DIVISION OF
UNDERGROUND STORAGE TANKS

REIMBURSEMENT GUIDANCE DOCUMENT (RGD) – 002-DRAFT

Control Number UST-REIM-G-03-RGD-002-

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Effective Date:

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REVISION HISTORY TABLE

Revision Number	Date	Brief Summary of Change
0	04/15/2014	Issuance of Guidance
1	05/20/2022	Costs updated and tasks added
2	?	• Personnel and rates revised • Drilling rate structure and rates revised • Revised excavation equipment, mobilization/demobilization rates • Routine equipment, supples and portable field instruments combined for 1 daily charge • Combined tasks • Added project management time to select tasks • Changed select tasks to 3 bid process • Changed select lump sum task to time and material

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/hottopics/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(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(12)(c) states: "Applications for payments may be submitted following acceptance by the Division of completed corrective actions. Such corrective actions may include but are not limited to the following:

1. Completion of hazard management activities that were authorized by the Division, including, but not limited to, provision of an alternate water supply;
2. Completion and submittal of a Hazard Management Report;
3. Development and submittal of an Initial Site Characterization Report;
4. Development and submittal of a Risk Analysis Report;
5. Implementation of interim remediation or risk management activities which were authorized by the Division;
6. Advanced risk-based modeling development which was authorized by the Division; or
7. Development and/or implementation of a Corrective Action Plan which was authorized by the Division."

Rule 0400-18-01-.09(12)(d) states: "Applications for payments for the implementation of corrective action may be submitted 60 days following initiation of work to implement the Corrective Action Plan and at 60-day intervals thereafter until completion of the authorized activities. Upon request, the Division may approve interim payments at more frequent intervals.

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(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."

Table of Contents **Page**

To electronically navigate to a selection, move your mouse to the selected title left click with your mouse on the selected title. You will then be relocated to that selection in the document.

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 Initial Screening Levels (ISLs) 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 10% not to exceed listed maximum cost/rates. A 5% markup continues to be allowed for disposal and treatment of soil, water, free product, etc. For tasks that are short term and/or single events and generally greater than $25,000 (i.e. advanced site characterization technologies or corrective action material injection/application) a 5% markup is applicable. For the short term and/or single event tasks, markup on mobilization and demobilization are not reimbursable.
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 that is overseen by an approved Corrective Action Contractor (CAC)
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)
8. Completing the Reimbursement Application (2% of total approved reimbursement application amount)

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
8. Completing the Reimbursement Application (2% of total approved reimbursement application amount)

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
8. Completing the Reimbursement Application (2% of total approved reimbursement application amount)

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. 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
12. Completing the Reimbursement Application (2% of total approved reimbursement application amount)

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
7. Completing the Reimbursement Application (2% of total approved reimbursement application amount)

F. Miscellaneous

1. Installation permit and 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 three (3) bids or

quotes cannot be obtained, a justification shall be submitted with the bids or quotes received for Division approval.

5. Three (3) bids or quotes shall be obtained by the CAC and submitted to the Division for approval, which does not include lump sum tasks, in the RGD-002 that cannot be conducted with the rates specified.
6. Completing the Reimbursement Application (2% of total approved reimbursement application amount)

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 and/or Permanent Closure Report (not TRBCA Closure Report), Application for Fund Eligibility
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
6. Rental/lease charges that exceed the purchase price of the equipment
7. Removal of backfill material in the tank pit
8. Replacement of asphalt or concrete
9. Replacement, repair, maintenance, removal, and retrofitting of any UST system unless in accordance with Rule 0400-18-01-.09(7)
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)

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

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)

E. Final Site Closure Process

1. Well abandonment permit (Shelby County) – Task 5.1

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. Communication 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. Communication 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. Airfare and/or car rentals
    b. Company car and/or truck rental
    c. 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, this document and Attachment Ishould 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 the 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**.

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 (Senior Engineer): This person must be a professional engineer licensed in the State of Tennessee and have 10 years of full-time experience as a licensed professional engineer working in investigation, remedial planning/design, and remedial implementation phases of environmental project management.

Project Manager (Senior Geologist): This person must be a professional geologist licensed in the State of Tennessee and have 10 years of full-time experience as a licensed profession geologist working in investigation, remedial planning/design, and remedial implementation phases of environmental project management.

Project Manager (Other): This person must have 15 years full-time experience in investigation, remedial planning/design, and remedial implementation 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 five (5) 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

Field Staff Description	Reimbursable Tasks
CAS Specialist	MEME events, 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

Field Operations Staff	Maximum Hourly Rate
Surveyor	$99.00
Senior technician	$75.00
Technician	$60.00
Heavy equipment operator	$70.00
General laborer	$50.00

Technical Staff	Maximum Hourly Rate
Project Manager (Senior Engineer)	$139.00
Project Manager (Senior Geologist)	$128.00
Project Manager (Other)	$128.00
Engineer	$104.00
Geologist	$99.00
Senior Environmental Specialist	$92.00
Environmental Specialist	$75.00
CAS Specialist	$85.00
CAD/GIS Operator	$63.00

Administrative Staff	Maximum Hourly Rate
Secretary	$43.00

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.

If equipment is utilized for three (3) days or more then the weekly rate applies. If equipment is utilized over two (2) weeks then three (3) bids or quotes for monthly rental shall be obtained and approved prior to activities. In the event equipment cannot be rented at or below the rates, three (3) bids or quotes shall be obtained and approved prior to activities. If the event the CAC or subcontractor owns equipment and rates are deemed too low, then three (3) bids or quotes shall be obtained from rental companies to justify and support the proposed rates are reasonable.

Heavy Equipment	Per Day	Per Week
Skid steer loader (bobcat – Category 1 mobilization)	$500.00	$1,300.00
Pavement/concrete breaker for bobcat	$300.00	$800.00
Backhoe (all types – Category 1 mobilization)	$550.00	$1,350.00
Pavement/concrete breaker for backhoe	$425.00	$1,075.00
Mini Excavator (Category 1 mobilization)	$575.00	$1,450.00
Trackhoe <50K lbs (Category 2 mobilization)	$1,100.00	$2,900.00

Trackhoe ≥50K lbs (Category 3 mobilization) – Division approval required	$1,400.00	$3,700.00
Dump truck with driver (mobilization charges do not apply)	$140.00/hr	
Vacuum truck/with driver	$200.00/hr	
Crane (17-ton skyhook)	$1,028.00	

Equipment/Supplies/Portable Field Instruments	Unit Cost
Disposable bailer	$10.00
Bag Filters	$12.00
0.45 micron water filter (PAHs and metals sampling)	At Cost + 10%
Level 1 Equipment, supplies, and portable field instruments (per day, not per task)	$50.00
Level 2 Equipment, supplies, and portable field instruments	$100.00
Level 3 Equipment, supplies, and portable field instruments	$400.00

The equipment, supplies, and portable field instruments are not to be billed by drilling subcontractors, all costs associated with routine drilling is included in the per ft rate. The equipment, supplies, and portable field instruments include, but are not limited to ice, disposal of samples, twine, string, latex gloves, decontamination materials, pH meter, turbidity meter, vacuum gauge/manometer, lubricating grease, paper towels, absorbent pads, Rydlyme, digital or dial vacuum gauge, 2k or 3K PSI pressure washer, oil/water interface probe, multi-gas meter (O_2, CO_2, CH^4), OVD – PID or FID, combustible gas indicator with oxygen meter, safety cones, barricades, caution tape, various pumps, utility trailer, poly tank, water, tools, and hand tools.

