirmed petroleum impact to a) drinking or surface water above Risk Based Cleanup Levels (RBCLs) and/or b) soil or groundwater above Site-Specific Cleanup Levels (SSCLs) or Initial Screening Levels (ISLs) for sites that an exposure assessment has not been completed.
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 on or after June 15, 2021, have a deductible of \$5,000.00 unless granted a reduced deductible. A higher deductible may apply per Rule 0400-18-.09(6)(b)7.
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 project manager in advance of conducting the work. This excludes tasks 2.4.e and any lump sum task.
Markup	Allowable markup for most items is 15% not to exceed listed maximum cost/rates. However, some tasks only allow a 5% markup as stated in the applicable task description.
Proof of payment	The acceptable evidence that the invoices included in the initial reimbursement application(s) indicates that the deductible has 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 seven (7) consecutive days.

**B. Acronyms Used in this Document and the Excel® cost task spreadsheets**

BTEX	Benzene, toluene, ethylbenzene, and total xylenes
BTEXMN	Benzene, toluene, ethylbenzene, total xylenes, MtBE, and Naphthalene
CAC	Corrective action contractor
CAD/GIS	Computer aided design/Geographic information systems
CAP	Corrective Action Plan
CABMR	Corrective Action Baseline Monitoring Report
CACMR	Corrective Action Closure Monitoring Report
CAMR	Corrective Action Monitoring Report
CAMR -ab	Corrective Action Monitoring Report with as-built diagrams
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
EDB	Ethylene Dibromide
EDC	Ethylene Dichloride
EPH	Extractable Petroleum Hydrocarbons (Note that EPH has no SSCL, RBCL, or ISL as it is utilized as a "soil screening" mechanism only for the potential installation of a monitoring well for UST tank closure and site check activities)
FID	Flame ionization detector
FP	Free product
GW	Groundwater
IRHMR	Initial Response and Hazard Management Report
ISCR	Initial Site Characterization Report
ISL	Initial screening level
kW	Kilowatt
MCL	Maximum contaminant level
MEME	Mobile enhanced multi-phase extraction
MtBE	Methyl tertiary butyl ether
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
PSI	Pounds per square inch
QA/QC	Quality assurance and quality control
RBCL	Risk based cleanup level
RGD	Reimbursement Guidance Document

RMR	Risk Monitoring Report
SGS	Soil gas survey
SSCL	Site specific cleanup level
Task	Reimbursement Task
TCLP	Toxicity characteristic leaching procedure
TGD	Technical guidance document
TRBCA	Tennessee risk-based corrective action
UST	Underground storage tank

### **III. REIMBURSEMENT APPLICATION GUIDELINES**

Instructions for completing a Reimbursement Application are in Section IX.

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 suspected or confirmed, an Application for Fund Eligibility shall be prepared and submitted. The initial reimbursement application shall not be submitted until Fund eligibility and the deductible have been determined. If full operational compliance is verified, then the Division will send a confirmation letter specifying the applicable deductible. If full operational compliance is not met, then the Division will notify the responsible party of the deductible with an enforcement order. This order will also include information on the appeal process.

#### **B. Subsequent Reimbursement Applications**

Subsequent applications may be submitted at the completion of each major reimbursable task 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.

### **IV. ELIGIBLE COSTS**

The following processes include common tasks that are eligible for reimbursement once the applicable deductible has been met, with Division approval.

**A. UST System Closure Process**

1. Over-excavation of contaminated material after the first 100 cubic yards of native material has been removed
2. Sample collection after over-excavation and/or recharge of groundwater into the tank pit
3. Soil and water laboratory analysis, including routine shipping charges, after over-excavation 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. Conducting a water use survey
7. Preparation of a risk-based closure report (TRBCA Closure Report - includes monitoring well installation, groundwater sampling and water use survey, if necessary)

**B. Hazard Management Process**

1. Alternate water supply – providing bottled water, 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, delivery, operation, and maintenance of approved treatment systems
3. Telephone charges associated with a telemetry system (must be plainly stated in the reimbursement application)
4. Rental of equipment for use during 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. Bonds required by government agencies (no markup)
3. Preparation of required submittals
4. Three (3) bids or quotes shall be obtained by the CAC and submitted to the Division for approval for items not listed in the RGD-002. If fewer than three (3) bids or quotes cannot be obtained, a justification shall be submitted with the bids or quotes received for Division approval.

**V. 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 (not TRBCA Closure 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 over-excavated contaminated native material
8. Replacement of asphalt or concrete
9. Replacement, repair, maintenance, removal, and retrofitting of any UST system
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**

1. Well abandonment permit (Shelby County) – Task 5.1
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 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. Personal protective equipment (chemical resistant suits, respirators, etc.)
  - m. Postage or express shipping of maps, photographs, reports, etc.
  - n. Property title searches
  - o. Telephone charges not associated with a telemetry system
  - p. Video camcorder
  - q. Markup on sales tax
  - r. Markup on freight/shipping
  - s. Markup on mobilization/demobilization
  - t. Markup on lodging and per diem
  - u. Markup on subcontractor reports
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 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. Personal 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. Telephone charges not associated with a telemetry system
  - s. Video camcorder
  - t. Markup on sales tax
  - u. Markup on freight/shipping
  - v. Markup on mobilization/demobilization
  - w. Markup on lodging and per diem
  - x. Markup on subcontractor reports
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 300 miles per round trip
  - c. Airfare and/or car rentals
  - d. Company car and/or truck rental
  - e. Markup on per diem and lodging
13. Underground locator services (unless approved by the Division in writing)

## VI. 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<sup>®</sup> cost task 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/GIS Operator:** This person must have the ability to develop scaled maps, engineering drawings, and contour maps using CAD computer programming software. The CAD/GIS computer operator must have a degree in information systems analysis, CAD computer programming, or possess applicable 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](mailto:ust.reimbursement@tn.gov).

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

**Environmental Specialist:** This person must have a Bachelor of Arts (BA), 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 and have at least one (1) year of UST related work and/or hazardous substance remedial activities.

**General Laborer:** This person must have current health and safety training. 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 current health and safety training, have completed appropriate 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 current health and safety training, have completed appropriate 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**

<b>Field Staff Description</b>	<b>Reimbursable Tasks</b>
CAS Specialist	CAS startup, routine/non-routine O&M, CAS deactivation and/or reactivation
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 and soil gas survey
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 and soil gas survey
Senior Environmental Specialist	Assessment of remedial activities, sampling (soil, water, etc.) through the initial investigation phase, compiling/analyzing environmental data, overseeing of MEME events and soil gas survey
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; of a non-state owned CAS), CAS deactivation, reactivation and/or decommissioning
Technician	Tilling/disking, gauging, installation/replacements of booms/pads, site restoration, assist with O&M (with Division project manager approval), CAS deactivation, reactivation and/or decommissioning

**C. Table of Staff Rates**

<b>Field Operations Staff</b>	<b>Maximum Hourly Rate</b>
Surveyor	\$75.00
Senior technician	\$63.00
Technician	\$52.00
Heavy equipment operator, Truck driver	\$50.00
General laborer	\$40.00

<b>Technical Staff</b>	<b>Maximum Hourly Rate</b>
Project Manager	\$109.00
Engineer, Geologist, Senior Environmental Specialist	\$92.00
Environmental Specialist	\$70.00
CAS Specialist	\$75.00
CAD/GIS Operator	\$58.00

<b>Administrative Staff</b>	<b>Maximum Hourly Rate</b>
Secretary	\$40.00

**VII. 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. Equipment mobilization are subdivided into three categories based on size/weight.

<b>Excavating Equipment</b>	<b>Per Day</b>	<b>Per Week</b>
Skid steer loader (bobcat – Category 1 mobilization)	\$389.00	\$1,167.00
Pavement/concrete breaker for bobcat	\$200.00	\$600.00
Backhoe (all types – Category 1 mobilization)	\$430.00	\$1,290.00
Pavement/concrete breaker for backhoe	\$289.00	\$867.00
Mini Excavator (Category 1 mobilization)	\$427.00	\$1,281.00
Trackhoe <50K lbs (Category 2 mobilization)	\$958.00	\$2,874.00
Trackhoe ≥50K lbs (Category 3 mobilization) – Division approval required	\$1,220.00	\$3,660.00
Field Tractor and attachment	590.00	1,770.00
Dump Trailer (Mobilization charges do not apply)	\$159.00	\$477.00
Dump truck 15 yd <sup>3</sup> and larger (w/o driver – mobilization charges do not apply)	\$78.00/hr	

<b>Mobilization and Demobilization (Excavation Equipment)</b>	<b>Rate</b>
Category 1 Excavation equipment (cost/mile) Skid steer loader (Minimum of \$150) (Maximum 300 miles round trip)	\$1.50   \$450.00
Category 2 Excavation equipment (cost/mile) Backhoe Mini excavator >7K lbs Trackhoe <50K lbs (Minimum of \$270) (Maximum 300 miles round trip)	\$2.70     \$810.00
Category 3 Excavation equipment (3 bids required) Trackhoe ≥50K lbs (Maximum 300 miles round trip)	At approved cost

<b>Support Equipment</b>	<b>Per Day</b>	<b>Per Week</b>
5 kW generator	\$100.00	\$300.00
50 kW generator	\$406.00	\$1,218.00
Explosion proof evacuation fan	\$86.00	\$258.00

