NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WASTE MANAGEMENT LEAKING PETROLEUM UNDERGROUND STORAGE TANK CLEANUP FUND

REASONABLE & NECESSARY TASK SCOPE-OF-WORK DOCUMENT

This document provides definitions and scopes-of-work of tasks that may be required to be performed in accordance with North Carolina General Statutes and Regulations at sites contaminated as a result of releases from leaking petroleum underground storage tank systems. Claims that are submitted to the Leaking Petroleum Underground Storage Tank Cleanup Fund must be prepared using the task codes listed in this document. For the most recent reasonable rates allowed for these tasks, please check the NC UST Reasonable and Necessary Maximum Rates List located on the UST Section's web site at http://deq.nc.gov/about/divisions/waste-management/underground-storage-tanks-section/trust-fund-branch/reasonable-rate-documents or call the UST Section at (919) 707-8171.

The reimbursable tasks described in this document are those that have been determined by the Department to be specifically related to environmental assessment and cleanup of contamination from leaking petroleum underground storage tanks (USTs) and are in no way inclusive of all required tasks to be performed. Items not specifically mentioned in this document are not reimbursable. The Department will consider items not listed within this document, that are required in order to conduct assessment or remedial activities as required by the Department, on a case by case basis. Some costs incurred by UST owners, operators and landowners are not reimbursable pursuant to regulation [N.C.G.S. 143-215.94B(b5)(d)] and [15A NCAC 2P .0402(b)]. Such regulated non-reimbursable costs include:

- 1. Costs of the removal and disposal of noncommercial underground storage tanks and contents removed on or after July 3, 1991, and of commercial underground storage tanks and contents removed on or after January 1, 1992. This includes any materials necessary to be removed in order to access the USTs such as asphalt, concrete, clean overburden soils, etc.;
- 2. Costs of the replacement of any underground storage tank, piping, fitting, or ancillary equipment such as, but not limited to, pump islands or canopies. This includes any materials necessary to be removed in order to access the USTs such as asphalt, concrete, clean overburden soils, etc.;
- 3. Costs incurred in preparation of any proposals or bid by a provider of service for the purpose of soliciting or bidding for the opportunity to perform an environmental investigation or cleanup, even if that provider is ultimately selected to provide the service solicited unless specifically requested by the Department as part of the Department's responsibility to ensure cost-effective cleanups;
- 4. Interest on any accounts, loans, etc.;
- 5. Expenses charged by the owner or operator or landowner in the processing and management of a reimbursement application or subsequent claims;
- 6. Attorney's fees;
- 7. Penalties, fees, and fines assessed by any court or agency;
- 8. Loss of profits, fees, and wages incurred by the owner or operator or landowner;
- 9. Costs incurred during cleanup if pre-approval of the cleanup tasks and associated costs was not obtained from the Division. Pre-approval is not required for activities defined by the Department as being related to an emergency response (such as the Initial Abatement Actions required per 15A NCAC 2L .0404) or risk assessment (such as the initial Limited Site

Assessment performed onsite to define the initial risk classification for the incident). It is the responsibility of the Responsible Party or their designate to contact the Trust Fund Branch concerning any questions concerning the pre-approval needs of an activity prior to the work being performed;

- 10. Any other expenses not specifically related to environmental cleanup, or implementation of a cost effective environmental cleanup, or third party bodily injury or property damage.
- 11. Pursuant to Session Law 2015-241, costs associated with any noncommercial UST releases detected on or after October 1, 2015 or claimed on or after July 1, 2016.

If charges incurred by the Responsible Party exceed the listed rates within this document, then all costs above the listed rates will be the responsibility of the Responsible Party. If you have any questions regarding the appropriate task to use for an activity, whether a task requires preapproval or if you have any questions concerning this document, please contact the UST Section, Trust Fund Branch at (919) 707-8171.

Important Reimbursement Notes:

- 1. All work is to be conducted in the most cost-effective manner possible to the Trust Fund.
- 2. If an error or discrepancy within this or the claim document is discovered, it is the responsibility of the individual preparing the claim to contact the Trust Fund Branch at (919) 707-8171 for clarification prior to claim submittal.
- 3. Please note that any task (for which bidding is required as indicated in the RRD) where costs are expected to exceed \$5,000 but less than \$25,000 must receive three (3) competitive bids and bids greater than \$25,000 must receive five (5) competitive bids prior to the initiation of the action except where otherwise noted. The bids shall include any and all costs necessary to do the work as outlined in the bid requests as well as all taxes, shipping and handling charges. Bids must be itemized by costs for material components, labor types and rates, rental equipment, etc. Lump sum bids will not be accepted. Only the lowest qualified bid will be reimbursed. Invoices must be broken down in accordance with the bid. Failure to provide the required bid information will result in the claim being reimbursed for the maximum non-bid amount (\$5,000). This being said, items that fall under the \$5,000 bidding requirement must still be justified as to the requested cost. The Trust Fund reserves the right to reject any and all bids or item invoices that it finds unreasonable. All bid specifications must be reviewed by the UST Section prior to being released. If the bid specification includes any requirements for PE review and signature, then the specification must be approved by the UST Section PE prior to release.
- 4. Cost is defined as that actual cost of conducting the work that can be supported by invoices and an itemized breakdown of the time and materials used in conducting the work. If you are a responsible party that conducts the work yourself, owns your own environmental service company, or environmental contractor and equipment then actual costs are limited to those immediate costs to conduct the work. Responsible

parties are not allowed to "profit" from the contamination. This includes the selling of any materials or equipment that has been reimbursed by the Trust Fund.