B. Vehicle Mileage / Mobilization and Demobilization of Equipment

Vehicle	Rate
Autos/all size pick-up trucks (cost/mile)	IRS Business Standard Mileage Rate
3/4 and 1 Ton Pick-up Trucks When used for Towing	Multiplier of 2 of IRS Business Standard Mileage Rate (2 x's)
Mobilization and Demobilization	Rate
Auger/core/wash rotary/air rotary rig and all associated equipment, support truck, etc. (Minimum 100 miles for roundtrip) If over 500 miles for roundtrip then: Three (3) bids required with justification	Multiplier of 9 of IRS Business Standard Mileage Rate (9 x's)
Direct push technology and all associated equipment, support truck, etc. (Minimum of 100 miles for roundtrip) If over 500 miles roundtrip then:	Multiplier of 4.5 of IRS Business Standard Mileage Rate (4.5 x's)

Three (3) bids required with justification	
Vehicle/Equipment for Well Abandonment (No minimum mileage) If over 500 miles roundtrip then: Three (3) bids required with justification	Multiplier of 2 of IRS Business Standard Mileage Rate (2 x's)
Category 1 Excavation equipment (roundtrip mob/demob) Skid steer loader Backhoe Mini excavator >7K lbs. If over $500 then three (3) bids required with justification	At Cost
Category 2 Excavation equipment (roundtrip mob/demob) Trackhoe <50K lbs. If over $1,000 then three (3) bids required with justification	At Cost
Category 3 Excavation equipment (3 bids required) Trackhoe ≥50K lbs.	At approved cost
Vacuum truck with driver (cost/mile) (Minimum of 100 miles for roundtrip) If over 500 miles for roundtrip then: Three (3) bids required with justification	Multiplier of 4 of IRS Business Standard Mileage Rate (4 x's)

Mileage will be reimbursed in accordance with the state of TN travel regulations, which reference the IRS Business Standard Mileage Rate, in effect at the time that work was performed. The current IRS Business Standard Mileage Rate can be found at: https://www.irs.gov/tax-professionals/standard-mileage-rates

Drilling equipment included in mobilization/demobilization costs are: rig, support vehicles, drum moving equipment, steam cleaner, grout plant, trailers, supplies, water, and crew. Limited to one (1) mobilization/demobilization per event/scope of work unless prior approval obtained.

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 with the reimbursement application 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 with driver hourly rate will be reimbursed):**

Treatment	Per Ton
Landfarming (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 with the reimbursement application. **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
Free Product (3 bids required)	At Approved Cost

E. Drum Disposal of Contaminated Soil, Water, used booms, used absorbent pads, and sediment (includes cost of drum)

Drummed soil and groundwater generated from investigative and corrective action activities will be reimbursed as a per drum cost that includes the drum, disposal, and transport. Other petroleum impacted media, such as used booms or pads along with a combination of free product and other media are included. Soil and water that is drummed is not considered the most efficient way of handling waste and will be scrutinized. Original invoices/manifests shall be submitted with the reimbursement application.

Contents	Per Drum
Water, soil, used booms, pads, etc.	$300.00

F. Drilling

The per foot drilling rates includes, but is not limited to: drill rig, setup, hand augering, installation, split spoon sampling, continuous sampling, soil sample liners, standby time, third man for drilling, watertight bolt down manhole and a 2'x 2' concrete pad, centralizers, concrete penetration, freight charges for well supplies, well supplies, sand, grout, bentonite, casing, screen, end cap/plug, locking cap, trailer, decontamination of rig and tools, water for decontamination, decontamination area/containment, drum moving and related equipment, per diem, and lodging. **Reimbursement will be limited to actual costs plus a maximum 10% markup not to exceed the following rates:**

Drilling Method and Equipment	**Rate**
Auger/core/wash rotary/air rotary rig drilling) (Minimum of $3,500 per scope of work) Two (2) inch wells (cost/foot) Four (4) inch wells (cost/foot)	 $83.00 $93.00
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	Submit three (3) bids
Well abandonment (includes licensed well driller, equipment, and supplies) Two (2) inch wells (cost/foot) Four (4) inch wells (cost/foot)	 $16.00 $18.00
Well abandonment via overdrilling (cost/foot), must be justified prior to submitting bids Two (2) inch wells (cost/foot) Four (4) inch wells (cost/foot)	Submit three (3) bids
Borings utilizing hollow stem auger (cost/foot)	Submit three (3) bids
Removal of manhole cover and well pad (cost/well)	$175.00
Recovery well vaults (2'x2'x2') (must be removed)	$400.00
Direct Push Technology and Equipment	**Rate**
Direct push (Minimum $3,000 per scope of work) Boring advancement (cost/foot) Two (2) inch well (cost/foot)	 $35.00 $45.00

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 a copy of the discharge permit approval shall be included with each associated reimbursement application.**

The chain of custody for the samples should always be submitted with any analytical charges. Samples received by the laboratory above the EPA Method required temperature 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, samples that were improperly collected, or samples that exceed the analytical method holding time will not be reimbursed. **The following analytical results will be reimbursed at actual cost plus a maximum 10% markup not to exceed the following rates:**

Soil Samples (Includes Markup)		**Maximum Rate**
Chemical of Concern	**Method**	
BTEX, MtBE, Naphthalene	Method 8260B	$86.00
BTEX, MtBE, Naphthalene, EDB, EDC	Method 8260B	$136.00
Extractable Petroleum Hydrocarbons (EPH),	TN EPH	$85.00
TCLP	Method 1311	$479.00

Water Samples (Includes Markup)		**Maximum Rate**
Chemical of Concern	**Method**	
BTEX, MtBE, Naphthalene	Method 8260B	$96.00
BTEX, MtBE, Naphthalene, EDB, EDC	Method 8260B	$146.00
EDB only	Method 8011	$86.00
PAHs	Method 8270C-SIM/8310	$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
Discharge Samples per Permit (Includes Markup)		
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

Air Samples (Includes Markup)		**Maximum Rate**
Chemical of Concern	**Method**	
BTEX, MtBE, Naphthalene, Isopropyl Alcohol	Method TO-15	$295.00
Percent O_2 and CO_2 (must be analyzed concurrently from SUMMA® sample above)	Method 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 U.S. General Services CONUS per diem rates in effect at the time that the work was performed. Current U.S. General Services CONUS per diem rates can be found at:
https://www.gsa.gov/travel/plan-book/per-diem-rates

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, either stockpiling or hauling and disposal, and backfilling during UST Closure

This task will include all necessary personnel and labor, equipment and supplies/portable field instruments to excavate, screen, collect samples, and backfill during an UST system closure as per Closure Assessment Guidelines. The task for loading, hauling, and disposal of contaminated stockpiled soils can be found in Task 1.1.c.

If extent of contamination is known and disposal permitting has also be obtained (i.e. a second mobilization is not required), cost for hauling and disposal is also included in this task. **Disposal of soil with contamination levels below the Division's applicable cleanup levels will not be reimbursed.** The disposal method, permitted landfill or permitted landfarm, shall be the most cost-effective. Transportation shall be by the most cost-effective method including trucks loaded to, or just below, their maximum legal capacity. **Reimbursement will be limited to actual costs plus a maximum 5% markup.**

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, or hauling and disposal if applicable, of contaminated soil. **Soil contamination as defined by the applicable Closure Guidelines must be documented by an approved state of Tennessee laboratory method.** Backfill material equivalent to the volume of the tanks is not a reimbursable expense. Routine over-excavation activities shall not exceed five (5) workdays (10-hour workday) without prior approval from the Division project manager.