<b>Miscellaneous Tools And Supplies</b>	<b>Per Day</b>	<b>Per Week</b>
Air jackhammer with bit and hose	\$71.00	
Electric jackhammer with bit	\$90.00	
Slide hammer and vapor probe kit	\$153.00	
Hammer drill and vapor probe kit	\$224.00	
Crane (17-ton skyhook)	\$1,028.00	
Plate compactor/tamper	\$92.00	\$276.00
Utility trailer	\$29.00	
Compressor 100 CFM, gas powered	\$127.00	
Compressor 175 CFM, gas powered	\$199.00	
Concrete saw (Gas) with blade	\$131.00	
Hydrocarbon skimmer pump (self-leveling)	\$46.00	\$138.00
Submersible well development pump (electric) 2-inch diameter	\$53.00	
Self-priming centrifugal pump (trash)	\$81.00	
Poly Tank (Tasks 4.4.a.11 and 4.4.d.8 only)	\$50.00	
500 gallons of water (Tasks 4.4.a.11 and 4.4.d.8 only)	\$25.00	

Portable Field Instruments	Per Day	Per Week
Combustible gas indicator/with oxygen meter*	\$50.00	\$150.00
OVD – PID or FID*	\$50.00	\$150.00
Multi-gas meter (O <sub>2</sub> , CO <sub>2</sub> , CH <sub>4</sub> ) *	\$50.00	\$150.00
Oil/water interface probe*	\$10.00	
Turbidity meter*	\$10.00	
Electronic water-level indicator*	\$10.00	
Vacuum Gauge/Manometer – air*	\$5.00	
pH meter*	\$10.00	
Velocity Meter - air*	\$10.00	
Digital or dial vacuum gauge*	\$5.00	
2K to 3K PSI pressure washer*	\$20.00	
Flow regulator (air samples only)	\$81.00	
SUMMA Canister	\$69.00	

\* - considered tools of the trade

Equipment/Supplies	Unit Cost
Disposable bailer	\$10.00
Petroleum absorbent booms (8 inch diameter, 10 ft. sections)	\$55.00
Petroleum absorbent pads (15" x 20", Light weight, 100 count)	\$70.00
Petroleum absorbent pads (15" x 20", Heavy weight, 100 count)	\$88.00
Petroleum absorbent sweeps (18" x 100' x 3/8")	\$108.00
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.)	\$25.00
0.45 micron water filter (PAHs and metals sampling)	\$20.00
Safety cones, barricades, caution tape	\$10.00/day

## B. Vehicles

Reimbursement is only for mileage within Tennessee with a **maximum 300** 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	\$188.00

\*Mileage will 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:

[https://www.tn.gov/content/dam/tn/finance/documents/fa\\_policies/policy8.pdf](https://www.tn.gov/content/dam/tn/finance/documents/fa_policies/policy8.pdf)

Mobilization and Demobilization	Rate
Vacuum truck with driver (cost/mile) (Minimum of \$270.00)	\$2.70
(Maximum 300 miles round trip)	\$810.00

**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 applicable cleanup level (e.g., ISL, RBCL, SSCL) 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 (additional transportation costs will not be reimbursed, actual dump truck and driver time will be reimbursed):**

Treatment	Per Ton
Land farming (must provide cost comparison with landfill for approval from case manager)	cost + 5%
Landfill	cost + 5%

**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 ISLs 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 includes transportation):**

Contents	Per Gallon
Water	\$0.94

**E. Drum Disposal of Contaminated Soil and/or Water (includes cost of drum)**

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 SiteSpecific Cleanup Levels will not be reimbursed.** This cost includes drum, disposal, and transport.

Contents	Per Drum
Water, soil, used booms, pads, etc.	\$200.00



**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, sand, bentonite, cement, 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:**

<b>Drilling Method and Equipment</b>	<b>Rate</b>
Auger rig/core rig/wash rotary rig/air rotary rig (cost per mile) (Minimum of \$500.00) (Maximum 300 miles round trip)	\$5.00  \$1,500.00
Auger drilling [cost/foot including two (2) man crew] Two (2) inch wells Four (4) inch wells	\$42.00 \$52.00
Air rotary drilling [cost/foot including two (2) man crew] Two (2) inch wells Four (4) inch wells	\$55.00 \$65.00
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	\$73.00 \$87.00
Well abandonment (includes licensed well driller, equipment, and supplies) (cost/foot)	\$13.00
Borings (cost/foot)	\$18.00
Split spoon sampling (ASTM-D1586) [cost/two (2) foot sampler]	\$24.00
Continuous sampling [cost/five (5) foot sampler]	\$55.00
Decontamination of rig and tools (cost/boring includes steam cleaner rental)	\$150.00
Standby time not due to the driller (cost/day with maximum of 1 hour)	\$150.00
Third man for drilling (cost/hour)	\$40.00
Watertight bolt down manhole (one per well - all sizes)	\$78.00
Centralizers-stainless steel (cost/per unit) Two (2) inch Four (4) inch	\$30.00 \$32.00
Concrete penetration (cost/hole)	\$114.00
Removal of manhole cover and well pad (cost/well)	\$150.00
Recovery well vaults (2'x2'x2') (must actually be removed)	\$345.00
1-ton truck with heavy trailer (cost/mile not to exceed 300 miles round trip - only applicable to days where mobilization charges do not apply)	\$1.50
Freight charges for well supplies - casing, screen, bentonite, etc.	Actual cost

<b>Direct Push Technology and Equipment</b>	<b>Rate</b>
Mobilization/demobilization (cost per mile) (Minimum of \$270.00) (Maximum 300 miles round trip)	\$2.70  \$810.00
Direct push [cost/day including a two (2) man crew]	\$1,900.00
Direct push [cost/half-day including a two (2) man crew]	\$1,425.00
Soil sample liners (cost/unit)	\$7.00
Soil gas survey sample train using nylon tubing (cost/sample train)	\$33.00
Expendable probe points (cost/unit)	\$13.00
Expendable soil gas probe points (cost/unit)	\$25.00
Temporary well (cost/foot)	\$6.00
Bentonite (cost/50-lb bag)	\$17.00

**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, DRO 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:**

<b>Soil Samples (Includes Markup)</b>		<b>Maximum Rate</b>
<b>Chemical of Concern</b>	<b>Method</b>	
BTEX, MtBE, Naphthalene	Method 8260B	\$86.00
BTEX, MtBE, Naphthalene, EDB, EDC	Method 8260B	\$136.00
TCLP	Method 1311	\$479.00

<b>Water Samples (Includes Markup)</b>		<b>Maximum Rate</b>
<b>Chemical of Concern</b>	<b>Method</b>	
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	\$150.00
Metals (Cd, Cr, Pb, Ag, Zn)	Method 6010	\$125.00
Lead (Pb) only	Method 6010	\$25.00
Fe, Mn for groundwater classification	Method 6010	\$50.00
<b>Discharge Samples per Permit (Includes Markup)</b>		
Oil & Grease	Method 1664 Revision B	\$58.00
Total suspended solids	Method 160.2	\$21.00
Diesel Range Organics (DRO)	Method 8015	\$85.00
Gasoline Range Organics (GRO)	Method 8015	\$85.00
Extractable Petroleum Hydrocarbons (EPH)	TN EPH	\$85.00
Metals (Cd, Cr, Pb) only	Method 6010	\$75.00
LC50 Toxicity Test	Method LC50	\$1,175.00
IC25 Toxicity Test	Method IC25	\$1,760.00

<b>Air Samples (Includes Markup)</b>		<b>Maximum Rate</b>
<b>Chemical of Concern</b>	<b>Method</b>	
BTEX, MtBE, Naphthalene, Isopropyl Alcohol	Method TO-15	\$295.00
Percent O <sub>2</sub> and CO <sub>2</sub> (must be analyzed concurrently from SUMMA <sup>®</sup> sample above)	Method ASTM 1945/1946/ D5314 or EPA Method 3C	\$110.00

#### 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. Lodging and per diem will 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: [https://www.tn.gov/content/dam/tn/finance/documents/fa\\_policies/policy8.pdf](https://www.tn.gov/content/dam/tn/finance/documents/fa_policies/policy8.pdf).

<b>County</b>	<b>Maximum Lodging Costs</b>	<b>Maximum Meals &amp; Incidental Costs</b>
Davidson (Nashville)		
September to November	\$234.00	\$61.00
December to January	\$187.00	\$61.00
February to June	\$230.00	\$61.00
July to August	\$207.00	\$61.00
Shelby (Memphis)	\$123.00	\$61.00
Williamson (Brentwood/Franklin)	\$125.00	\$61.00
Hamilton (Chattanooga)	\$109.00	\$61.00
Knox (Knoxville)	\$102.00	\$56.00
All other counties	\$96.00	\$55.00

<b>Professional Travel Time</b>	<b>Maximum Hours</b>
One-way per trip based on professional staff description and rate	3
Round trip based on professional staff description and rate	6

**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 allow 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.). Any other time increments will not be properly calculated by the reimbursement database.

## VIII. TASK DESCRIPTIONS

### 1.0 UST SYSTEM CLOSURE PROCESS

#### TASK 1.1 Over-excavation

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

This task 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 task includes personnel time to coordinate this task and to manage laboratory services (i.e., Chain of Custody, sample preparation, sample quality assurance/quality control (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 over-excavation shall not exceed three (3) workdays (10-hour workday) without prior approval from the Division project manager.

**Personnel cost is hourly, not to exceed \$2,429.00 per day.**

**Maximum equipment cost is \$2,283.00 per day.**

##### 1.1.b Cost for mobilization and demobilization of heavy equipment

This task will include mobilization and demobilization of the trackhoe or backhoe to and from the site.

**Maximum cost for category 1 equipment is \$450.00 (\$1.50/mile).**

**Maximum cost for category 2 equipment is \$810.00 (\$2.70/mile).**

**Category 3 equipment mobilization requires submission of 3 bids and prior Division approval.**

##### 1.1.c Cost for loading stockpiled contaminated soil for disposal

This task 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 (10-hour workday).