5. The Trust Fund does not reimburse for property transaction investigations conducted at the request of a purchaser. Investigations conducted as part of the 15A NCAC 2N .0601 which do not confirm a release are not eligible for reimbursement. However, it is possible in some cases to utilize a portion of the data from these ineligible events in a subsequent eligible abatement or assessment phase to avoid duplicate sampling at locations that have already been investigated. Investigations conducted as part of 15A NCAC 2N .0602 due to offsite impacts may be eligible for reimbursement.

Where some of earlier investigations were positioned and analyzed such that they may be utilized in one of these subsequent phases, the Trust Fund will consider those earlier costs to be applicable during that later stage. For instance, if an incident manager agrees that a few recent soil samples from an ESA or ineligible Site Check can be used to create abatement over-excavation boundaries rather than recollecting confirmation samples in the same area, the analytical costs for those samples may be claimed as part of the eligible initial abatement. If a monitoring well installed during one of these ineligible investigations is acceptable as a source area well, the installation, supervision, sampling and applicable analytical samples from that well may be claimed in the LSA lump sums (Task Code 2.600 or 2.610). Similarly, where some of the soil or groundwater data can be used to substitute for the new plume delineation samples during the Comprehensive Site Assessment, the boring/well installation, supervision, sampling, and analytical for those selected samples may be included in the CSA claim. Any claim for portions of the ineligible investigations must include documentation showing exactly what was reused in the eligible assessment or abatement phases included in the claim. Other data that are not considered valid substitutions for sampling during later phases would not be reimbursable.

- 6. Energy surcharges will not be reimbursed. The Department will periodically review mileage rates due to the fluctuating fuel prices and issue a price clarification if warranted.
- 6. In accordance with the following general statute, § 143-215.94E,
 - (j) An owner, operator, or landowner shall request that the Department determine whether any of the costs of assessment and cleanup of a discharge or release from a petroleum underground storage tank are eligible to be paid or reimbursed from either the Commercial Fund or the Noncommercial Fund within one year after completion of any task that is eligible to be paid or reimbursed under G.S. 143-215.94B(b), 143-215.94B(b1), or 143-215.94D(b1).
 - (k) An owner, operator, or landowner shall request payment or reimbursement from the Commercial Fund or the Noncommercial Fund for the cost of a task within one year after the completion of the task. The Department shall deny any request for payment or reimbursement of the cost of any task that would otherwise be eligible to be paid or reimbursed if the request is not received within 12 months after the later of the date on which the:
 - (1) Department determines that the cost is eligible to be paid or reimbursed.
 - (2) Task is completed. (1987 (Reg. Sess., 1988), c. 1035, s. 1; 1989, c. 652, ss. 7, 16; 1991, c. 538, ss. 7, 22; 1991 (Reg. Sess., 1992), c. 817, s. 2; 1993, c.

400, s. 15; c. 402, s. 3; 1995, c. 377, s. 8; 1995 (Reg. Sess., 1996), c. 648, ss. 3, 4; 1998-161, ss. 4, 5, 8(a), (b), 11(b); 1998-215, s. 68; 2000-172, s. 7.1; 2003-352, ss. 6, 7; 2004-124, s. 30.10(d); 2005-365, ss. 1, 2; 2008-195, s. 2(a); 2010-154, ss. 5, 6; 2011-398, s. 51.)

This statute will be strictly applied. In (k)(1) the date is the date of the eligibility determination letter and in (k)(2) it is the completion date of the task defined by the scope of work listed within this document or listed on the pre-approval with the exception of report tasks in which the date will be the regulatory date established in rule, if applicable, or the date established by the Department in any Notice of Regulatory Requirements (NORR), or the approval date by the UST Section, whichever is earlier. It is the responsibility of the RP and of their designee to update report deadlines with the UST Section.

- 7. When submitting for required pre-approval of tasks, ALL subcontractors to be utilized are to be clearly listed as well as the presentation of any and all site maps or diagrams showing the location of the requested work. The Responsible Party is free to contract with any individual or company that is properly licensed to conduct the requested work but in doing so it does not bind the Department to any increased costs as a result of their or their designee's business practices. Any costs for which an AVERAGE is provided, for example utilities, must be justified after the first six months of operation by a continuing running average of the proceeding costs.
- 8. Any increased difference in costs resulting from contracts with preferred vendors to the Trust Fund will not be reimbursed. Any licensed individual or company in good standing with the governing licensing board or authority, including state and local government, that is licensed to conduct UST related assessment or cleanup, may not be denied the ability to do so as a result of contractual services by the responsible party or their designee. In an effort to minimize excess travel and hauling expenses, to the extent practicable, all work should be done by individuals, companies, and facilities located as close to the incident as possible. Contracts between responsible parties and environmental service providers are not binding to the UST Section and do not represent a reasonable or necessary justification for increased costs.
- 9. When conducting work at a site with a current or previous incident, prior to conducting ANY work, the responsible party or their designee shall contact the Trust Fund to determine if the eligibility determination will result in the work requiring pre-approval.