For equipment utilized 3 or more consecutive days, the weekly rate is applicable. For equipment utilized 2 or more consecutive weeks, 3 bids or quotes for monthly rate should be submitted for prior Division approval.

Personnel cost is hourly, not to exceed $2,889.00 per day and is dependent on personnel conducting the work.
Maximum equipment cost is $3,150.00 per day.

1.1.b Cost for mobilization and demobilization of heavy equipment

This task will include mobilization and demobilization of the necessary equipment

Category 1 equipment is at cost not to exceed $500.00. If the cost is over $500.00 then submission of 3 bids and prior Division approval is required..
Category 2 equipment is at cost not to exceed $1,000.00. If the cost is over $1,000.00 then submission of 3 bids and prior Division approval is required.
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, hauling and proper disposal at a permitted facility. Routine loading, hauling and disposal shall not exceed one (1) workday (10-hour workday). For equipment utilized 3 or more consecutive days, the weekly rate is applicable. For equipment utilized 2 or more consecutive weeks, 3 bids or quotes for monthly rate should be submitted for prior Division approval.

The disposal method, permitted landfill or permitted landfarm, shall be the most cost-effective. Transportation shall be by the most-cost effective method including trucks loaded to, or just below, their maximum legal capacity. **Reimbursement of disposal will be limited to actual costs plus a maximum 5% markup. Disposal of soil with contamination levels below the Division's site-specific cleanup levels will not be reimbursed.**

Project management time is limited to $417.00 per event/scope of work and is dependent on personnel overseeing the work.
Onsite personnel cost is hourly not to exceed $2,750.00 per day and is dependent on personnel conducting the work.
Maximum equipment cost is $3,050.00 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 application. **The cost of laboratory analyses will be reimbursed at cost plus 10% 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 **RESCINDED, included in task 1.1.a** **Cost for replacement backfill material during any type of over-excavation**

1.1.f **RESCINDED, included in task 1.1.a** **Cost for backfilling the tank pit and/or associated piping trench(s) during over-excavation**

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. Hourly rates for vacuum or pump truck should not be billed during mobilization and demobilization, the hourly rate is only applicable during vacuuming time plus one (1) hour to assemble/disassemble hoses and other components.

Personnel cost is hourly not to exceed $1,179.00 per day and is dependent on personnel conducting the work.
Maximum equipment cost is $200.00 per hour, not to exceed $2,000.00 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. Hourly rates for vacuum or pump truck should not be billed during mobilization and demobilization.

Maximum roundtrip is 500 miles, mileage rate is 4 x IRS Business Standard Mileage Rate at the time the work is conducted.

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

This task will include any personnel time and the applicable equipment/supplies/portable field instruments 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.

Maximum number of samples is two (2) per tank pit and/or two (2) per installation.

Maximum cost is $210.00 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 application. **The cost of laboratory analyses will be reimbursed at cost plus 10% 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 and manifest(s).** 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. If free product disposal cost exceeds $0.94 per gallon, three bids or quotes and prior Division approval are required.

1.0 UST SYSTEM CLOSURE PROCESS

Task 1.3 Soil Treatment/Disposal

Task 1.3.a **RESCINDED** Soil Treatment by Aeration

1.0 UST SYSTEM CLOSURE PROCESS

Task 1.3 Soil Treatment/ Disposal

Task 1.3.b **RESCINDED, included in either 1.1.a or 1.1.c** Hauling and Soil Disposal by Landfilling

1.0 UST SYSTEM CLOSURE PROCESS

Task 1.3 Soil Treatment/ Disposal

Task 1.3.c **RESCINDED, included in either task 1.1.a or 1.1.c** Soil Treatment by Landfarming

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 $417.00 and is dependent on personnel conducting the work.

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 and equipment/supplies/portable field instruments. 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 $1,279.00 and is dependent on personnel conducting the work.

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. Limited to a single mobilization/demobilization per scope of work/event.

A minimum of 100 miles roundtrip is allowed for each event/scope of work. **Maximum roundtrip mileage is 500 miles and cost is limited to 9 x IRS Business Standard Mileage Rate.**

1.4.d Cost for drilling

This task reasonable rate is all inclusive, no additional time, material, equipment, lodging, or per diem will be approved. The CAC must submit the drilling invoice with the reimbursement application. 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 **10% markup** not to exceed the reasonable rate schedule. A markup will not be allowed if the CAC uses their own driller. A $13.00 / foot deduction should be included if a sample is not collected for lithologic logging, OVD screening, and/or soil sample collection for laboratory analysis.

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. All wells are required to be properly developed prior to sampling. This includes surge blocking where needed.

Maximum cost for one well is $318.00 and is dependent on personnel conducting the work.

1.4.f Cost for groundwater sampling

This task is no longer lump sum, the current rate structure includes all personnel time to collect static water level measurement(s), calculate purge volume(s), purge well(s) of any depth or diameter, sample well(s), 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). A maximum of 2 hours per well is allowed unless justification is provided and approved prior to field activities. Does not include drum costs.

Project management time is limited to $417.00 per event/scope of work and is dependent on personnel overseeing the work.
Maximum cost for sampling one well is $220.00.

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 application. **Only analytical test(s) required by the current Closure Assessment Guidelines will be reimbursed.** The cost of laboratory analyses will be reimbursed at cost plus 10% 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 $1,308.00 and is dependent on personnel conducting the work.

1.4.i RESCINDED, included in task 8.1.a Cost for disposal of free product and/or groundwater contaminated with petroleum product

1.4.j Cost for disposal of stockpiled soil from well installation

This task will include all costs necessary for disposal of stockpiled soil from monitoring well installation at a permitted landfill or permitted landfarm.

Reimbursement will be limited to actual costs plus a maximum 5% markup.

1.4.k RESCINDED, included in task 8.1.a Cost for disposal of petroleum contaminated soil in drums

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, 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 Division/Department staff.

Maximum cost is $949.00 and is dependent on personnel conducting the work.

2.1.b **RESCINDED, included in task 2.1.c** Cost for mobilization and demobilization of heavy equipment

2.1.c Cost for interceptor/recovery trench installation

This task will include all necessary personnel and labor, equipment mobilization and demobilization, equipment, and supplies to excavate, properly install and collect samples from a passive interceptor/recovery trench. Cost includes location of utilities,, removal of any concrete, asphalt and/or soil during installation, loading and hauling soil for proper disposal, backfill, and restoration (i.e. repair of asphalt, concrete and/or landscaping. Cost also includes all sampling supplies, and equipment and trench supplies such as a trackhoe or backhoe, well screens, piping, and sumps.

Soil shall be disposed 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 applicable report. Disposal cost is at cost plus 5%.

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 and at cost plus 10%, which includes transportation.

Routine installation shall not exceed one (1) workday (maximum 10-hour workday) without prior approval from the Division project manager.

Maximum cost is equal the proposed cost and any change orders that is approved by the Division prior to completing the work.

2.1.d **RESCINDED, included in 2.1.c** Cost for loading stockpiled contaminated soil for disposal

2.1.e **RESCINDED, included in 2.1.c** Cost for replacement backfill material during any type of excavation

2.1.f **RESCINDED, included in 2.1.c** Cost for repair/replacement of asphalt after interceptor/recovery trench installation

2.1.g **RESCINDED, included in 2.1.c** Cost for repair/replacement of concrete after interceptor/recovery trench installation

2.1.h **RESCINDED, included in 2.1.c** Cost for repair/replacement of landscaping after interceptor/recovery trench installation

2.1.i **RESCINDED, included in 2.1.c** Cost for backfilling the void and/or associated trench(s) during excavation

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. The vacuum or pump truck and driver hourly rate should only be for vacuum time plus one (1) hour to assemble/disassemble hoses and other components, the hourly rate should not be charged during mobilization and demobilization.