**Personnel cost is hourly not to exceed \$2,820.00 per day.**

**Maximum equipment cost is \$3,038.00 per day.**

**1.1.d Cost for laboratory services**

This task 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. The CAC must submit the laboratory invoice and completed chain of custody form with the reimbursement request. **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 CAC 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 over-excavation**

This task 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 over-excavation**

This task 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 Division project manager.

**Personnel cost is hourly not to exceed \$2,820.00 per day.**

**Maximum equipment cost is \$3,013.00 per day.**

## 1.0 UST SYSTEM CLOSURE PROCESS

### Task 1.2 Groundwater/Free Product Removal

#### 1.2.a **Cost for removing contaminated groundwater and/or free product using a vacuum/pump truck**

This task 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 groundwater and/or free product from a tank excavation, pit, trench, vault, etc. **Groundwater contamination as defined by the applicable Closure Guidelines must be documented by an approved state of Tennessee laboratory method.** This task does not include the cost of laboratory analyses of samples collected. Routine groundwater/free product removal shall not exceed ten (10) hours without prior Division approval.

**Maximum cost is \$280.00 per hour (or \$2,800.00 per day).**

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

This task will include mobilization and demobilization of the vacuum truck or pump truck to and from site for groundwater/free product removal.

**Maximum cost is \$810.00 (\$2.70/mile).**

#### 1.2.c **Cost for inspecting/sampling tank pit for groundwater recharge**

This task will include any personnel time and all sampling supplies to inspect and/or collect a groundwater sample for laboratory analysis from a tank pit, utility trench, or interceptor trench. This task 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 \$171.00 per event.**

#### 1.2.d **Cost for laboratory services**

This task will include any groundwater laboratory analysis not associated with a boring or monitoring well installation. The CAC must submit the laboratory invoice and completed chain of custody form with the reimbursement request. **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 CAC 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 groundwater contaminated with petroleum product**

This task consists of disposal of free product and/or groundwater contaminated with petroleum product removed from a tank pit, trench, etc. **The volume of free product and/or groundwater contaminated with petroleum product requested for reimbursement must agree with the volume documented in the Permanent Closure Report.** Groundwater 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 \$0.94 per gallon.**



## 1.0 UST SYSTEM CLOSURE PROCESS

### Task 1.3 Soil Treatment/Disposal

#### Task 1.3.a Soil Treatment by Aeration

**(This method of soil treatment is only allowed for gasoline impacted soil.)**

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

This task will include either on-site or off-site natural attenuation of petroleum-contaminated soil by aeration. This method of soil treatment is only allowed for gasoline impacted soil. This task 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. \$2,790.00 per closure event and/or approved application, plus applicable equipment mobilization/demobilization charges.**

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

This task 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 \$790.00.**

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

This task 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 four (4) hours on site technician time. Cost includes all personnel time, replacement of plastic sheeting, straw bales, etc. shall be purchased as needed and receipts provided.  
**Maximum personnel cost is \$208.00 per event.**

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

This task will include sampling the treated soil in accordance with Technical Guidance Document (TGD)-009 and the approved application. This task

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.

**This is a lump sum task with a maximum cost of \$201.00 per event.**

#### **1.3.a.5 Cost for laboratory services**

This task will include any soil laboratory analysis from a treated stockpile. The CAC must submit the laboratory invoice and completed chain of custody form with the reimbursement request. **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 CAC 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 task 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. \$218.00.**

##### **1.3.b.2 Cost for hauling petroleum contaminated soil**

This task will include all necessary personnel and equipment, to haul 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. Trucks filled to their maximum legal capacity.

**Maximum cost is \$128.00 per hour for each truck and driver for a maximum of \$1,280.00 per day for each truck and driver.**

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

This task 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 task 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 includes drum, disposal, and transport.

**Maximum cost is \$200.00 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 task will include all necessary contracting and scheduling for disposal of petroleum contaminated soil at a permitted land farm facility. Work not to exceed two (2) hours.

**Maximum cost is \$218.00.**

##### 1.3.c.2 Cost for hauling petroleum contaminated soil

This task will include all necessary personnel and equipment, to haul soil to a permitted landfarming facility. Fill the trucks to their maximum legal capacity.

**Maximum cost is \$128.00 per hour for each truck and driver for a maximum of \$1,280.00 per day for each truck and driver.**

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

This task will include all necessary personnel and labor, equipment, and supplies for landfarming petroleum contaminated soil at a permitted land farm. **The volume of the contaminated material requested for reimbursement must agree with the amount of the contaminated area during the closure as reported in the Permanent Closure Report. 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. Must provide cost comparison with landfill for approval from case manager.**

## 1.0 UST SYSTEM CLOSURE PROCESS

### Task 1.4 TRBCA Closure Process

#### 1.4.a Cost for scheduling drilling event

This task 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 task shall include the scheduling of field activities associated with the drilling event, including locating all underground utilities. This task shall also include all personnel cost necessary to acquire all well permits from the appropriate agency.

**Maximum cost is \$327.00.**

#### 1.4.b Cost for supervision of field work

This task shall include oversight of field activities as well as office support and coordination. This task 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 task, the CAC 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 \$1,114.00.**

#### 1.4.c Cost for mobilization/demobilization of drill rig

This task will include mobilization and demobilization of the drill rig, support vehicles, steam cleaner, grout plant, trailers, and crew to and from the site. Mobilization/demobilization is not to exceed 300 miles round trip. **Maximum cost is limited to \$5.00 per mile (\$500 minimum) not to exceed a total cost of \$1,500.00.**

#### 1.4.d Cost for drilling

This task will include support vehicles, steam cleaner, grout plant, trailers, and crew. The CAC must submit the drilling invoice with the reimbursement request. All monitoring wells shall be installed and abandoned by a TN

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 CAC 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 task will include all necessary personnel (TN licensed geologist, TN licensed engineer, senior environmental specialist, environmental specialist, or senior technician), labor, equipment and supplies to properly develop wells in accordance with the EAG twenty-four (24) hours after installation, does not include drum costs.

**Maximum cost per day is \$402.00.**

**1.4.f Cost for groundwater sampling**

This task includes all personnel time to collect static water level measurements, calculate purge volumes, sample wells of any depth or diameter, and sampling of purge water for disposal. This task also 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). Does not include drum costs.

**This is a lump sum task with a maximum cost of \$298.50 for one (1) well.**

**1.4.g Cost for laboratory services**

This task includes laboratory costs associated with all sampling of soil and/or water. The CAC must submit the laboratory invoice and completed chain of custody form with the reimbursement request. **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 CAC uses their own lab. Transportation/shipping costs to the laboratory should be included in this task.

**Maximum cost shall not exceed the reasonable reimbursable rates for the applicable laboratory method established in Reference 1.**

**1.4.h Cost for water use and Karst survey**

This task includes preparation of a water use and Karst survey in accordance with the EAG. This task includes all field work, telephone contacts and

records search. This task includes the completion of the Water Use Survey Sheets. **This task is not repeatable unless requested/approved by the Division.**

**Maximum cost is \$1,040.00.**

**1.4.i Cost for disposal of free product and/or groundwater contaminated with petroleum product**

This task will include all necessary personnel and labor, equipment and supplies to properly dispose of free product and/or groundwater contaminated with petroleum product removed from a monitoring well. Groundwater contamination must be documented by an approved state of Tennessee laboratory method. This cost includes cost of drum, disposal, and transport.

**Maximum cost is \$200.00 per drum.**

**1.4.j Cost for disposal of petroleum contaminated soil**

This task 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 task 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 includes cost of drum, disposal, and transport.

**Maximum cost is \$200.00 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 task 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 task will include any project coordination time including cost estimates, equipment procurement/rental, and meeting with the responsible party and state regulators.

**Maximum cost is \$713.00.**

#### **2.1.b Cost for mobilization and demobilization of heavy equipment**

This task will include mobilization and demobilization of the trackhoe or backhoe to and from the site.

**Maximum cost is limited to \$2.70 per mile not to exceed \$810.00.**

#### **2.1.c Cost for interceptor/recovery trench installation**

This task 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 workday) without prior approval from the Division project manager.

**Personnel cost is hourly not to exceed \$2,320.00 per day.**

**Maximum equipment cost is \$2,594.00 per day.**

#### **2.1.d Cost for loading stockpiled contaminated soil for disposal**

This task 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 workday).