ACRONYMS USED IN THIS DOCUMENT

AFVR	Aggressive Fluid-Vapor Recovery	NOV	Notice of Violation
AS	Insitu Air Sparging (groundwater)	NPDES	National Pollutant Discharge Elimination System
ASTM	American Society for Testing and Materials	NRP	Notice of Residual Petroleum
BOD/COD	Biological / Chemical Oxygen Demand		Operation and Maintenance
BTEX	Benzene, Toluene, Ethylbenzene, & Xylene		Oxygen Reduction Potential
CAMA	Coastal Area Management Act	OVA	Organic Vapor Analyzer
CAP	Corrective Action Plan	PAHs	Polycyclic Aromatic Hydrocarbons
CFM	Cubic Feet per Minute	PCB	Polychlorinated Biphenyls
CSA	Comprehensive Site Assessment	PID	Photo ionization Detector
DOT	Department of Transportation (NC)	POTW	Publicly Owned Treatment Works
DRO	Diesel Range Organics	QA/QC	Quality Assurance and Quality Control
DWQ	Division of Water Quality	RCRA	Resource Conservation & Recovery Act
EDB	Ethylene Dibromide	ROA	Right-of-Access
EMC	Environmental Management Commission	ROW	Right-of-Way
EPA	Environmental Protection Agency	RP	Responsible Party
GAC	Granular Activated Carbon	SDR	Standard Dimension Ratio
GC/MS	Gas Chromatography Mass Spectrometry	SOW	Scope of Work
GPM	Gallons Per Minute	STF	State Trust Fund
GRO	Gasoline Range Organics	SVE	Soil Vapor Extraction (soil)
IAAR	Initial Abatement Action Report	SVOC	Semi-Volatile Organic Compounds
IPE	Diisopropylether	TCLP	Toxicity Characteristic Leaching Procedure
LIF	Laser Induced Fluorescence		
LSA	Limited Site Assessment	TDS/TSS	Total Dissolved / Suspended Solids
MADEP	Massachusetts Department of Environmental Protection	TOC	Total Organic Carbon
MIP	Membrane Interface probe	TPH	Total Petroleum Hydrocarbons
MMPE	Mobile Multi-phase Extraction	ULOCO	Utility Locating Company
MOBE	Mobilization to and from a site	UST	Underground Storage Tank
NCAC	North Carolina Administrative Code	UVF	Ultraviolet fluorescence
NOI	Notice of Intent	VOC	Volatile Organic Compounds
NORR	Notice of Regulatory Requirements	VRS	Vapor Recovery System (vapor abatement)

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Section 1 - Pre-Assessment Activities

1.010

Project Review and Setup: This SOW is only allowed when the initial environmental service provider (ESP) working on the release changes through no action or fault of the responsible party (RP). This SOW includes review of existing site data, including incident information, past site history, agency requirements (NOV, NORR, etc.), previous assessments and remediation (closure reports, CSA, CAP, etc.). SOW assumes RP will provide consultant with all available information plus all reimbursement documentation. SOW will also include one visit to the appropriate Regional Office to copy and review any needed documentation as necessary. SOW includes file-copying costs, consultant mileage and travel time. Responsible parties who contract with ESPs and then change ESPs for whatever reason, will be responsible for this task. This task does not apply to RPs who sell/buy interest in sites and then, as a result, change ESPs. This task does not apply for changes in project managers within an ESP firm, contracts maintained by the same project manager when changing ESP firms, the reactivation of years-dormant sites by the same ESP responsible for the prior work, or for internal reorganization following a merger or takeover of one ESP by another.

1.020

Site Reconnaissance and Receptor Survey: This SOW will consist of locating and identifying any potential receptors such as supply wells, unconfined or semi-confined deeper aquifers in the Coastal Plain physiographic region which the Department has determined is being used or may be used as a source of drinking water, surface waters, wellhead protection areas, basements and public utilities within 1,500 feet of the discharge, release or known extent of contamination. Determine the geographic coordinates using either a GPS or address matching for each potential receptor which can be described by a point location. Lat/Long will be reported in decimal degrees to six decimal places. Identify all potentially affected parties and include names and property and mailing addresses in a table matching the format of Table B-5 located in the appendices of the guidelines. This SOW will also consist of gathering information about the site so that a detailed site map can be generated from field observations (i.e. location of discharge and extent, identify all receptors, monitoring wells, and other site features) as well as taking onsite and surrounding pictures. SOW will include review of city or county tax maps, local topographical maps, local or DOT aerial maps, city or county public utility maps, and site photographs. SOW includes project manager oversight and staff level persons (or equal) to perform fieldwork, telephone coordination with property owners and local city and state government agencies. SOW includes data review, evaluation, reporting (client, property owners, Regional Office), and the purchase of required maps. If this task has already been completed, it should only be duplicated where requested and pre-approved by the UST Section under Task 1.025 below. Consultant mobe may be claimed under 12.050.

1.025

Site Reconnaissance and Receptor Survey Update: This task is to be conducted when specifically, requested by the Regional Office and pre-approved by the UST Section. The RP is expected (by rule and guideline) to review the status of potential receptors continuously, providing updates of the status with every report submitted. Such a review does not demand a full survey. The scope of this task is similar to that of task 1.020. The Responsible Party or their designee is expected to review the current site reconnaissance/survey report on file and to update the well user information and/or waterline information. The report should consist of an updated

table of the well users in the area and an updated map. SOW includes data review, evaluation, reporting (client, property owners, Regional Office), and the purchase of required maps. If a previous Responsible Party or their designee has already completed this task, it should not be duplicated unless requested and pre-approved by the UST Section. Consultant mobe may be claimed under 12.050.