Maximum cost is $275.00 per hour (or $2,750.00 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. The hourly vacuum or pump truck and driver rate should not be charged during mobilization and demobilization.

Maximum cost is limited to 4 x IRS Business Standard Mileage Rate.

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 $210.00 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 application. The cost of laboratory analyses will be reimbursed at cost plus 10% 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 number of samples is two (2) per trench and/or two (2) per installation.**

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

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 and manifest(s).** 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. If the free product disposal cost exceeds $0.94 per gallon, three bids or quotes and prior Division approval are required.

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

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

2.2.h RESCINDED Cost for discharge to 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 equipment/supplies/portable field instruments 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. **Task is not intended to be a viable method for short or long term free product recovery. Justification and approval must be obtained prior to conducting this task.**

Maximum cost is of $949.00 per event and is dependent on personnel conducting the work and the number of wells.

2.3.b RESCINDED, included in task 8.1.a Cost for disposal of free product

2.0 HAZARD MANAGEMENT PROCESS

Task 2.4 Mobile Enhanced Multi-phase Extraction (MEME)

2.4.a Cost for scheduling MEME event

This task will consist of coordinating and scheduling the MEME event.
Maximum cost is $278.00 per event and is dependent on personnel conducting the work.

2.4.b Cost for mobilization and demobilization of vacuum truck

This task will include mobilization and demobilization of the MEME truck to and from site. A trailer mounted dual-phase extraction unit is not comparable for this task/rate.

Maximum roundtrip is limited to 500 miles and cost is limited to 4 x IRS Business Standard Mileage Rate.

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 $1,279.00 and is dependent on personnel conducting the work.

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. Due to considerations of storage and transport of recoverable fluids, trailer mounted dual-phase extraction unit is not comparable to a MEME truck for this task. 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 10% 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. Due to considerations of storage and transport of recoverable fluids, trailer mounted dual-phase extraction unit is not comparable to a MEME truck for this task. Cost includes two (2) hours allowed for set-up and shut down and 24 hours for the actual MEME event. The Federal Motor Carrier Safety Administration (FMCSA) mandates that commercial motor vehicle (CMV) drivers adhere to strict Hours of Service (HOS) rules. One additional personnel may be approved by the Division for 24-hour manned events.

Maximum cost is bid plus 10% 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 and disposal manifest(s)**.

Reimbursement will be limited to actual costs plus a maximum of 5% markup not to exceed $0.94 per gallon. If the free product disposal cost exceeds $0.94 per gallon, three bids or quotes and prior Division approval are required.

2.4.g Cost for free product assessment after an 8-hour or 24-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. This task should only be proposed if site conditions, number of wells, and thickness

of free product warrant more time than allowed for the MEME event oversite. This task can be conducted on a different date following completion of the MEME event. Cost includes personnel and labor, equipment, and supplies.

Maximum cost is $457.00 per event and is dependent on personnel conducting the work.

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 application. The cost of laboratory analyses will be reimbursed at cost plus 10% 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 field personnel to oversee 24-hour MEME activities, assemble the sample train and collect the influent water sample. The preferred personnel are CAS Specialists.

Maximum cost is $2,588.00 per event and is dependent on personnel conducting the work.

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, inspection and replacement.

This task will include all personnel time to install/lay booms or absorbent pads to recover free-floating product from impacted surface waters. This task includes all field materials used including absorbent booms, absorbent pads, polypropylene rope, steel fence posts, and field supplies initially and during subsequent inspection and replacement. All personnel time, frequency of inspections, and durations shall be included in the proposal/bid.

Maximum cost is equal the proposed cost and any change orders that is approved by the Division prior to completing the work.

2.5.b RESCINDED, included in task 2.5.a Cost for boom inspection and replacement

2.5.c RESCINDED, included in task 8.1.a Cost of drums for spent booms and/or absorbent pads

2.5.d RESCINDED, included in task 8.1.a Cost for disposal of drums filled with spent booms and/or absorbent pads

2.5.e Cost for specifying and purchasing a passive skimmer for surface water

This task will include all necessary personnel time to properly specify and purchase a passive skimmer system to remove free product from surface water, installation, and servicing. All personnel time, frequency of inspections, and durations shall be included in the proposal/bid.

Maximum cost is equal the proposed cost and any change orders that is approved by the Division prior to completing the work.

2.5.f RESCINDED, included in task 2.5.e Cost for installation of a passive skimmer

2.5.g RESCINDED, included in task 2.5.e Cost for servicing a passive skimmer

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 or absorbent sock for monitoring well(s)

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 as well as inspections, servicing passive skimmers, or replacing absorbent socks. All personnel time, equipment, frequency of inspections, and durations shall be included in the proposal/bid.

Maximum cost is equal the proposed cost and any change orders that is approved by the Division prior to completing the work.

2.6.b RESCINDED, included in 2.6.a Cost for installation of a passive skimmer or absorbent pad/sock

2.6.c RESCINDED, included in 2.6.a Cost for servicing a passive skimmer

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 equal to the proposed cost and any change orders that is approved by the Division prior to completing the work..

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 proposed cost and any change orders that is approved by the Division prior to completing the work..

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 equal to the proposed cost and any change orders that is approved by the Division prior to completing the work.

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 proposed cost and any change orders that is approved by the Division prior to completing the work..

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 $347.00 and is dependent on personnel conducting the work.

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 $823.00 and is dependent on personnel conducting the work.

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 $1,222.00 and is dependent on personnel conducting the work .

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 $555.00 per agreement and is dependent on personnel conducting the work.

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 limited to measured drawdown and radius of influence during the 24 hour MEME event, extraction rates for soil vapor and groundwater, advanced site characterization if applicable, number of proposed soil vapor extraction or recovery wells, current wells with free product and thickness, 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 a meeting that may be conducted onsite, at a local field office, or virtually. Maximum cost includes the time required for oversight by the Project Manager and a staff level person to schedule and compile aforementioned information in a suitable format to present/review during the meeting. Time includes the meeting itself.

Maximum cost is $1,944.00 per meeting and is dependent on personnel conducting the work.

3.0 RELEASE INVESTIGATION PROCESS

Task 3.2 System Test & Fund Deductible Compliance Inspections

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 routine system compliance is not reimbursable**.

Maximum cost is actual invoice cost from System Test(s) plus 10% markup.

3.2.b Cost for Fund Deductible Compliance Inspection

This task shall include field activities as well as office support and coordination in assisting the Division in conducting compliance inspections resulting from a reported suspected or confirmed release. This includes opening of tank tops, sumps, dispensers, and obtaining necessary release detection and operational compliance paperwork. Maximum on-site personnel time limited to four (4) hours and one (1) hour offsite.

Compliance inspections conducted to establish a fund deductible of a suspected/confirmed release as required under rule 0400-18-01-.09(6) are reimbursable. This applies only to inspections scheduled from a suspected release reported to the Division**. Routine three-year compliance inspections including those in which a suspected release is discovered, or any follow up visits to address non-compliance issues discovered during a reimbursable compliance inspection are non-reimbursable.**

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 $417.00 per event/scope of work and is dependent on personnel conducting the work.

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 500 miles round trip.