**Personnel cost is hourly not to exceed \$2,320.00 per day.**

**Maximum equipment cost is \$2,238.00 per day.**



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

This task 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 trench. 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 task 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 cost of the bid plus 15% markup. Submit bid and applicable change orders to the Division and obtain approval in writing.**

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

This task will include all personnel and labor, equipment and supplies to properly restore trench location to a condition comparable to the original condition. **Maximum cost of the bid plus 15% markup. Submit bid and applicable change orders to the Division and obtain approval in writing.**

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

This task 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. Seed, mulch, and straw shall be purchased as needed and receipts provided.  
**Personnel cost is hourly and not to exceed \$104.00.**

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

This task 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 Division project manager.  
**Personnel cost is hourly not to exceed \$2,820.00 per day.**  
**Maximum equipment cost is \$3,043.00 per day.**

## 2.0 HAZARD MANAGEMENT PROCESS

### **Task 2.2 Groundwater/Free Product Removal from an Interceptor/Recovery Trench (with Division approval only)**

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

This task 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 groundwater and/or free product from an interceptor/recovery trench installation. **Groundwater contamination must be documented by an approved state of Tennessee laboratory method.** This task does not include the cost of laboratory analyses of samples collected. **Maximum cost is \$251.00 per hour (or \$2,510.00 per day).**

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

This task will include mobilization and demobilization of the vacuum truck or pump truck to and from site. **Maximum cost is limited to \$2.70 per mile, with up to \$810.00.**

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

This task will include any personnel time and sampling supplies to collect a groundwater sample for laboratory analysis during interceptor/recovery trench installation. This task 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 trench and/or two (2) per installation.** **Maximum cost is \$171.00 per event.**

#### **2.2.d Cost for laboratory services**

This task will include any groundwater laboratory analysis collected during interceptor/recovery trench installation. The CAC must submit the laboratory invoice and completed chain of custody form with the reimbursement request. 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 CAC 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/shipping costs to the laboratory should be included in this task. **Maximum number of samples is two (2) per trench and/or two (2) per installation.**

**2.2.e Cost for disposal of free product and/or groundwater contaminated with petroleum product**

This task consists of disposal of free product and/or groundwater contaminated with petroleum product removed from a tank pit, trench, etc. **The volume of free product and/or groundwater 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.** Groundwater contamination 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 \$0.94 per gallon.**

**2.2.f Cost for obtaining a temporary permit to POTW**

This task will include all personnel and labor to coordinate and prepare a permit application required by local POTW for temporary discharge of contaminated petroleum groundwater. **Maximum cost is based on the actual permit fee required per municipality plus a maximum of two (2) hours personnel time (not to exceed \$184.00).**

**2.2.g Cost for obtaining a groundwater sample collected to meet POTW discharge requirements**

This task will include all personnel and labor to collect a groundwater sample for laboratory analysis to meet/establish POTW discharge permit requirements. This task 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 sampling frequency and laboratory analytical requirements shall be in accordance with the approved discharge permit. Maximum number is one (1) sample per discharge. **This is a lump sum task with a maximum cost of \$88.00 per required sample.**

**2.2.h Cost for discharge to POTW**

This task will include all costs associated with the discharge of groundwater/free product under the approved POTW permit. **The amount**

**requested for reimbursement should agree with the volume (in gallons) reported as 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 task will include all necessary personnel and labor, equipment (such as gloves, bailers, twine, and oil-water interface probe), and labor (senior technician) to remove free product from a monitoring well or observation well and properly store when encountered. This task includes measurement and recording of groundwater 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 of \$579.00 per event.**

#### **2.3.b Cost for disposal of free product**

This task consists of transportation and disposal of contaminated petroleum product removed from a monitoring well or observation well. This cost includes drum, disposal, and transport.

**Maximum cost is \$200.00 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 task will consist of review of the existing site data, and coordination and scheduling the MEME event.

**Maximum cost is \$184.00 per event.**

#### 2.4.b Cost for mobilization and demobilization of vacuum truck

This task will include mobilization and demobilization of the vacuum truck or pump truck to and from site. Mobilization/demobilization is not to exceed 300 miles round trip.

**Maximum cost is limited to \$2.70 per mile for the vacuum or pump truck, not to exceed \$810.00.**

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

This task will include all personnel time for the supervision of one (1) complete 8-hour MEME event. This task includes one (1) field person to oversee MEME activities. This task includes, if not conducted by the MEME contractor, tabulating results (free product and groundwater 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, ensuring all readings by the MEME contractor is obtained, etc.

**Maximum cost is \$1,049.50.**

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

This task will include the setup and performance of one (1) 8-hour MEME event according to the approved application. This task will include personnel and equipment to perform one (1) eight (8) hour MEME event. Required equipment also includes instrumentation for measuring temperature, velocity, relative humidity, the concentration of emissions, the amount of product and water recovered. Cost includes two (2) hours allowed for set-up and shut down and eight (8) hours for the actual MEME event.

**Maximum cost is bid plus 15% markup. Submit as a lump sum bid and applicable change orders to the Division and obtain approval in writing.**

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

This task will include the setup and performance of one (1) 24-hour MEME event according to the approved application. This task will include personnel and equipment to perform one (1) twenty four hour MEME event. Required equipment also includes instrumentation for measuring temperature, velocity, relative humidity, and the concentration of emissions. Cost includes two (2) hours allowed for set-up and shut down and 24 hours for the actual MEME event.

**Maximum cost is bid plus 15% markup. Submit as a lump sum bid and applicable change orders to the Division and obtain approval in writing**

**2.4.f Cost for disposal of free product and/or groundwater contaminated with petroleum product**

This task consists of disposal of free product and/or groundwater contaminated with petroleum product removed during a MEME event. **The volume of free product and/or groundwater 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 \$0.94 per gallon.**

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

This task includes measurement and recording of groundwater depth and product thickness of each well after a free product recovery event. The intent of this task 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 \$313.50 per event.**

**2.4.h Cost for laboratory services**

This task includes laboratory costs associated with all sampling of influent groundwater. CAC must submit the laboratory invoice and chain of custody with the reimbursement request. 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 CAC 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 task will include all personnel time for the supervision of one (1) complete MEME event. This task includes one (1) field person to oversee 24-hour MEME activities, assemble the sample train and collect the influent water sample for a maximum of four (4) hours.

**Maximum cost is \$2,099.50.**



## 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 task 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 task includes all field materials used including absorbent booms, absorbent pads, polypropylene rope, steel fence posts, and field supplies.

**Maximum cost is \$333.00 per event.**

#### 2.5.b Cost for boom inspection and replacement

This task 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 \$283.00 per event.**

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

This task will include all personnel time for purchasing and delivery of required drums to store used booms and/or absorbent pads. This task does not include cost of drum. This task also includes properly sealing and labeling drums.

**Maximum cost is \$63.00.**

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

This task 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 drum, disposal, and transport.

**Maximum cost is \$ \$200.00 per drum.**

#### 2.5.e Cost for specifying and purchasing a passive skimmer

This task 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 one engineer, geologist, senior environmental specialist not to exceed two (2) hours. Prior written approval

from the Division project manager required. **Cost of skimmer system is not to exceed \$1,300.00/each.**  
**Maximum cost is \$1,484.00.**

**2.5.f Cost for installation of a passive skimmer**

This task 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 \$126.00.**

**2.5.g Cost for servicing a passive skimmer**

This task will include emptying free product and properly storing recovered product from surface water. This task 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 \$126.00.**

## 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 task 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 \$984.00.**

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

This task 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 task includes measurement and recording of groundwater depths and product thickness in each well.

**Work is not to exceed two (2) hours.**

**Maximum cost is \$126.00.**

#### 2.6.c Cost for servicing a passive skimmer

This task will include emptying free product and properly storing recovered product from a monitoring well. This task 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 \$126.00.**

## 2.0 HAZARD MANAGEMENT PROCESS

### Task 2.7 Impacted Drinking Water Management

#### 2.7.a Cost for temporary response activities

This task 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 task will include the cost to implement the Division approved Impacted Drinking Water Supply Permanent Response – Proposal (Task 6.5.c) 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 task 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 task also includes 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 task will include the cost to implement the Division approved Petroleum Vapor Impact Response - Proposal (Task 6.6.b) 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 task includes all personnel time necessary to secure permits and/or utility connections with federal, state, and/or local government agency requirements. **Maximum cost is \$184.00.**

### **3.0 RELEASE INVESTIGATION PROCESS**

#### **Task 3.1 Project Management**

##### **3.1.a Cost for initial project setup and review**

This task 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 task assumes client will provide CAC with all available information plus all reimbursement documentation. **This task is not repeatable per release. Maximum cost is \$706.00.**

##### **3.1.b Cost for site reconnaissance**

This task 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 task 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 task includes project manager oversight and staff level persons (or equal) to perform field work, telephone coordination with property owners and local city and state government agencies. This task includes data review, evaluation, and reporting (client, property owners, Division's files, etc.). If a previous CAC has already completed this task, then it should not be duplicated unless requested by the Division. **Maximum cost is \$977.00.**

##### **3.1.c Cost for offsite access (grant of access)**

This task 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 \$368.00 per agreement.**

##### **3.1.d Cost for pre-Corrective Action Plan meeting**

This task 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 or recovery 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) staff level persons (or equal) to schedule, plan, and attend the meeting.

**Maximum cost is \$1,581.00 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 task will include all necessary contracting and scheduling for a driller to perform all phases of drilling (i.e., soil borings, installation of monitoring wells, remedial wells, perform well development, boring abandonment, and various other drilling tasks as needed). This task shall include the scheduling of field activities associated with the drilling event. This task shall include scheduling and coordinating of underground utility location services. This task shall also include all personnel time necessary to acquire all well permits from the appropriate agency.

**Maximum allowable cost is \$327.00.**

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

This task will include mobilization and demobilization of the drill rig, support vehicles, steam cleaner, grout plant, trailers, and crew to and from the site. Mobilization/demobilization is not to exceed 300 miles round trip.

**Direct push unit: Maximum cost is limited to \$2.70 per mile not to exceed a total cost of \$810.00.**

**Auger and air rotary type drilling rig: Maximum cost is limited to \$5.00 per mile not to exceed a total cost of \$1,500.00.**

##### 3.3.c Cost for supervision of field work

This task will include oversight of field activities as well as office support and coordination. This task 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 task, the CAC 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 \$1,049.50.**

**3.3.d Cost for drilling**

This task will include support vehicles, steam cleaner, grout plant, trailers, and crew. All monitoring wells shall be installed by a TN licensed well driller. The CAC must submit the drilling invoice with the reimbursement request. 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 CAC 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 task will include all necessary personnel (TN licensed geologist, TN licensed engineer, senior environmental specialist, environmental specialist, or senior technician), labor, equipment and supplies to properly develop wells in accordance with the EAG twenty-four (24) hours after installation.