1.050

Right-of-Access Agreements (Area Property Owners): This SOW consists of presenting and acquiring a right-of-access from adjacent and nearby property owners. Access purposes include; borings and soil sampling, monitor and remedial well installation, easements, and soil excavation, or other activities resulting in material or legal changes to the property. This task is not applicable for simple door-knock access to obtain information such as receptor status, surveyor measurements for mapping purposes, water supply well sampling, etc. Responsible Party or their designee will be responsible for his or her own standard access agreement format. SOW will include three verifiable attempts to access adjacent properties for the purposes listed above. SOW will also include a meeting with the subject property owner to reconcile any problems or attempt to clarify the need to have access as well as all Responsible Parties or their designees and associated time and mileage. Restrictions to and property owner contact requirements of this agreement will be at the discretion of the RP and/or property owner, and will be addressed within the maximum amount allowed per property for access (i.e., multiple access events cannot exceed the maximum rate per property over the lifetime of the site). ROA's are to be between the Property Owner and the RP & their agents (whoever their agent may be at any given time). The UST Section must be notified upon failure to obtain a signed right-ofaccess agreement. Unsuccessful agreements may be reimbursed as long as the Responsible Party or their designee can provide sufficient documentation (certified mail, statements from the property owner, etc) that three attempts were made to contact the individual and all return correspondence from the property owner have been received. Price is per final agreement and is for the duration of ownership of the property.

1.061

Request for Bid of Non-Engineering Design Work (*Bid Solicitation Package Preparation and Distribution*): This SOW consists of preparing (1) a quotation form and (2) a copy of technical specifications of needed equipment or products and drawings (where applicable), and (3) providing a copy of the quotation form and technical specifications and drawings to the UST Section incident manager or engineer for review and modification <u>prior to solicitation</u>.

Submittal of: (1) the quotation form and (2) technical specifications and drawings (where applicable) to appropriate service providers and the receipt and processing of completed forms upon return. Bid requests must reference the applicable task codes for which the bid is being placed and include any and all costs necessary to do the work as outlined in the quotation forms as well as all taxes, shipping and handling charges. Bids must be itemized by costs for material components, labor types and rates, rental equipment, etc. Lump sum bids without a cost breakdown will not be accepted. If multiple tasks are being bid, each task must have a total amount specific for the work to be conducted within that task.

Bids are to be requested directly from a subcontractor capable of conducting the work or from general contractors or other intermediary subcontractors if it can be shown to be more cost effective due to several different professional service subcontractors being required to complete the scope of work. All bids must be solicited from providers local to the site to the maximum

extent practicable. Where the Responsible Party or their designee wishes to compete for the work themselves, their finalized bid plus a list of the prospective bidders must be provided with the pre-approval request for this task (1.061). Notarization will no longer be required. Price is \$100 per successful, required bid not to exceed \$300 or \$500, whichever is applicable. Please complete and attach Secondary Form Sec-J.

Please note that any task (for which bidding is required as indicated in the RRD) where costs are expected to exceed \$5,000 but less than \$25,000 must receive three (3) competitive bids, and bids greater than \$25,000 must receive five (5) competitive bids prior to the initiation of the action except where otherwise noted. Only the lowest qualified bid, as determined by the Section, will be reimbursed. Failure to provide the required bid information will result in the claim being reimbursed for the maximum non-bid amount (\$5,000).

Section 2 – Release Investigation and Confirmation

<u>2.05</u>0

Tank Tightness Testing: This SOW is for the testing of an underground storage tank at the specific request of the UST Section, under 2N .0602 and General Statute 143-215.94B(b)(8), in order to determine if a release has occurred.

Free Product Recovery

2.071

Cost of Free Product Evaluation: This SOW must include a bail-down test to provide an estimate of the recovery rate of free product, an estimate of product thickness and an evaluation of product type. This activity is to be conducted while onsite for either well installation or sampling. The bail-down test must be conducted until at least 90% recovery in the water level has occurred or the test has progressed for two hours. It also includes all personnel, miscellaneous equipment and expendables. SOW includes initial measurement and recording of groundwater depths and product in affected well(s). It also includes bailing or pumping free product from affected well(s) ONE TIME plus proper storage of product once recovered. If MIP, LIF or other 3D representation screening is being utilized to make a determination of product thickness, then this SOW can be used in conjunction with the necessary drilling task code.

This SOW will be used to determine the free product method that is most appropriate at the site. Using the data collected from the initial bail-down test, subsequent free product recovery events that may be conducted and other data gathered in the course of regular assessment, the Responsible Party or their designee will recommend a method of continued free product recovery. For free product evaluations performed during initial response and abatement, the reporting of results and conclusions should be incorporated into the next required report (24hour, 20-Day, IAA, and/or LSA) following the format provided for FPR reporting in each such report, as described in the UST Section Guidelines for Site Checks, Tank Closure, and Initial Response and Abatement and the Guidelines for Assessment and Corrective Action. A separate Free Product Recovery Report (6.022), described in the Guidelines for Assessment and Corrective Action, may be required in the longer intervals between CSA, CAP, and monitoring reports, but as a rule FPR reporting should be incorporated into the CSA, CAP, and monitoring reports, following the specific format provided for those reports in the Guidelines for Assessment and Corrective Action. This report shall be presented to the Regional Office in 45 days or at a time agreed to in writing by the Regional Office. All activities must be completed in this category to receive reimbursement. No additional Free Product recovery beyond one AFVR or MMPE event will be considered or reimbursed until the UST Section receives this report. This task shall not be duplicated unless requested and pre-approved by the UST Section. Please record and submit bailing information on Primary Form P-2a. Price is per site, and only one "Free Product Recovery Report" is allowed for this task.

2.072

Cost for a Passive Skimmer: Contractor must provide a copy of the invoice. Provide a copy of the invitation to bid letter and the written bids as described in Task 1.061 above. This task requires pre-approval from the UST Section. Passive skimmers are considered bailers that store recovered product inside a built-in canister that is positioned inside a well, and <u>not</u> a typical

disposable bailer. This task is not to be used for the installation or maintenance of sorbent socks. Price is cost.