Direct push unit: A minimum of 100 miles roundtrip is allowed for each event/scope or work. **Maximum roundtrip mileage is 500 miles and cost is limited to 4.5 x IRS Business Standard Mileage Rate .**
Auger and air rotary type drilling rig: A minimum of 100 miles roundtrip is allowed for each event/scope of work. **Maximum roundtrip mileage is 500 miles and cost is limited to 9 x IRS Business Standard Mileage Rate. .**

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 and equipment/supplies/portable field instruments. 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 $1,279.00 and is dependent on personnel conducting the work.

3.3.d Cost for drilling

This reasonable rate for this task is all inclusive, no additional time (i.e. 3rd man for drilling), material, equipment, lodging, or per diem will be approved. All monitoring wells shall be installed by a TN licensed well driller. The CAC must submit the drilling invoice with the reimbursement application. 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 10% markup not to exceed the reasonable rate schedule. A markup will not be allowed if the CAC uses their own driller. A $13.00 / foot deduction should be included if a sample is not collected in applicable media for either soil sample collection for laboratory analysis or for logging purposes.

3.3.e Cost for well development

This task will include all necessary personnel equipment/supplies/portable field instruments to properly develop wells in accordance with the EAG no sooner than twenty-four (24) hours after installation. A maximum of 2 hours per well is allowed unless justification is provided and approved prior to field activities. Note: all development records shall be included in an appendix in the applicable report**.** All wells are required to be properly developed prior to sampling. This includes surge blocking where needed.

Maximum cost per day is $1,150.00 and is dependent on personnel conducting the work.

3.3.f RESCINDED, included in task 8.1.a Cost for disposal of petroleum contaminated soil in drums (includes cost of drums)

3.0 RELEASE INVESTIGATION PROCESS

Task 3.4 Sampling

3.4.a Cost for groundwater sampling

This task is no longer lump sum, the current rate structure includes all personnel time and equipment/supplies/portable field instruments to collect static fluid level measurements, calculate purge volumes, purge wells of any depth or diameter, sample wells , 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). A maximum of 2 hours per well is allowed unless justification is provided and approved prior to field activities. Does not include drum costs. Note: all field gauging, purging, and sample collection records shall be included in an appendix in the applicable report.

Project management time is limited to $417.00 per event/scope of work and is dependent on personnel overseeing the work.
Maximum cost of field activities per day is limited to $820.00.

3.4.b Cost for water supply well sampling

This task is no longer lump sum, the current rate structure includes all personnel and equipment/supplies/portable field instruments to purge and sample a water supply well (i.e., indoor or outdoor spigot). This task includes well purging by letting spigot run for an adequate time followed by water supply sampling and purge water sampling for disposal. This task includes the time to coordinate this work and to manage the laboratory services (i.e., Chain of custody, sample preparation, sample QA/QC, and invoice managing). A maximum of 2 hours per well is allowed unless justification is provided and approved prior to field activities. Note: all field sample collection records shall be included in an appendix in the applicable report.

Maximum cost of $200.00 for one (1) well, each additional well sampled includes time only..

3.4.c Cost for surface water sampling

This task is no longer lump sum, the current rate structure includes sampling of various types of surface waters (i.e., includes ponds, streams, creeks, etc.) to verify contamination. This task includes all necessary personnel and equipment/supplies/portable field instruments 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). A maximum of 2 hours per sample point is allowed unless justification is provided and approved prior to field activities. Note: all field sample collection records shall be included in an appendix in the applicable report.

Maximum cost of $200.00 for one (1) sample point, each additional sample point is time only.

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

This task is no longer lump sum, the current rate structure 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 personnel and equipment/supplies/portable field instruments to perform sampling. This task includes personnel time to coordinate this work and to manage the laboratory services (i.e., Chain of custody, sample preparation, sample QA/QC, and invoice managing).

Maximum cost of $989.00 per day.

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 application. **The cost of laboratory analyses will be reimbursed at cost plus 10% 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 RESCINDED, included in task 8.1.a Cost for disposal of free product and/or groundwater contaminated with petroleum product (includes cost of drum)

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

This task includes all personnel and equipment/supplies/portable field instruments to properly collect thirty (30) day static groundwater level measurements in accordance with the current Environmental Assessment

Guidelines. In the event more than 12 wells will be gauged, then 15 minutes per well can be added to the three hours.

Maximum cost is $275.00.

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 $441.00 and is dependent on personnel conducting the work.

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 $1,169.00 and is dependent on personnel conducting the work.

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 $1,246.00 for the initial four (4) wells and $212.00 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 and subsurface structures (i.e. buildings, basements, crawl spaces, utility vaults, etc.) for petroleum vapors. This task includes personnel and equipment/supplies/portable field instruments to coordinate and conduct this work. 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 $200.00 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 $417.00 and is dependent on personnel conducting the work.

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 500 miles round trip.

A minimum of 100 miles roundtrip is allowed for each event/scope or work. **Maximum cost is limited to 4.5 x IRS Business Standard Mileage Rate.**

3.8.a.3 Cost for supervision of field work using a direct push technology ≤4 sample pts

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. 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. Use of direct push technology for soil gas survey should be limited to points at a depth of 10 ft, unless justified.

Maximum allowable cost is $1,916.00

3.8.a.4

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. 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. Use of direct push technology for soil gas survey should be limited to points at a depth of 10 ft, unless justified.

Maximum allowable cost is $2,540.00

3.8.a.5 Cost for drilling using direct push technology ≤4 sample pts

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 application. **The cost of drilling will be reimbursed at cost plus 10% markup not to exceed the reasonable rate schedule. A markup will not be allowed if the CAC uses their own driller.** Use of direct push technology for soil gas survey should be limited to points at a depth of 10 ft, unless justified.

***Minimum cost for Direct Push Rig and associated drilling equipment is $3,119.00**

3.8.a.6 Cost for drilling using direct push technology ≥5 sample points

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 application. **The cost of drilling will be reimbursed at cost plus 10% markup not to exceed the reasonable rate schedule. A markup will not be allowed if the CAC uses their own driller.** Use of direct push technology for soil gas survey should be limited to points at a depth of 10 ft, unless justified.

***Minimum cost for Direct Push Rig and associated drilling equipment is $3,239.00 Dollars**

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 application. **The cost of laboratory analyses will be reimbursed at cost plus 10% 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 $417.00 and is dependent on personnel conducting the work.

3.8.b.2 Cost for field work using a hammer drill or slide hammer ≤4 sample pts

This task will include oversight of field activities as well as office and field 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, 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 is $2,759.00 and is dependent on personnel conducting the work.

3.8.b.3 Cost for field work using a hammer drill or slide hammer ≥5 sample points

This task will include oversight of field activities as well as office and field 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, 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 is $4,601.00 and is dependent on personnel conducting the work.

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 application. **The cost of laboratory analyses will be reimbursed at cost plus 10% 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 $417.00 and is dependent on personnel conducting the work.

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 10% markup, submitted to the Division and approved in writing.

3.9.a.3 RESCINDED, included in task 3.9.a.5 Cost for mobilization / demobilization of drill rig

3.9.a.4 RESCINDED, included in task 3.9.a.6 Cost for drilling

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 $1,179.00 and is dependent on personnel conducting the work.

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 $1,279.00 and is dependent on personnel conducting the work.

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. A maximum of 2 hours per well is allowed unless justification is provided and approved prior to field activities. Note: all development records shall be included in an appendix in the applicable report. All wells are required to be properly developed prior to sampling. This includes surge blocking where needed.

Maximum cost per day is $1,150.00 and is dependent on personnel conducting the work.