**Maximum cost per day is \$1,138.00.**

**3.3.f Cost for disposal of petroleum contaminated soil in drums (includes cost of drums)**

This task 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 drum, disposal, and transport.

**Maximum cost is \$200.00 per drum.**

### 3.0 RELEASE INVESTIGATION PROCESS

#### Task 3.4 Sampling

##### 3.4.a Cost for groundwater sampling

This task includes all personnel time, equipment, and sampling supplies to collect static fluid level measurements, calculate purge volumes, sample wells of any depth or diameter, and sampling of purge water for disposal. This task also 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).

**This is a lump sum task with a maximum cost of \$298.50 for one (1) well and \$136.00 per well for each additional well sampled.**

##### 3.4.b Cost for water supply well sampling

This task includes all personnel and sampling supplies to purge and sample a water supply well (i.e., indoor or outdoor spigot). This task includes all necessary equipment, personnel, and sampling supplies to perform well purging (by letting spigot run for an adequate time) followed by sampling. This task includes sampling of purge water for disposal. This task 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).

**This is a lump sum task with a maximum cost of \$151.00 for one (1) well and \$63.00 for each additional well sampled.**

##### 3.4.c Cost for surface water sampling

This task includes sampling of various types of surface waters (i.e., includes ponds, streams, creeks, etc.) to verify contamination. This task includes all necessary equipment, personnel, and sampling supplies to perform sampling. This task 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).

**This is a lump sum task with a maximum cost of \$151.00 for one (1) sample point and \$63.00 for each additional sample point.**

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

This task includes various types of soil sampling not associated with drilling activities, closure activities, stockpile sampling or over-excavation sampling. (i.e., includes surface sampling, etc.) to verify contamination. This task includes all necessary equipment, personnel, and sampling supplies to perform

sampling. This task 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).

**This is a lump sum task with a maximum cost of \$255.50 for one (1) sample point by hand augering and \$63.00 for each additional sample point.**

#### **3.4.e Cost for laboratory services**

This task includes laboratory costs associated with all sampling of soil and/or water. The CAC must submit the laboratory invoice and completed chain of custody form with the reimbursement request. **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 CAC 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 groundwater contaminated with petroleum product (includes cost of drum)**

This task consists of disposal of free product and/or groundwater contaminated with petroleum product removed from a monitoring well. Groundwater contamination must be documented by an approved state of Tennessee laboratory method. This cost is for drum, disposal, and transport. **Maximum cost is \$200.00 per drum.**

#### **3.4.g Cost for collection of thirty (30) day static groundwater levels**

This task 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 \$199.00.**

### **3.0 RELEASE INVESTIGATION PROCESS**

#### **Task 3.5 Receptor and Water Use Survey**

##### **3.5.a Cost for receptor survey**

This task includes preparation of a receptor survey in accordance with the EAG. This task includes all field work, telephone contacts and records search. This task includes the completion of the Water Use Survey Sheets. **This task is not repeatable unless requested/approved by the Division. Maximum cost is \$396.00.**

##### **3.5.b Cost for water use and Karst survey**

This task includes preparation of a water use and Karst survey in accordance with the EAG. This task includes all field work, telephone contacts and record searches. This task includes the completion of the Water Use Survey Sheets. **This task is not repeatable unless requested/approved by the Division. Maximum cost is \$1,040.00.**

### **3.0 RELEASE INVESTIGATION PROCESS**

#### **Task 3.6 Site Survey**

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

This task will include all personnel time to coordinate and schedule field activities associated with the survey event, and equipment to collect, and record all data required to complete an acceptable monitoring well location map. This task 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.

**This is a lump sum task with a maximum cost of \$1,007.00 for the initial four (4) wells and \$173.00 for each additional well.**

### **3.0 RELEASE INVESTIGATION PROCESS**

#### **Task 3.7 Vapor Monitoring**

##### **3.7.a Cost for vapor monitoring**

This task includes monitoring of various types of aboveground structures and subsurface structures (i.e., includes buildings, basements, crawl spaces, utility vaults, etc.) for petroleum vapors. This task includes all necessary equipment and personnel to coordinate and conduct this task. This task should be performed in conjunction with any monitoring or sampling task when personnel are already onsite and not performed as a separate event, unless otherwise directed by the Division.

**Maximum cost is \$176.00 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 task 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 task will include the scheduling of field activities associated with the soil gas survey event. This task shall include scheduling and coordinating of underground utility location services.

**Maximum allowable cost is \$327.00.**

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

This task will include mobilization and demobilization of the drill rig, support vehicles, steam cleaner, grout plant, trailers, and crew to and from the site. Mobilization/demobilization is not to exceed 300 miles round trip.

**Maximum cost is limited to \$2.70 per mile not to exceed a total cost of \$810.00.**

###### **3.8.a.3 Cost for supervision of field work using a direct push technology (4 sample points or less)**

This task will include oversight of field activities as well as office support and coordination. This task 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 task 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 \$1,701.00.**

###### **3.8.a.4 Cost for supervision of field work using a direct push technology (5 or more sample points)**

This task will include oversight of field activities as well as office support and coordination. This task 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 task, 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 \$2,985.00 (10 hours).**



### **3.8.a.5 Cost for drilling using direct push technology (4 points or less)**

This task will include support vehicles, steam cleaner, trailers, and a two (2) person crew. The CAC must submit the drilling invoice with the reimbursement request. 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 CAC uses their own driller. Maximum allowable cost per half day is \$1,542.00.**

### **3.8.a.6 Cost for drilling using direct push technology (5 sample points or more)**

This task will include support vehicles, steam cleaner, trailers, and a two (2) person crew. The CAC must submit the drilling invoice with the reimbursement request. 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 CAC uses their own driller. Maximum allowable cost per full day is \$2,117.00.**

### **3.8.a.7 Cost for laboratory services**

This task includes laboratory costs associated with all air or soil gas sampling. The CAC must submit the laboratory invoice and completed chain of custody form with the reimbursement request. **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 CAC uses their own lab. Transportation costs to the laboratory should be included in this task.**

### 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 task 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 task will include the scheduling of field activities associated with the soil gas survey event. This task will include locating all underground utilities.

**Maximum allowable cost is \$327.00.**

##### 3.8.b.2 Cost for field work using a hammer drill or slide hammer (4 sample points or less)

This task will include oversight of field activities as well as office and field support and coordination. This task 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 task, the CAC is required to complete all field forms and collect all necessary samples.

**Maximum allowable cost per half day is \$ 2,447.00 plus shipping.**

##### 3.8.b.3 Cost for field work using a hammer drill or slide hammer (5 or more sample points)

This task will include oversight of field activities as well as office and field support and coordination. This task 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 task, the CAC is required to complete all field forms and collect all necessary samples.

**Maximum allowable cost per full day is \$4,083.00 plus shipping.**

##### 3.8.b.4 Cost for laboratory services

This task includes laboratory costs associated with all air or soil gas sampling. The CAC must submit the laboratory invoice and completed chain of custody form with the reimbursement request. **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 CAC uses their own lab. Transportation costs to the laboratory should be included in this task.**

### 3.0 RELEASE INVESTIGATION PROCESS

#### Task 3.9 Advanced Site Characterization

##### Task 3.9.a Advanced Site Characterization Technologies

###### 3.9.a.1 Cost for scheduling approved site characterization technologies

This task will include all necessary contracting and scheduling to perform all phases of approved site characterization technologies. This task shall include the scheduling of field activities associated with the approved site characterization technologies. This task includes having the Tennessee 811 System locate all underground utilities. This task shall also include all personnel time necessary to acquire any required permits from the appropriate agency.

**Maximum allowable cost is \$327.00.**

###### 3.9.a.2 Cost for private utility location

This task will include the cost equal to the cost of the approved bid and change orders if applicable, submitted to the Division and approved in writing. Three bids are required, and the lowest bid is to be chosen unless approved by the Division in writing. Only one private utility location is allowed for each release unless approved by the Division in writing.

**Maximum cost is equal to the cost of the bid, and change orders if applicable, plus a 15% markup, submitted to the Division and approved in writing.**

###### 3.9.a.3 Cost for mobilization/demobilization of drill rig

**This task only applies if the advanced site characterization technologies sub-contractor is not supplying the drill rig.** This task will include mobilization and demobilization of an appropriate drilling rig, support vehicles, steam cleaner, grout plant, trailers, and crew required to complete the approved advanced site characterization technologies to and from the site. Mobilization/demobilization is not to exceed 300 miles round trip.

**Direct push unit: maximum cost is limited to \$2.70 per mile not to exceed a total cost of \$810.00.**

**Auger and air rotary type drilling rig: maximum cost is limited to \$5.00 per mile not to exceed a total cost of \$1,500.00.**

#### **3.9.a.4 Cost for drilling**

**This task only applies if the advanced site characterization technologies sub-contractor is not supplying the drill rig.** This task will include the time and equipment required to advance the advanced site characterization technologies tools and includes support vehicles, trailers, and 2-person crew. The CAC must submit the drilling invoice with the reimbursement request. **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 CAC uses their own drill rig.**

#### **3.9.a.5 Cost for mobilization/demobilization of approved advanced site characterization technologies equipment**

This task will include mobilization and demobilization of advanced site characterization technologies equipment to and from the site. The cost is equal to the cost of the approved bid and change orders if applicable, submitted to the Division and approved in writing.

**Maximum cost is equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing. No markup will be reimbursed.**

#### **3.9.a.6 Cost to conduct advanced site characterization technologies**

This task will include the cost to conduct approved advanced site characterization technologies.