2.073

Cost for Installation and Service of Passive Skimmer: SOW includes measurement and recording of groundwater depths and product thickness of each well requiring passive skimmers. This SOW includes the installation of a passive skimmer, emptying of free product from skimmer, and proper storage of recovered product. SOW includes all personnel, miscellaneous equipment, and expendables. This task requires pre-approval from the UST Section. Price is per well.

2.074

Hand Bailing of Free Product: Occasional hand bailing of a well MAY be reimbursed if the Responsible Party or their designee meets all the following criteria:

- No special trip is required. That is, it is combined with an assessment activity already scheduled
- No additional personnel are assigned
- No additional mileage is requested
- No additional report is generated
- Free product amount must be more than just a sheen; at least 1/8 inch
- Task includes all expendables, and
- Measure and record groundwater depth and product thickness prior to bailing each well.

Please record and submit bailing information on Primary Form P-2a. This task requires preapproval from the UST Section. Price is per well.

Aggressive Fluid/Vapor Recovery (AFVR)

Please note: All non-emergency AFVR events must be pre-approved by the UST Section and the Free Product Recovery Report or Initial Abatement Action Report documenting AFVR as the most effective product recovery alternative must have been received and approved by the UST Section unless there is a written documented emergency response by a local fire official. Nuisance odors, or other concerns that do not represent exceedances of explosive concentrations (LELs) or health-based exposure limits (TWA, STEL, or IDLH) do not qualify as emergency responses. (see Task 2.071).

2.082

Field Supervision of AFVR Event (Responsible Party or their designee): SOW includes the setup and all supervision of <u>sub-contracted employees</u>, <u>not self</u>, of one complete event of AFVR. If the Environmental Service Provider is conducting this work, then this task code is not eligible for reimbursement. SOW will include helping the vacuum truck contractor setup as well as tabulating results (product and groundwater measurements before and after the event plus vacuum pressure on affected wells during the event). SOW requires hourly monitoring of VOC vapor removal rates, the amount of total fluids recovered, vacuum radius of influence, etc during the duration of the event to determine event efficiency. SOW includes all required labor, and

equipment to perform oversight. Required equipment also includes, but is not limited to, instrumentation for measuring temperature, velocity, relative humidity, and the concentration of emissions, if not provided by the subcontractor under Task 2.084. On average a typical AFVR event should be run at least 8 continuous hours. Results of this event should be incorporated into the Free Product Report or Initial Abatement Action Report (see Section 6). Consultant mobe may be claimed under 12.050.

2.084

Cost for Aggressive Fluid / Vapor Recovery (AFVR) Event: As indicated above, this task requires pre-approval from the UST Section. Along with the AFVR subcontractor invoice, the Responsible Party or their designee must include the Secondary Form 2D. Please also write the corresponding task (2.084) on the AFVR subcontractor invoice. The vacuum truck must meet the minimum performance requirements of 400 cubic feet per minute at 24 inches of mercury and 100 cubic feet per minute at 27 inches of mercury in order to be eligible for reimbursement. Please see Secondary Form D for maximum rates. Please complete and attach Secondary Form Sec-D and the subcontractor invoice in any claim. Price is cost.

2.085

Rental of AFVR Emission Control Equipment (Outgassing Treatment): This SOW will only be allowed where state or local air requirements mandate emission control equipment during AFVR events. This does not apply for emission monitoring equipment required for proper operation and evaluation of the recovery during an AFVR event, which is included in the hourly supervision rates under Task 2.082 or subcontractor equipment under Task 2.084. Please attach the vendor invoice. Price is per day up to the purchase price of the equipment.

2.086

Regulatory Reporting Requirements for AFVR: This SOW will only be allowed where state or local regulators require emissions control data to be reported for AFVR events (see Task 2.085 above). SOW includes any required public or governmental notification prior to and after the AFVR event.

2.087

Free Product Level Check: This SOW includes all personnel and equipment necessary to measure the thickness and elevation of free product. This task is to be conducted in conjunction with other activities at the site and is not eligible for reimbursement when conducted concurrently with Task Codes 2.074, 2.082, 2.084 or 7.420, and may not be claimed for the same wells for which Task 4.031 is claimed. Reimbursement for mileage for this task will only be allowed with written pre-approval from the UST Section. Price is per well showing an accumulation of free product greater than 1/8 of an inch. Dry wells are not eligible for this task maximum and shall claim only the allowable rate under Code #810. Consultant mobe may be claimed under 12.050 if pre-approved.

Free Product/Vapor Recovery System

Please Note: Vapor recovery under this section shall be defined as an abatement measure to withdraw or remove vapors that pose a documented threat to human health or results in a fire hazard or an explosion hazard as determined by the local fire marshal or fire department. Some examples include vapors in confined areas such as underground utilities, foundations, basements, etc. Vapor recovery under this section does not include vapor extraction for DWM/UST 10/17/17

remediation of in-situ soil (i.e., Soil Vapor Extraction). Soil Vapor Extraction (SVE) is to be performed in later sections as part of corrective action (see Section 7).

2.090

Specify Free Product/Vapor Recovery System: SOW includes developing specifications for a free product or vapor recovery system to meet the needs of the site. If sorbent materials or passive skimmers are to be used and assuming the appropriate wells are in place, <u>DO NOT</u> use Task 2.130. For all passive skimmer installation and maintenance activities use Tasks 2.072 and 2.073. For all sorbent installation and maintenance activities use Tasks 2.281 and 2.290. This task requires pre-approval from the UST Section and the Division.