3.9.a.10 Cost for groundwater sampling

This task is no longer lump sum, the current rate structure includes all personnel time to collect static water level measurements, calculate purge volumes, purge wells of any depth or diameter, sample wells and sample 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). A maximum of 2 hours per well is allowed unless justification is provided and approved prior to field activities. Does not include drum costs. Note: all field sample collection records shall be included in an appendix in the applicable report.

Project management time is limited to $417.00 per event/scope of work and is dependent on personnel overseeing the work.

Maximum cost of field activities per day is limited to $820.00.

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 application. **The cost of laboratory analyses will be reimbursed at cost plus 10% 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 **RESCINDED, included in task 8.1.a** Cost for disposal of petroleum contaminated soil/water in drums

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 10% 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 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. This task includes field activities and supervision, project scheduling and oversight.

Maximum cost is $1,040.00 per day and is dependent on personnel conducting the work.

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 application. 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 10% markup not to exceed the reasonable rate schedule. A markup will not be allowed if the CAC uses their own driller.

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 4.2 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 $147.00 and is dependent on personnel conducting the work. 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 $251.00 and is dependent on personnel conducting the work.

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 $1,830.00 and is dependent on personnel conducting the work.

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.

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 time, travel, mileage, equipment, mobilization/demobilization, supplies, lodging, and per diem to complete recovery well trenching in accordance with the Corrective Action Plan Guidelines and applicable TDEC CAS Figure Package, on a per foot basis.

Maximum cost for recovery well trench installation, including piping and fittings, is $90.00 or $100.00 / 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 $1,626.00/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 $463.00. and a maximum cost for each additional extraction well/contingent line connection of $140.00.

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 $2,438.00 per pad installation. Maximum cost for bollard installations is $253.00 each up to $3,036.00 for 12.

4.4.a.9 Rescinded, included in relevant tasks

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.

Category 1 equipment is at cost not to exceed $500.00, if over $500.00 then requires submission of 3 bids and prior Division approval.

Category 2 equipment is at cost not to exceed $1,000.00, if over $1,000.00 then 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 time, travel, mileage, equipment, mobilization/demobilization, supplies, lodging, and per diem to complete CAS discharge piping and trenching in accordance with the Corrective Action Plan Guidelines and TDEC CAS Figure Package, on a per foot basis.

Maximum cost for discharge trench installation, including piping and fittings, is either $26 or $33 / linear foot.

4.4.a.11 Cost for wet test of system

This task will include personnel and equipment/supplies/portable field instruments 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 $1,788.00 per wet test and is dependent on personnel conducting the work.

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 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/supplies/portable field instruments 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. **Level 2 equipment/supplies/portable field instruments is applicable when only backflushing carbons and changing bag filters (i.e. other major components are not cleaned). Level 3 equipment/supplies/portable field instruments is applicable when major components are cleaned. To receive reimbursement for Level 3, photographic documentation with date and time stamp of before and after of major components cleaned are required in both the reimbursement application and associated monitoring report. Level 1 through Level 3 equipment, supplies, and portable field instruments are on a per day basis and not per task. Justification and approval shall be obtained prior to field activities for variance and/or more than one level per day (i.e. this will be an exception and not routinely necessary**

Maximum cost is $1,517.00 per day and is dependent on personnel conducting the work. 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). A Corrective Active System Field Log (CASFL) should also be completed for each site visit if the system is operating before departure from the site. 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. **Level 2 equipment/supplies/portable field instruments is applicable when only backflushing carbons and changing bag filters (i.e. other major components are not cleaned). Level 3 equipment/supplies/portable field instruments is applicable when major components are cleaned. To receive reimbursement for Level 3, photographic documentation with date and time stamp of before and after of major components cleaned are required in both the reimbursement application and associated monitoring report. Level 1 through Level 3 equipment, supplies, and portable field instruments are on a per day basis and not per task. Justification and approval shall be obtained prior to field activities for variance and/or more than one level per day (i.e. this will be an exception and not routinely necessary**

Maximum cost is $1,321.00 per day and is dependent on personnel conducting the work. 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 a meeting that may be conducted onsite, at a local field office, or virtually. Maximum cost includes the time required for oversight by the Project Manager and a staff level person to schedule and compile aforementioned information in a suitable format to present/review during the meeting. Time includes the meeting itself.

Maximum cost is $2,152.00 per meeting and is dependent on personnel conducting the work.

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 $86.00 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 $560.00 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 $278.00 per month and is dependent on personnel conducting the work.

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/supplies/portable field instruments 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. **Level 2 equipment/supplies/portable field instruments is applicable when only backflushing carbons and changing bag filters (i.e. other major components are not cleaned). Level 3 equipment/supplies/portable field instruments is applicable when major components are cleaned. To receive reimbursement for Level 3, photographic documentation with date and time stamp of before and after of major components cleaned are required in both the reimbursement application and associated monitoring report. Level 1 through Level 3 equipment, supplies, and portable field instruments are on a per day basis and not per task. Justification and approval shall be obtained prior to field activities for variance and/or more than one level**

per day (i.e. this will be an exception and not routinely necessary

Maximum cost is $2,181.00 per day and is dependent on personnel conducting the work. The cost of the annual O&M kit from the system manufacturer is at cost plus a 10% 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 is no longer lump sum, the rate structure includes all personnel time to collect static water level measurements, calculate purge volumes, purge wells of any depth or diameter, sample wells, and sample 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. A maximum of 2 hours per well is allowed unless justification is provided and approved prior to field activities. Does not include drum costs. Note: all gauging, purging, and field sample collection records shall be included in an appendix in the applicable report.

Project management time is limited to $417.00 per event/scope of work and is dependent on personnel overseeing the work.
Maximum cost of field activities per day is limited to $820.00.

4.4.c.2 Cost for water supply well sampling

This task is no longer lump sum, the current rate structure includes all personnel and equipment/supplies/portable field instruments 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 work and to manage the laboratory services (i.e., Chain of custody, sample preparation, sample QA/QC, and invoice managing). A maximum of 2 hours per well is allowed unless justification is provided and approved prior to field activities. Note: all field sample collection records shall be included in an appendix in the applicable report.

Maximum cost of $200.00 for one (1) well, each additional well sampled includes time only.

4.4.c.3 Cost for surface water sampling

This task is no longer lump sum, the current rate structure includes sampling of various types of surface waters (i.e., includes ponds, streams, creeks, etc.) to verify contamination. This task includes all necessary personnel and equipment/supplies/portable field instruments to perform sampling. This task also includes personnel time to coordinate this work and to manage the laboratory services (i.e., Chain of custody, sample preparation, sample QA/QC, and invoice managing). A maximum of 2 hours per sample point is allowed unless justification is provided and approved prior to field activities. Note: all field sample collection records shall be included in an appendix in the applicable report.

Maximum cost of $200.00 for one (1) sample point, each additional sample point is time only.

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

This task is no longer lump sum, the current rate structure 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 personnel and equipment/supplies/portable field instruments to perform sampling. This task also includes personnel time to coordinate this work and to manage the laboratory services (i.e., Chain of custody, sample preparation, sample QA/QC, and invoice managing).
Maximum cost of $989.00 per day.

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 application. **The cost of laboratory analyses will be reimbursed at cost plus 10% 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 work 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 applicable personnel is already on site and not performed as a separate event, unless otherwise directed by the Division. **Limited to the frequency approved in the CAP, Division's preference is once per year.**

Maximum cost is $347.00 and is dependent on personnel conducting the work.