**Maximum cost is equal to the cost of the bid, and change orders if applicable, plus a 5% markup, submitted to the Division and approved in writing.**

#### **3.9.a.7 Cost for supervision of advanced site characterization technologies**

This task will include oversight of field activities as well as office support and coordination. This task 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. Supervisory time should not exceed drilling time.

**Maximum allowable cost per day is \$974.50.**

### **3.9.a.8 Cost of supervision of drilling/sampling**

This task will include oversight of field activities as well as office support and coordination. This task 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 task, the CAC 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 \$1,049.50.**

### **3.9.a.9 Cost for well development**

This task will include all necessary personnel (TN licensed geologist, TN licensed engineer, senior environmental specialist, environmental specialist, or senior technician), labor, equipment and supplies to properly develop wells in accordance with the EAG twenty-four (24) hours after installation.

**Maximum cost per day is \$1,138.00.**

### **3.9.a.10 Cost for groundwater sampling**

This task includes all personnel time to collect static water level measurements, calculate purge volumes, sample wells of any depth or diameter, and sampling of purge water for disposal. This task also 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).

**This is a lump sum task with a maximum cost of \$298.50 for one (1) well and \$136.00 per well for each additional well sampled.**

### **3.9.a.11 Cost of soil/groundwater sampling laboratory services**

This task includes laboratory costs associated with soil/groundwater sampling. The CAC must submit the laboratory invoice and completed chain of custody form with the reimbursement request. **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 CAC 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.**

**3.9.a.12 Cost for disposal of petroleum contaminated soil/water in drums**

This task will include all necessary personnel, labor, equipment and supplies to properly dispose petroleum contaminated soil/water in drums at a permitted disposal facility. This cost is for drum, disposal, and transport.

**Maximum cost is \$200.00 per drum.**

## 4.0 RISK MANAGEMENT AND CORRECTIVE ACTION PROCESS

### Task 4.1 Risk Reduction

#### 4.1.a Cost for risk reduction implementation

This task 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 task 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, plus 15% markup 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 task 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 400-45-09-.16. This task includes field activities and supervision, project scheduling and oversight.

**Maximum cost is \$688.00 per event.**

#### 4.1.d Cost for private water supply well abandonment

This task 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 400-45-09-.16. All private water supply wells shall be installed and abandoned by a licensed well driller. The CAC must submit the drilling invoice with the reimbursement request. 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 CAC uses their own driller.**

**Maximum cost is not to exceed \$13.00 per foot.**



## **4.0 RISK MANAGEMENT AND CORRECTIVE ACTION PROCESS**

### **Task 4.2 Institutional Controls**

#### **4.2.a Cost for institutional control implementation**

**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**

**Maximum cost is equal to the cost of the bid, plus 5% markup, 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 task 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 \$92.00. 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 task includes all personnel time necessary to secure permits and/or utility connections with federal, state, and/or local government agency requirements. **Maximum cost is \$184.00.**

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

This task includes all personnel time to coordinate, schedule and oversee delivery of the corrective action system. Cost includes crane rental with operator or forklift for off-loading.

**Maximum cost is \$1,488.00.**

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

This task 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 task 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 \$82.00 or \$94.00 / 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 task 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.

**This is a lump sum task with a maximum cost of \$1,478.00/wellhead**

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

This task 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.

**This is a lump sum task with a maximum cost for the first extraction well connection of \$421.00. and a maximum cost for each additional extraction well/contingent line connection of \$127.00.**

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

This task 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.

**This is a lump sum task with a maximum cost of \$2,216.00 per pad installation.**

**Maximum cost for bollard installations is \$230.00 each up to \$2,760.00 for 12.**

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

This task will include mobilization and demobilization of any heavy equipment to and from the site for excavation and corrective action system off-loading from the delivery truck.

**Maximum cost for category 1 equipment is limited to \$450.00 (\$1.50/mile).**

**Maximum cost for category 2 equipment is \$810.00 (\$2.70/mile).**

**Category 3 equipment mobilization requires submission of 3 bids and prior Division approval.**

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

This task 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 either \$24 or \$30 / linear foot.**

#### **4.4.a.11 Cost for wet test of system**

This task 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 \$1,474.00 per wet test.**

#### **4.4.a.12 Cost for electrical service installation**

This task will include the cost of the bid by the electric service provider, for a licensed electrician to make final connections, and change order(s) if applicable, approved in writing by the Division.

**This task will include the cost of the bid, and change order(s) if applicable, approved in writing by the Division.**

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

This task 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 (4.4.a.5 through 4.4.a.8 and 4.4.a.10). 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 (e.g., 1.3.b.2 transportation to a landfill and 1.3.b.3 landfill costs with**

**maximum 5% markup) or 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.b Corrective Action System Operation and Maintenance**

##### **4.4.b.1 Cost for routine operation and maintenance**

This task 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 Division project 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 not limited to, tabulating gauge and meter readings, inspecting for and repairing leaks (including removing any standing water/product/oil), noting 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 Division project manager. In the month that Annual O&M is performed, monthly O&M should not be performed.

**Maximum cost is \$1,175.50 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 task will include a nonscheduled site visit as a result of a system shutdown or failure. This task includes all personnel and equipment to perform the tasks, troubleshooting, and repairing of the system and completing the Division provided field forms (CASRL and/or CASDR). Office coordination and scheduling time is included in the daily price rate. Only the actual time spent onsite for the CAS Specialist is to be reimbursed. This task will only be reimbursed if the Division project manager is notified no later than one (1) working day after any non-routine field activity after the system shutdown or failure.

**Maximum cost is \$1,043.00 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 task 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 \$1,581.00 per meeting.**

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

This task 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. This task shall be billed in conjunction with 4.4.b.5.

**Maximum cost is \$80.00 per month.**



#### **4.4.b.5 Cost for charges for utility service**

This task 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. This task shall be billed in conjunction with 4.4.b.4.

**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 task 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 Division project manager.** Operation and/or maintenance shall not exceed one (1) workday (maximum 10-hour workday) without prior approval from the Division project manager. 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 Division project manager.

**Maximum cost is \$520.00 per day.**

#### **4.4.b.7 Cost for review of telemetry report**

This task includes all personnel time necessary to review and interpret all telemetry alarms, data and reports associated with the corrective action system. This includes remotely starting the CAS, when necessary.

**Maximum cost is \$218.00 per month.**

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

This task 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 Division project manager. 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 annual routine O&M conducted on a state owned system shall be performed by a CAS Specialist and technician. A separate routine O&M event during the same month will not be reimbursed.

**Maximum cost is \$1,598.50 per day plus the cost of the annual O&M kit from the system manufacturer (at cost plus a 15% markup and shipping).**

## 4.0 RISK MANAGEMENT AND CORRECTIVE ACTION PROCESS

### Task 4.4 Corrective Action

#### Task 4.4.c Corrective Action Sampling

##### 4.4.c.1 Cost for groundwater sampling

This task includes all personnel time to collect static water level measurements, calculate purge volumes, sample wells of any depth or diameter, and sampling of purge water for disposal. This task also 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). The schedule for groundwater 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.

**This is a lump sum Task with a maximum cost of \$298.50 for one (1) well and \$136.00 per well for each additional well sampled.**

##### 4.4.c.2 Cost for water supply well sampling

This task includes all personnel and sampling supplies to purge and sample a water supply well and sample purge water for disposal. The water supply well is to be purged by running water through a spigot for an adequate time prior to sampling. This task also 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).

**This is a lump sum Task with maximum cost of \$88.00 for one (1) well and \$63.00 for each additional well sampled.**

##### 4.4.c.3 Cost for surface water sampling

This task includes sampling of various types of surface waters (i.e., includes ponds, streams, creeks, etc.) to verify contamination. This task includes all necessary equipment, personnel, and sampling supplies to perform sampling. This task also 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).

**This is a lump sum Task with maximum cost of \$88.00 for one (1) sample point and \$63.00 for each additional sample point.**

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

This task includes various types of soil sampling not associated with drilling activities, closure activities, stockpile sampling or over-excavation sampling (i.e., includes surface sampling, etc.) to verify contamination. This task includes all necessary equipment, personnel, and sampling supplies to perform sampling. This task also 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).

**This is a lump sum Task with maximum cost of \$255.50 for one (1) sample point by hand augering and \$63.00 for each additional sample point.**

#### **4.4.c.5 Cost for laboratory services**

This task will include any soil laboratory analysis performed for corrective action monitoring. The CAC must submit the laboratory invoice and completed chain of custody form with the reimbursement request. **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 CAC 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 task 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 task also 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 equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing.**

#### **4.4.c.7 Cost for land and receptor monitoring**

This task shall consist of monitoring for changes in land, surface, and/or groundwater 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 task 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 \$184.00.**

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

This task will include all personnel time and sampling supplies required to collect corrective action system water samples for laboratory analysis to meet/establish POTW discharge permit requirements. This task 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 task should be performed in conjunction with any monitoring or sampling task when personnel are already on site and not performed as a separate event, unless otherwise directed by the Division.

**This is a lump sum Task with maximum cost of \$88.00 for the first sample and \$63.00 for each additional sample collected.**

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

This task includes all personnel time and sampling supplies required to collect corrective action system water samples for laboratory analysis to meet/establish NPDES discharge permit requirements. This task 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 task should be performed in conjunction with any monitoring or sampling task when personnel are 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).

**This is a lump sum Task with maximum cost of \$88.00 for the first sample and \$63.00 for each additional sample collected.**

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

This task includes all personnel time and sampling supplies required 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.  
This is a lump sum Task with maximum cost of \$356.00 per event.**

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

This task includes all personnel time and equipment required 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 task should be performed in conjunction with any monitoring task when personnel are already on site and not performed as a separate event, unless otherwise directed by the Division.