2.100

Cost for a Free Product/Vapor Recovery System: Along with the invoice, the Responsible Party or their designee must provide a copy of the bid specification work plan, invitation to bid letter and the written bids as described in Task 1.061 above. (complete and submit Secondary Form Sec-J). This task requires pre-approval from the UST Section. Price is lowest qualified bid cost. Please complete and attach Secondary Form Sec-J.

2.121

Field Supervision for Free Product/Vapor Recovery System Installation: SOW includes all required personnel to supervise installation performed by the subcontractor not to exceed 8-hours of field time per week with the exception of the initial start date of the installation and the completion date of the installation which is allowed eight total hours. This task requires preapproval from this Section. Price is per hour. Consultant mobe may be claimed under 12.050.

2.130

Cost to Install a Free Product/Vapor Recovery System: Along with the subcontractor invoice, the Responsible Party or their designee must provide a copy of the invitation to bid letter and written bids from those subcontractors as described in Task 1.061 above. Please complete and attach Secondary Form Sec-J. SOW also includes startup and troubleshooting once system is installed. This task requires pre-approval from this Section. Price is lowest qualified bid cost.

2.141

Cost for Free Product/Vapor Recovery System Maintenance: SOW includes all required personnel to perform system check and maintenance. SOW shall also include checking product levels and thickness in well(s), checking holding tank or drums for adequate storage of recovered product, arranging product disposal, and tabulating all data for compiling into the Free Product Report (see Section 6). It is the responsibility of the Responsible Party or their designee to provide detailed field notes sufficient to explain the activities being conducted along with a time breakdown for each activity. Please complete and attach Secondary Form Sec-E. Price is per hour. Consultant mobe may be claimed under 12.050.

2.150

Maintenance and Operating Expenses for Free Product/Vapor Recovery System: SOW includes costs associated with maintenance supplies and overhead costs such as power bills. Please complete and attach Secondary Form 2E plus the invoice(s). Price is cost.

Typical operating and maintenance supplies include:

- Oil, belts, filters (compressor or skimmer components, etc.)
- Electrical components, drums or misc.
- Power bills, etc.
- Vapor Recovery (Emergency Response)

2.170

Initial Site Evaluation to Measure and Monitor Vapors: SOW includes office and field coordination to perform a site check to measure vapors plus visually locate source upon notification from the local fire officials of a documented explosive vapor situation. SOW includes notifying the local fire marshal or fire department to check the site for explosive vapors. Documentation of a report indicating an explosive potential from the fire marshal or fire department will be required for reimbursement of this task. SOW also includes notification of property owners and occupants of vapor hazards. Site check shall include all field personnel, and equipment to measure percent of oxygen and/or LEL. An OVA or a PID is not an acceptable instrument for measuring ambient vapors and should not be used. Instruments that measure % oxygen and/or % LEL should be used for this type of monitoring. SOW also includes notifying the Epidemiology Section for health risk evaluation only if best available instrumentation does not detect vapor hazards, but strong odors are persistent. This will require a site visit by the Epidemiology Section. SOW also includes reporting all information to the UST Section. This task requires pre-approval from this Section. Price is per event. Consultant mobe may be claimed under 12.050.

Please Note: The Responsible Party or their designee must evaluate if vapor recovery is necessary and make every effort to locate and remove the source prior to pursuing a VRS under Tasks 2.100 to 2.145 (where feasible). If vapor recovery is in fact needed, and the source cannot be isolated or removed, then the Responsible Party or their designee should proceed with Task 2.090.

2,200

Cost for Leasing a Free Product / Vapor Recovery System: Along with the invoice, the Responsible Party or their designee must provide a copy of the invitation to bid letter and the written bids from those vendors as described in Task 1.061 above (include optional purchase price of VRS for comparison; complete and submit Secondary Form Sec-J). This task requires pre-approval from the UST Section. Price is cost.

Please Note: The STF can only reimburse lease charges up to the purchase price of the equipment.

Boom Maintenance

2.281

Sorbent Boom/Sock Maintenance: SOW shall include all field personnel required to initially manage new booms/socks and drums (if applicable) at a site as well as any required liquid level measurements for management of sorbent booms/socks within wells. This includes installation and/or removal. Removal should only be conducted at the time of replacement as indicated by the manufacturer. Sampling schedules should be altered in accordance with the manufacturers indicated length of time for sock expenditure for socks that release nutrients or chemicals into

the aquifer. Socks/Booms can be removed at the time of sampling. SOW will also include any additional area inspection for possible health risks or environmental impacts. Please complete and attach Secondary Form Sec-E. This task is required to be completed while onsite conducting other site activities. If required by the UST Section to be done as a standalone activity consultant mobe may be claimed under 12.050.

2.282

Boom Maintenance Surface Waters: SOW shall include all field personnel required to mobilize booms and drums (if applicable) to the site. SOW includes lying out or retrieving booms or sorbents to recover free floating product from impacted surface waters. SOW also includes any additional area inspection for possible health risks or environmental impacts. Please complete and attach Secondary Form Sec-E. Price is per hour. If required by the UST Section to be done as a standalone activity consultant mobe may be claimed under 12.050.

2.290

Cost for Booms and Sorbent Materials: SOW will include purchasing and delivery of required booms and sorbents. While bulk purchasing is encouraged, the SOW does not include coverage for inventory restocking, and any claim should be prorated for actual use only. SOW includes submittal of the vendor invoice with cumulative use (at one or multiple sites) tracked in the margin. Please complete and attach Secondary Form Sec-E. Price is per unit cost.