4.4.c.8 (RESCINDED should be conducted during 4.4.b.1 activities, no additional time will be added) Cost for Publicly Owned Treatment Works (POTW) sampling

4.4.c.9 (RESCINDED should be conducted during 4.4.b.1 activities, no additional time will be added) Cost for National Pollutant Discharge Elimination System (NPDES) sampling

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

This task includes all personnel time and equipment/supplies/portable field instruments required to conduct whole effluent toxicity sampling over a five (5) day period. Personnel are allotted a maximum of two (2) hours 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 $567.00 for each sample collection event, total of 3.

4.4.c.11 RESCINDED, included in task 4.4.b.1 (no additional time added) Cost for corrective action system air monitoring

4.4.c.12 RESCINDED, included in task 8.1.a Cost for disposal of drums filled with free product or groundwater contaminated with petroleum product

4.4.c.13 RESCINDED, included in task 8.1.a Cost for disposal of drums filled with petroleum contaminated soil

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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 CAP Guidelines. All vacuum measurements shall be documented in the CASFL as well as the applicable table(s) in the associated 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. Note: all field notes shall be included in an appendix in the applicable report.

Maximum cost is $150.00.

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. **To receive reimbursement for Level 3 equipment/supplies /portable field instrument (for the event and not per day), photographic documentation with date and time stamp of before and after of major components cleaned are required in both the reimbursement application and associated monitoring report. Level 1 through Level 3 equipment, supplies, and portable field instruments are on a per day basis and not per task. Justification and approval shall be obtained prior to field activities for variance and/or more than one level per day (i.e. this will be an exception and not routinely necessary**

Maximum cost is $3,359.00 and is dependent on personnel conducting the work.

4.4.d.2 RESCINDED, included in task 8.1.a Cost for disposal of drums filled with free product and/or groundwater

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 $208.00 for oversight and is dependent on personnel conducting the work.
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.

Maximum cost not to exceed $450.00.

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

This task includes all personnel time and equipment required to properly decommission 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. All state-owned equipment pick-up will be scheduled by the Division.

Maximum cost is not to exceed $1,499.00. 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.
Category 1 equipment is at cost not to exceed $500.00, if over $500.00 then requires submission of 3 bids and prior Division approval.

Category 2 equipment is at cost not to exceed $1,000.00, if over $1,000.00 then requires submission of 3 bids and prior Division approval.

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 $450.00.

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 $1,619.00.

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 $1,799.00.

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 $417.00 and is dependent on personnel conduct the work.

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 10% markup, submitted to the Division and approved in writing.

4.4.e.3 (RESINDED included in 4.4.e.5) Cost for mobilization/demobilization of drill rig

4.4.e.4 (RESINDED, included in 4.4.e.6) Cost for drilling

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 1,109.50 and is dependent on personnel conducting the work.

4.4.e.8 Cost for groundwater sampling

This task is no longer lump sum, the current rate structure includes all personnel time to collect static water level measurements, calculate purge volumes, purge wells of any depth or diameter, sample wells, and sample purge water for disposal. This task also includes personnel time to coordinate this work and to manage the laboratory services (i.e., Chain of custody, sample preparation, sample QA/QC, and invoice managing). A maximum of 2 hours per well is allowed unless justification is provided and approved prior to field activities. Does not include drum costs. Note: all gauging, purging, and field sample collection records shall be included in an appendix in the applicable report.

Project management time is limited to $417.00 per event/scope of work and is dependent on personnel overseeing the work.

Maximum cost of field activities per day is limited to $820.00.

4.4.e.9 Cost of laboratory services

This task includes laboratory costs associated with groundwater sampling. 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 10% 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 RESCINDED, included in task 8.1.a Cost for disposal of petroleum contaminated soil and/or water in drums

4.0 RISK MANAGEMENT AND CORRECTIVE ACTION PROCESS

Task 4.4 Corrective Action

Task 4.4.f Corrective Action Training

4.4.f.1 Cost for Annual CAS Specialist Training

This task will include Annual CAS Specialist Training conducted by the Division's Contracted Corrective Action System Manufacturer. This training shall include but not limited to CAS system O&M, trouble shooting, startup and deactivation, CAS system optimization and system performance. CACs contracted to an open fund covered release are eligible for reimbursement. Maximum cost includes the attendee's maximum hourly rate, travel and per diem costs required to complete the training. Attendees must meet all pre-requisites for CAS Specialist Certification, be present for the entire training course and pass any required testing with a satisfactory result to be eligible for reimbursement.

No markup will be reimbursed.

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 $508.00 per event and is dependent on personnel conducting the work.

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 application. 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 10% markup not to exceed the reasonable rate schedule. A markup will not be allowed if the CAC uses their own driller.**

Maximum cost for 2" well abandonment is not to exceed $16.00 per foot.
Maximum cost for 4" well abandonment is not to exceed $18.00 per foot.
Maximum cost for recovery well vault removal is $400.00 per vault.
Maximum cost for manhole covers and well pad removal is $175.00 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 500 miles round trip.
Maximum roundtrip mileage is 500 miles and cost is limited to 2 x IRS Business Standard Mileage Rate.

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 $278.00 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.

Maximum cost is equal to the proposed cost and any change orders that is approved by the Division prior to completing the work.

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. **Grass seed, straw bales, and/or mulch at cost + 10%, receipts are required.**

Maximum cost is $280.00.

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.

Task Code	Submitted Documents (Applications/Proposals/Reports/Submittals)		Maximum Cost
6.1	**UST Closure**		
	6.1.a	TRBCA Closure Report	$665.00
	6.1.b	Soil Stockpile Sampling Report (TGD-005)	$455.00
	6.1.c	Over-excavation Report	$1,455.00
	6.1.d	Application to Treat Petroleum Contaminated Soil (TGD-009)	$455.00
	6.1.e	Soil Treatment and Disposal Report	$455.00
6.2	**Hazard Notification Report**		$245.00
6.3	**Site Check Report (TGD-012)**		$1,140.00
6.4	**Initial Response and Hazard Management Report (IRHMR)**		$2,900.00
	6.4.a	Hazard Management Report	$560.00
	6.4.b	Health and Safety Plan (if not included with IRHMR)	$495.00
6.5	**Impacted Drinking Water Management (TGD-019)**		
	6.5.a	Impacted Drinking Water - Hazard Management Report (TGD-019)	$560.00
	6.5.b	Impacted Drinking Water Supply Temporary Response – Proposal (if costs anticipated to exceed $2500.00)	$495.00
	6.5.c	Impacted Drinking Water Supply Permanent Response – Proposal	$975.00
6.6	**Petroleum Vapor Impact Management (TGD-020)**		
	6.6.a	Petroleum Vapor Impact - Hazard Management Report (TGD-020)	$560.00
	6.6.b	Petroleum Vapor Impact Temporary Response – Proposal (if costs anticipated to exceed $2,500.00)	$495.00
	6.6.c	Petroleum Vapor Impact Permanent Response – Proposal	$975.00
6.7	**Mobile Enhanced Multi-phase Extraction (MEME) (TGD-016)**		
	6.7.a	Application to Perform MEME	$765.00
	6.7.b	8-hour MEME Report	$560.00
	6.7.c	24-hour MEME Report	$765.00