**Maximum cost is \$123.00.**

#### **4.4.c.12 Cost for disposal of drums filled with free product or groundwater contaminated with petroleum product**

This task will include all necessary personnel time, equipment and supplies required to properly dispose of drums filled with free product and/or groundwater contaminated with petroleum product removed from a monitoring well. Groundwater contamination must be documented by an approved state of Tennessee laboratory method. This cost is for drum, disposal, and transportation to a permitted disposal facility. **Maximum cost is \$200.00 per drum.**

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

This task will include all necessary personnel time, equipment and supplies required 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 drum, disposal, and transportation to a permitted disposal facility.

**Maximum cost is \$200.00 per drum.**

#### **4.4.c.14 Cost for vacuum monitoring of CAS**

This task includes all personnel time and equipment required to obtain and document vacuum measurements collected 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 task should be performed in conjunction with any monitoring task when personnel are already on site and not performed as a separate event, unless otherwise directed by the Division. **Maximum cost is \$131.00.**

## **4.0 RISK MANAGEMENT AND 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 task includes all personnel time and equipment required 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 \$3,064.00.**

##### **4.4.d.2 Cost for disposal of drums filled with free product and/or groundwater**

This task will include all necessary personnel time, equipment and supplies required to properly dispose of drums filled with free product and/or groundwater contaminated with petroleum product removed from a monitoring well. Groundwater contamination must be documented by an approved state of Tennessee laboratory method. This cost is for drum, disposal, and transportation to a permitted disposal facility. **Maximum cost is \$200.00 per drum.**

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

This task includes all personnel time necessary to terminate permits and/or utility connections with federal, state, and/or local government agency requirements.

**Maximum cost is \$184.00 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, plus 5% markup, and change order(s) if applicable.**

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

This task includes all personnel time and equipment required 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 \$378.00.**

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

This task includes all personnel time and equipment required to properly decommission of a 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 task 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 \$3,313.00. This task must be approved in writing from the Division project manager.**

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

This task 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 for category 1 equipment is \$450.00 (\$1.50/mile).**

**Maximum cost for category 2 equipment is \$810.00 (\$2.70/mile).**

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

This task 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 \$378.00.**

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

This task includes all personnel time and equipment required 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 \$1,734.00.**

**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 task includes all personnel time and equipment required 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 task 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 \$1,448.00.**

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

## 4.0 RISK MANAGEMENT AND CORRECTIVE ACTION PROCESS

### Task 4.4 Corrective Action

#### Task 4.4.e Corrective Action Material Injection/Application

##### 4.4.e.1 Cost for scheduling corrective action material injection/application

This task will include all necessary contracting and scheduling a corrective action material injection/application event. This task shall include the scheduling of field activities associated with the remedial design characterization. This task includes having the TN 811 System locate all underground utilities. This task shall also include all personnel time necessary to acquire any required permits from the appropriate agency.

**Maximum allowable cost is \$327.00.**

##### 4.4.e.2 Cost for private utility location

This task will include the cost equal to the cost of the approved bid and change orders if applicable, submitted to the Division and approved in writing. Three bids are required, and the lowest bid is to be chosen unless approved by the Division in writing. Only one private utility location is allowed for each release unless approved by the Division in writing.

**Maximum cost is equal to the cost of the bid, and change orders if applicable, plus a 15% markup, submitted to the Division and approved in writing.**

##### 4.4.e.3 Cost for mobilization/demobilization of drill rig

**This task only applies if the corrective action materials injection/application sub-contractor is not supplying the drill rig.** This task will include mobilization and demobilization of a direct push technology rig, support vehicles, steam cleaner, trailers, and crew to and from the site. Mobilization/demobilization is not to exceed 300 miles round trip.

**Maximum cost is limited to \$2.70 per mile not to exceed a total cost of \$810.00 for a direct push technology rig.**

##### 4.4.e.4 Cost for drilling

**This task only applies if the corrective action materials injection/application sub-contractor is not supplying the drill rig.** This task will include the time and equipment required to advance the alternative technology tools and includes support vehicles, trailers, and 2-person crew. The CAC must submit the drilling invoice with the reimbursement request. **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 CAC uses their own driller.**

**4.4.e.5 Cost for mobilization/demobilization of corrective action materials injection/application equipment.**

This task will include mobilization and demobilization of corrective action materials injection/application equipment to and from the site. The cost is equal to the cost of the approved bid and change orders if applicable, submitted to the Division and approved in writing.

**Maximum cost is equal to the cost of the bid, and change orders if applicable, submitted to the Division and approved in writing. No markup will be reimbursed.**

**4.4.e.6 Cost to conduct corrective action materials injection/application**

This task will include the cost to conduct corrective action materials injection/application. **Maximum cost is equal to the cost of the bid, and change orders if applicable, plus a 5% markup, submitted to the Division and approved in writing.**

**4.4.e.7 Cost for supervision of corrective action materials injection/application**

This task will include oversight of field activities as well as office support and coordination. This task 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. Supervisory time should not exceed drilling time.

**Maximum allowable cost per day is \$974.50.**

**4.4.e.8 Cost for groundwater sampling**

This task includes all personnel time to collect static water level measurements, calculate purge volumes, sample wells of any depth or diameter, and sampling of purge water for disposal. This task also 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).

**This is a lump sum task with a maximum cost of \$298.50 for one (1) well and \$136.00 per well for each additional well sampled.**

#### **4.4.e.9 Cost of laboratory services**

This task includes laboratory costs associated with groundwater sampling. CAC 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 CAC 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.**

**The cost of shipping samples to the supplier/manufacturer is reimbursable.**

#### **4.4.e.10 Cost for disposal of petroleum contaminated soil and/or water in drums**

This task will include all necessary personnel, labor, equipment and supplies to properly dispose petroleum contaminated soil and/or water in drums at a permitted disposal facility. This cost is for drum, disposal, and transportation.

**Maximum cost is \$200.00 per drum.**

## 5.0 FINAL SITE CLOSURE PROCESS

### Task 5.1 Well Abandonment

#### 5.1.a Cost for supervision of well abandonment

This task 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 task includes field activities and supervision, project scheduling and oversight.

**Maximum cost is \$436.00 per event.**

#### 5.1.b Cost for well abandonment

This task 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 TN licensed well driller. The CAC must submit the drilling invoice with the reimbursement request. 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 CAC uses their own driller.**

**Maximum cost is not to exceed \$13.00 per foot.**

**Maximum cost for recovery well vault removal is \$345.00 per vault.**

**Maximum cost for manhole covers and well pad removal is \$150.00 per well.**

#### 5.1.c Cost for mobilization/demobilization of support truck

This task 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 300 miles round trip.

**Maximum cost is limited to \$0.75 per mile not to exceed a total cost of \$225.00.**

**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 task will include all necessary contracting and scheduling for site restoration activities. Work is not to exceed two (2) hours. Maximum cost is \$109.00 per hour.

**Maximum cost is \$218.00 per event.**

#### **5.2.b Cost for supervision of site restoration**

This task will include oversight of field activities as well as office support and coordination. Work not to exceed two (2) hours. Maximum cost is \$92.00 per hour.

**Maximum cost is \$184.00 per event.**

#### **5.2.c Site restoration**

This task 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 task does not include tank(s), line(s), asphalt and/or concrete replacement.

**Maximum cost is \$260.00.**

## 6.0 SUBMITTED DOCUMENTS MAXIMUM COST TABLE

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

<b>Task Code</b>	<b>Submitted Documents (Applications/Proposals/Reports/Submittals)</b>		<b>Maximum Cost</b>
<b>6.1</b>	<b>UST Closure</b>		
	6.1.a	TRBCA Closure Report	\$575.00
	6.1.b	Soil Stockpile Sampling Report (TGD-005)	\$385.00
	6.1.c	Over-excavation Report	\$1,285.00
	6.1.d	Application to Treat Petroleum Contaminated Soil (TGD-009)	\$220.00
	6.1.e	Soil Treatment and Disposal Report	\$395.00
<b>6.2</b>	<b>Hazard Notification Report</b>		\$95.00
<b>6.3</b>	<b>Site Check Report (TGD-012)</b>		\$1,005.00
<b>6.4</b>	<b>Initial Response and Hazard Management Report (IRHMR)</b>		\$2,540.00
	6.4.a	Hazard Management Report	\$430.00
	6.4.b	Health and Safety Plan (if not included with IRHMR)	\$375.00
<b>6.5</b>	<b>Impacted Drinking Water Management (TGD-019)</b>		
	6.5.a	Impacted Drinking Water - Hazard Management Report (TGD-019)	\$485.00
	6.5.b	Impacted Drinking Water Supply Temporary Response – Proposal (if costs anticipated to exceed \$2500.00)	\$425.00
	6.5.c	Impacted Drinking Water Supply Permanent Response – Proposal	\$860.00
<b>6.6</b>	<b>Petroleum Vapor Impact Management (TGD-020)</b>		
	6.6.a	Petroleum Vapor Impact - Hazard Management Report (TGD-020)	\$485.00
	6.6.b	Petroleum Vapor Impact Temporary Response – Proposal (if costs anticipated to exceed \$2,500.00)	\$425.00
	6.6.c	Petroleum Vapor Impact Permanent Response – Proposal	\$860.00
<b>6.7</b>	<b>Mobile Enhanced Multi-phase Extraction (MEME) (TGD-016)</b>		
	6.7.a	Application to Perform MEME	\$430.00
	6.7.b	8-hour MEME Report	\$430.00
	6.7.c	24-hour MEME Report	\$570.00