2.300

Cost for Drums: SOW will include purchasing and delivery of required drums to the site to store new and used booms and sorbents or free product. SOW includes properly sealing and labeling drums which contain used booms and sorbents or free product (cost excludes disposal, see Section 9). *This task is not to be used for the drumming of drill cuttings*. Drums must be full before removal unless all site activities are completed. SOW includes submittal of the invoice. Price is per drum.

UST Removal and Closure

Please Note: What is eligible for Reimbursement during Tank Closure? Both G.S.143-215.94B (d)(2) and 15A NCAC 2P .0402 (1) & (2) explicitly prohibit reimbursing any cost for system removal or replacement. This exclusion covers the costs for emptying and preparing the system components for removal as well as the costs to dispose of the system components themselves. It also excludes any other costs incurred as part of the tank removal effort, such as the management and disposal of construction and demolition debris (concrete, asphalt, canopy components, dispenser island forms, etc.,) as well as the costs to remove, stockpile, and backfill any overburden soils to gain access to the tank.

The Trust Fund may only assist with assessment and cleanup costs required by 15A NCAC 2L. Tank closure sampling is required by 15A NCAC 2N .0803 to document the presence or lack of a release. Also, whenever a release is suspected, soil sampling in locations where contamination is most likely to be present is required by 15A NCAC 2N .0603. If a new release is actually discovered, this sampling may represent an eligible 'assessment' activity, without preapproval, as it may also meet the requirements referenced in 15A NCAC 2L .0404. For sites with existing releases, samples that assess previously-inaccessible areas, or act to monitor in-situ soil remediation in the tank basin, also may be eligible, but only if those samples were initially preapproved as reasonable and necessary to evaluate the condition of the existing plume.

2,330

Preparation of Work Plan for UST Closure: This SOW includes scheduling of field activities which will including procuring a contractor to remove and dispose of the complete UST system. SOW will also include coordination and notification to all other subcontractors that will aid in the disposal and/or removal of the UST or UST system. For sites with pre-existing releases, this activity is included within a Soil Cleanup Plan or Corrective Action plan. Please complete and attach Secondary Form Sec-A.1. **This task is not reimbursable.**

2.340

Prepare and Submit Local City or County Permits for UST Removal: The SOW includes preparation and submittal of required permits to remove the complete UST or UST system. SOW includes the costs for these permits. Please complete and attach Secondary Form Sec-A.1. **This task is not reimbursable.**

2.350

Prepare and Submit the Notice of Intent (NOI): The SOW includes the preparation of a NOI to properly close the UST or UST system and submit the NOI to the appropriate regional office and in the case of a commercial, regulated UST, to the Permits and Inspections Branch of the UST Section. The NOI should be included in the closure report and/or the Initial Abatement Action Report. Please complete and attach Secondary Form Sec-A.1. **This task is not reimbursable.**

2,360

Cost for the Removal of the Complete UST System and Contents: This SOW includes providing an invoice for the complete disposal of the UST system which includes the tanks, lines, dispensers, any ancillary equipment, tank contents, and fluids spilled as part of tank removal from the final disposal facility for the UST and the fluids. Please complete and attach Secondary Form Sec-A.1. This task is not reimbursable.

2,370

Cost for Removal and Disposal of Asphalt, Concrete, and Over-Burden: This SOW includes providing an invoice for the complete disposal of asphalt, concrete, and/or over-burden necessary to be removed in order to remove the UST(s) which includes the final disposal facility for these materials. Please complete and attach Secondary Form Sec-A.1. This task is not reimbursable.

2,410

Cost for Backfilling UST Void: The SOW includes the costs for the backfill to fill the void space generated by the removal of the UST and should not exceed the volume of the USTs removed.

2.416

Cost for Initial Abatement Excavation: This SOW includes <u>ALL</u> activities related to the removal, backfill, transport, and disposal of excavated materials conducted as part of initial abatement activities. Eligible excavation is defined as beginning at the first sign of an eligible release from the UST system that can be supported by analytical evidence. This includes the excavation of soil contaminated by any confirmed release which occurred above any UST system components (such as a spill bucket failure above a tank, or a tank overfill or dispenser spill onto the ground surface, etc.). No materials removed in order to facilitate UST System DWM/UST 10/17/17

removal or costs to replace any surface cover immediately above the tank system components (e.g. asphalt or concrete) may be claimed under this task code. If no over-excavation is completed or the UST system is closed in place without any abatement excavation of an accessible release, then this task is not reimbursable. <u>ALL</u> costs; oversight, materials, equipment, labor, travel, per diems, sampling, waste stream analysis, transportation, etc., are included in the per ton rate. Field screening with a mobile lab or equivalent should be listed under Task Code 3.310. Documentation required to support this task includes:

- 1. Contaminated soil weight tickets, sealed by a licensed public weighmaster,
- 2. certification of treatment for any backfill purchased from a treatment/disposal facility,
- 3. waste manifests and disposal facility certificate of disposal,
- 4. analytical evidence to show that each truckload of soil meets the definition of "contaminated" under the 15A NCAC 2T rules in place at the time of soil removal and/or the current TPH action levels (i.e., at least one grab sample per truckload),
- 5. a surveyor's report if the materials are disposed of onsite under a Certificate of Disposal.

All weight tickets must be in accordance with the Weights and Measures Act of 1975 NCGS 81A-51(5) and in accordance with Trust Fund policy memo dated August 1, 2006 titled, "Amendment to Reasonable Rate Document Policy Concerning Requirements for Determining the Weight of Soil Excavated or Disposed".