Task Code	Submitted Documents (Applications/Proposals/Reports/Submittals)		Maximum Cost
6.8	**Free Product Removal**		
	6.8.a	Free Product - Hazard Management Report (TGD-004)	$665.00
	6.8.b	Free Product Investigation Proposal	$975.00
	6.8.c	Free Product Investigation Report	$2,900.00
	6.8.d	Free Product Removal Plan	$8,565.00
6.9	**Initial Site Characterization Report (ISCR) -** (Exposure Assessment and Risk Analysis Report are integrated into Report requirements – no additional cost allowed)		$6,075.00
	6.9.a	Additional Monitoring Well Installation Proposal	$410.00
	6.9.b	Additional Monitoring Well Installation Report	$560.00
6.10	**Exposure Assessment Report (TGD-017)**		$1,600.00
	6.10.a	Additional Remediation and/or Risk Management Response Submittal	$105.00
	6.10.b	Additional Remediation and/or Risk Management Evaluation – with Division approval	$975.00
	6.10.c	Risk Analysis Report only	$195.00
6.11	**Soil Gas Survey (TGD-018)**		
	6.11.a	Soil Gas Survey Application	$590.00
	6.11.b	Soil Gas Survey Report	$870.00
6.12	**Source Removal (Over-excavation)**		
	6.12.a	Source Removal Proposal	$660.00
	6.12.b	Source Removal Report	$1,455.00
6.13	**Risk Reduction**		
	6.13.a	Risk Reduction Proposal	$455.00
	6.13.b	Risk Reduction Report	$840.00
6.14	**Institutional Controls**		
	6.14.a	Institutional Control Proposal	$455.00
	6.14.b	Institutional Control Report	$140.00
6.15	**Engineering Controls**		
	6.15.a	Engineering Control Proposal (estimate must be submitted and approved prior to proposal)	-
	6.15.b	Engineering Control Report (cost as proposed and approved)	
6.17	**Corrective Action Plan (CAP)**		
	6.17.a	CAP - Soil Contamination Only	$4,950.00
	6.17.b	CAP with Groundwater Contamination	$8,565.00
6.18	**Monitoring Reports (TGD-007)**		
	6.18.a	Risk Monitoring Report (RMR)	$1,455.00

	6.18.b	Closure Monitoring Report (CMR)	$1,455.00
	6.18.g	Corrective Action Baseline Monitoring Report (CABMR)	$2,265.00
Task Code	**Submitted Documents (Applications/Proposals/Reports/Submittals)**		**Maximum Cost**
	6.18.h	Corrective Action Monitoring Report with as-built diagrams (CAMR-ab)	$4,430.00
	6.18.i	Corrective Action Monitoring Report (CAMR)	$3,165.00
	6.18.j	Corrective Action Closure Monitoring Report (CACMR)	$1,725.00
6.19	**Permit Applications and Discharge Monitoring Reports**		
	6.19.a	NPDES Permit Application	$600.00
	6.19.b	Discharge Monitoring Report (DMR)	$350.00
	6.19.c	POTW Application	$600.00
	6.19.d	POTW Report	$195.00
	6.19.f	Air Exceedance Report	$280.00
	6.19.g	Annual Air Emissions Report	$430.00
	6.19.h	Monitoring Well Maintenance Fee – no markup (Shelby County)	$150.00
	6.19.i	Class V Underground Injection Well Application	$600.00
	6.19.j	Monitoring Well Permit – no markup (Shelby County)	$150.00
	6.19.k	Right-of-way Bond – no markup	actual cost
	6.19.x	Other Required Permits/Renewals – no markup	actual cost
6.20	**Miscellaneous Application/Proposals/Reports/Submittals**		
	6.20.a	Field Work Notification	$45.00
	6.20.b	Boring Log Installation submittal	$245.00
	6.20.c	Public Notice of Corrective Action	$130.00
	6.20.d	Water Use and Receptor Survey Report (other than IRHMR/ISCR)	$1,040.00
	6.20.z	Other report as required by the Division (actual cost as approved by Division project manager in writing). Report name must be listed in the comment section of the reimbursement application.	actual cost
6.21	**Corrective Action System Deactivation or Decommission Report**		$245.00
6.22	**Monitoring Well Abandonment Report (<6 wells)**		$245.00
6.23	**Monitoring Well Abandonment Report (>6 wells)**		$350.00
6.24	**Advanced Site Characterization**		
	6.24.a	Advanced Site Characterization Proposal	$1,010.00

	6.24.b	Advanced Site Characterization Report from the Sub-contractor (includes a CAC site map, cover letter, and summary)	$2,080.00
	6.24.c	Confirmatory Soil Sampling Report (includes tables, maps, and boring logs)	$560.00

Reference 1

		EPA Method 8260B								EDB (EPA Method 8011)	EPA Method 8270C SIM[2] or EPA Method 8310[2]																EPA Method 200.7[2]					EPH[1] (TN EPH Method)
Matrix	**Product(s)**	**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	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	
	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	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	
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)[3]	**Gasoline**	X	X	X																											
	Diesel, Kerosene, Jet Fuel	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					
	Aviation Fuel	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					

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 hotel invoice. 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 TN travel regulations can be found at: https://www.tn.gov/finance/rd-doa/fa-travel.html
Current CONUS rates can be found at: https://www.gsa.gov/travel/plan-book/per-diem-rates/per-diem-rates-results?action=perdiems_report&fiscal_year=2025&state=TN&city=&zip=

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 application. 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/finance/rd-doa/fa-travel.html
Current CONUS rates can be found at: https://www.gsa.gov/travel/plan-book/per-diem-rates/per-diem-rates-results?action=perdiems_report&fiscal_year=2025&state=TN&city=&zip=

8.0 DRUM DISPOSAL PROCESS

Task 8.1 Drum Disposal

8.1.a Cost for drum disposal

This task will include all necessary personnel time, equipment and supplies required to properly dispose of drums filled with soil or water/free product generated from investigation or corrective action activities. This cost is for drum, disposal, and transportation to a permitted disposal facility. Disposal invoice/manifest must be included with the reimbursement application.

Maximum cost is $300.00 per drum.

10.0 STATE CONTRACTOR USE ONLY

Task 10.1 Tank Closure and Overexcavation

10.1.a Tank Closure and Over-excavation

Per Notice to Proceed

10.1.b Mobilization and Demobilization of heavy equipment

Per Notice to Proceed

10.1.c Stockpile Loading, Hauling, and Disposal

Per Notice to Proceed

10.1.c QAPP Checklist

Per Notice to Proceed

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/ust/forms-guidance.html .

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

A. UST Cost Database Instructions

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

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

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

B. To Begin The Invoice

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

C. Cost Database Main Page

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

D. Invoice Entry Page

It is important that all information on this page be correct. The facility ID number will appear as a default on the next page. Enter the appropriate information in all fields. If any field is left blank, a pop-up box will identify the field that needs to be completed. If the case number is not known, enter "Unk". It is recommended that you contact the 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.

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.

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.
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GROUNDWATER SAMPLING - Reimbursed costs include all personnel and equipment/supplies/portable field instruments.

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 @ $1078.00). Any additional wells surveyed may be entered on the same page (i.e., MW-5 and MW-6; 2 wells @ $184.00/each).

ANALYSIS – Reimbursed at cost plus 10% 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 approved rates.

WELL INSTALLATION - Enter costs associated with any drilling activity such as direct push, slide hammer, or hammer drill (soil gas survey), 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..

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 preparer 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, the Certification Affidavit-Responsible Part page must be signed. The CAC should also complete the applicable certification affidavit page in the

same manner. Both original, certification affidavit pages must be submitted as the first two pages of the electronic submittal. Applications will not be forwarded to the fiscal office for payment without both completed certification affidavit pages. Copies of these pages are found under Forms and can be downloaded at: https://www.tn.gov/environment/ust/forms-guidance.html . (click FUND AND REIMBURSEMENT > click Certification Affidavits for Electronic Reimbursement 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.

N. Appeals

Appeals should be entered as a reimbursement application with the appeal letter included. The appeal submittal process to follow is outlined in the receipt acknowledgement email