<b>Task Code</b>	<b>Submitted Documents (Applications/Proposals/Reports/Submittals)</b>		<b>Maximum Cost</b>
<b>6.8</b>	<b>Free Product Removal</b>		
	6.8.a	Free Product - Hazard Management Report (TGD-004)	\$585.00
	6.8.b	Free Product Investigation Proposal	\$890.00
	6.8.c	Free Product Investigation Report	\$2,540.00
	6.8.d	Free Product Removal Plan	\$6,195.00
<b>6.9</b>	<b>Initial Site Characterization Report (ISCR) - (Exposure Assessment and Risk Analysis Report are integrated into Report requirements - no additional cost allowed)</b>		\$5,075.00
	6.9.a	Additional Monitoring Well Installation Proposal	\$185.00
	6.9.b	Additional Monitoring Well Installation Report	\$430.00
<b>6.10</b>	<b>Exposure Assessment Report (TGD-017)</b>		\$1,410.00
	6.10.a	Additional Remediation and/or Risk Management Response Submittal	\$95.00
	6.10.b	Additional Remediation and/or Risk Management Evaluation - with Division approval	\$855.00
	6.10.c	Risk Analysis Report only	\$170.00
<b>6.11</b>	<b>Soil Gas Survey (TGD-018)</b>		
	6.11.a	Soil Gas Survey Application	\$425.00
	6.11.b	Soil Gas Survey Report	\$730.00
<b>6.12</b>	<b>Source Removal (Over-excavation)</b>		
	6.12.a	Source Removal Proposal	\$280.00
	6.12.b	Source Removal Report	\$1,285.00
<b>6.13</b>	<b>Risk Reduction</b>		
	6.13.a	Risk Reduction Proposal	\$280.00
	6.13.b	Risk Reduction Report	\$730.00
<b>6.14</b>	<b>Institutional Controls</b>		
	6.14.a	Institutional Control Proposal	\$280.00
	6.14.b	Institutional Control Report	\$110.00
<b>6.15</b>	<b>Engineering Controls</b>		
	6.15.a	Engineering Control Proposal	\$280.00
	6.15.b	Engineering Control Report	\$1,110.00
<b>6.17</b>	<b>Corrective Action Plan (CAP)</b>		
	6.17.a	CAP - Soil Contamination Only	\$4,210.00
	6.17.b	CAP with Groundwater Contamination	\$6,195.00
<b>6.18</b>	<b>Monitoring Reports (TGD-007)</b>		
	6.18.a	Risk Monitoring Report (RMR)	\$1,285.00
	6.18.b	Closure Monitoring Report (CMR)	\$1,285.00
	6.18.g	Corrective Action Baseline Monitoring Report (CABMR)	\$1,995.00



<b>Task Code</b>	<b>Submitted Documents (Applications/Proposals/Reports/Submittals)</b>		<b>Maximum Cost</b>
	6.18.h	Corrective Action Monitoring Report with as-built diagrams (CAMR-ab)	\$2,660.00
	6.18.i	Corrective Action Monitoring Report (CAMR)	\$2,270.00
	6.18.j	Corrective Action Closure Monitoring Report (CACMR)	\$1,470.00
<b>6.19</b>	<b>Permit Applications and Discharge Monitoring Reports</b>		
	6.19.a	NPDES Permit Application	\$525.00
	6.19.b	Discharge Monitoring Report (DMR)	\$185.00
	6.19.c	POTW Application	\$525.00
	6.19.d	POTW Report	\$185.00
	6.19.f	Air Exceedance Report	\$185.00
	6.19.g	Annual Air Emissions Report	\$380.00
	6.19.h	Monitoring Well Maintenance Fee	\$135.00
	6.19.i	Class V Underground Injection Well Application	\$555.00
	6.19.j	Monitoring Well Permit – no markup	\$180.00
	6.19.k	Right-of-way Bond – no markup	actual cost
	6.19.x	Other Required Permits/Renewals – no markup	actual cost
<b>6.20</b>	<b>Miscellaneous Application/Proposals/Reports/Submittals</b>		
	6.20.a	Field Work Notification	\$40.00
	6.20.b	Boring Log Installation submittal	\$95.00
	6.20.c	Public Notice of Corrective Action	\$95.00
	6.20.d	Water Use and Receptor Survey Report (other than IRHMR/ISCR)	\$910.00
	6.20.z	Other report as required by the Division (actual cost as approved by Division project manager in writing)	actual cost
<b>6.21</b>	<b>Corrective Action System Deactivation or Decommission Report</b>		\$95.00
<b>6.22</b>	<b>Monitoring Well Abandonment Report (&lt;6 wells)</b>		\$95.00
<b>6.23</b>	<b>Monitoring Well Abandonment Report (&gt;6 wells)</b>		\$185.00
<b>6.24</b>	<b>Advanced Site Characterization</b>		
	6.24.a	Advanced Site Characterization Proposal	\$890.00
	6.24.b	Advanced Site Characterization Report from the Sub-contractor (includes a CAC site map, cover letter, and summary)	\$1,225.00
	6.24.c	Confirmatory Soil Sampling Report (includes tables, maps, and boring logs)	\$430.00

**Reference 1**

Matrix	Product(s)	EPA Method 8260B								EPA Method 8011	EPA Method 8270C SIM <sup>2</sup> or EPA Method 8310 <sup>2</sup>													EPA Method 200.7 <sup>2</sup>					EPH <sup>1</sup> (TN EPH Method)									
		Benzene	Toluene	Ethylbenzene	Total Xylenes	MtBE	Naphthalene	EDC	EDB		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	Cadmium	Total Chromium		Total Lead	Silver	Zinc						
Soil	Gasoline	X	X	X	X	X	X																															
	Diesel, Kerosene, Jet Fuel	X	X	X	X	X	X																														X	
	Waste Oil						X																														X	
	Aviation Fuel	X	X	X	X	X	X	X	X																												X	
	Unknown	X	X	X	X	X	X	X	X																												X	
Groundwater and Surface Water (Drinking Water Use or Unknown)	Gasoline	X	X	X	X	X	X																															
	Diesel, Kerosene, Jet Fuel	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X														
	Waste Oil						X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Aviation Fuel	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X													X	
	Unknown	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Groundwater (Non-Drinking Water Use)	Gasoline	X	X	X	X	X	X																															
	Diesel, Kerosene, Jet Fuel	X	X	X	X	X	X																															
	Waste Oil						X																															
	Aviation Fuel	X	X	X	X	X	X	X	X																													
	Unknown	X	X	X	X	X	X	X	X																													
Surface Water (Non-Drinking Water Use) <sup>3</sup>	Gasoline	X	X	X																																		
	Diesel, Kerosene, Jet Fuel	X	X	X							X		X	X	X		X	X	X	X	X	X															X	
	Waste Oil										X		X	X	X		X	X	X	X	X	X															X	
	Aviation Fuel	X	X	X				X			X		X	X	X		X	X	X	X	X	X															X	
	Unknown	X	X	X				X			X		X	X	X		X	X	X	X	X	X															X	

1 - To be included for soil samples prior to Exposure Assessment (i.e., Exposure Assessment is integrated into IRHMR/ISCR)  
 2 - PAH and metal samples shall be field filtered using a 0.45 micron filter  
 3 - If surface water is within 0.1 mile from UST contamination/site then groundwater shall also include modified PAHs for anything other than gasoline

## **7.0 PER DIEM AND LODGING PROCESS**

### **Task 7.1 Per Diem**

#### **7.1.a Cost for per diem charges**

This task 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 markup 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:

[https://www.tn.gov/content/dam/tn/finance/documents/fa\\_policies/policy8.pdf](https://www.tn.gov/content/dam/tn/finance/documents/fa_policies/policy8.pdf).

### **Task 7.2 Lodging**

#### **7.2.a Cost for lodging charges**

This task 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 markup 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:

[https://www.tn.gov/content/dam/tn/finance/documents/fa\\_policies/policy8.pdf](https://www.tn.gov/content/dam/tn/finance/documents/fa_policies/policy8.pdf).

## **IX. 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.

An Access® database has been developed to prepare and submit electronic applications. The database is available for download from the Division's website under Fund and Reimbursement: <https://www.tn.gov/environment/program-areas/ust-underground-storage-tanks/forms-guidance.html>.

Applications, appeals, questions, comments, etc. should be submitted to: [ust.reimbursement@tn.gov](mailto: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 Division project 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. Note: employee names on the reimbursement application are to

match the employee names exactly as submitted with the annual Corrective Action Contractor (CAC) update or subsequent revisions.

2. Entering or editing detail task information

Click the “Enter/Edit Detail Task Information” button.

**F. Process And Tasks Page**

Click the “Enter New Task” button. Enter a process, task, sub task, 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 three (3) hours travel to the site and three (3) 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 Division project 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 Division project 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 300 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.

**GROUNDWATER 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 @ \$298.50). Any additional wells sampled may be entered on the same page (i.e., MW-2 thru MW-6; 5 wells @ \$136.00/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 @ \$1,007.00). Any additional wells surveyed may be entered on the same page (i.e., MW-5 and MW-6; 2 wells @ \$173.00/each).

**ANALYSIS** - Reimbursed at cost plus 15% markup 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 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. Certification Affidavit Pages**

Applications for reimbursement 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 affidavit pages. After the Responsible Party has reviewed the application, it must be signed and notarized. The CAC should also complete the applicable certification affidavit page in the same manner. Both original, notarized certification affidavit pages must be submitted with the electronic submittal. 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: <https://www.tn.gov/environment/program-areas/ust-underground-storage-tanks/forms-guidance.html>. (click FUND AND REIMBURSEMENT > click Blank Certification Affidavit Pages for Electronic Applications click CN-0923).

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