Pursuant to Session Law 2015-241, costs associated with any noncommercial UST releases detected on or after October 1, 2015 or claimed on or after July 1, 2016 are no longer eligible to be reimbursed from the Leaking Underground Storage Tank Trust Fund. Therefore, Task Codes 2.500, 2.510, and 2.520 have been deleted.

Please Note:

For initial abatement of a new release at a site with no prior risk assessment, the over-excavation should be limited to the lesser of:

- 1) all soils above MSCCs properly removed in any accessible direction;
- 2) the point where it is reasonably determined that residual soils cannot feasibly be removed due to obstructions, access issues, or lack of cost-effectiveness; or
- 3) one of the following thresholds is reached without additional authorization obtained:
 - a. 533 cubic yards or 800 total tons of soil has been removed;
 - b. up to an additional 267 cubic yards or 400 total tons of soil removed with written Incident Manager authorization based on field screening from a lab or mobile lab (UVF, MIP, Mobile GC, etc.) indicating a reasonable likelihood of clean closure (even if clean closure is ultimately not obtained within the allowed limit); or
 - c. a formally preapproved amount greater than 800 cubic yards / 1200 total tons is reached following Incident Manager and Trust Fund Auditor preapproval of additional soils based on field screening from a lab or mobile lab indicating a reasonable likelihood of clean closure (even if clean closure is not ultimately obtained within the preapproved limit).

For initial abatement of a new, isolated release at a site with a risk assessment for a prior, non-commingled release elsewhere onsite, the over-excavation should be limited as follows:

- 1) High or Intermediate Risk Same as with the new release above. For Option 3(b) or (c), the Incident Manager (and Trust Fund Auditor) will consider the known site risk and previous release status when evaluating a request for additional excavation;
- 2) Low Risk Unless the new release results in an increase in site risk, no initial abatement excavation would be necessary under risk-based closure standards.

For initial abatement of a new, commingled release at a site with a risk assessment for the prior release, the over-excavation should be limited as follows:

- 1) High or Intermediate Risk The Incident Manager must authorize any excavation based upon known site conditions, with a maximum volume of initial abatement excavation not to exceed 133 cubic yards / 200 tons without written preapproval from an Incident Manager and Trust Fund Auditor of a projected corrective action volume based on prior assessment or field screening from a mobile lab;
- 2) Low Risk Unless the new release results in an increase in site risk, no initial abatement excavation would be necessary under risk-based closure standards.

For any release more than 90 days from the discovery of the release:

No initial abatement is eligible as the 90-day reporting window from Title 15A NCAC 2L .0404(3) has expired. Any excavation would require preapproval as a corrective action (See Task 7.361 below).

2.600

Limited Site Assessment - Low & Intermediate Risk, or High Risk sites with Groundwater less than 10 times the 2L Standards: This task is applicable where an LSA is required in accordance with 15A NCAC 2L .0405. This task includes all aspects of the required Limited Site Assessment: receptor survey (if not already conducted), mileage, per diems, reports, drilling, site access and restoration, analytical and any other miscellaneous costs needed to complete the requirements for a LSA as described in the UST Guidelines for Assessment and Corrective Action. Drilling should not exceed more than 20 feet below the bottom of the source area or area of over-excavation (whichever is deeper) without evidence of soil contamination or more than 10 feet below the water table. Analytical costs are to be based only on the soil and groundwater samples required to be taken by the guidelines. When sampling down the borehole for the monitoring well located in the source area, do not sample in the backfill material or above the tank bed. The first sample should be collected in native soils below the bottom of the base of any earlier over-excavation, and should be sampled every five feet if less than 25 feet of well depth from the first point of sampling to well termination or every 10 feet if more than 25 feet from the first point of sampling to well termination. Soil samples collected during well installation below the water table are limited to TPH analysis. Please complete and attach Task 2.600 on Secondary Form Sec-C.1. Where multiple separate source areas are defined on a single site, the footage for any additional wells may also be claimed on Secondary Form Sec-C.1 with attached documentation from the UST Section incident manager verifying the necessity of the additional wells. Additional soil or groundwater samples resulting from these two situations may be similarly added to Secondary Form Sec-C.1 as well. DO NOT itemize the LSA activities on the claim form. All LSA activities are to be included and totals under Task Code 2.600 and CLEARLY indicate in the Project Summary and Secondary Forms that you have done so.

The rate for this activity is a maximum rate and reflects the completion of the full scope of work defined in the Reasonable Rate Document. Failure to complete the basic requirements of this task may result in denial of all costs for this and other subsequent tasks. Failure to complete the full scope of work for this task will result in the reimbursement of only the applicable portions of the task, as described in the attached Secondary Form Sec-C.1.

2.610

Limited Site Assessment - High Risk Sites with Groundwater more than 10 times the 2L Standard: This task includes all aspects of the LSA described in Task 2.600 where required under 15A NCAC 2L .0405 and is to be completed immediately upon notification to the regional office incident manager of the analytical evidence indicating an exceedance more than 10 times the 2L GW standard and agreement from the regional office incident manager that the analytical information warrants the additional work: receptor survey, travel, reports, drilling, site access and restoration, analytical and any other miscellaneous costs needed to complete the LSA requirements as described in the UST Guidelines for Assessment and Corrective Action (see also Task 2.600 above). Drilling for this task is to be based upon the installation of four wells (one source-area and three additional monitoring wells, or any combination of multiple source-area wells and monitoring wells resulting in four total wells) as described in the UST Guidelines for Assessment and Corrective Action. Reimbursement will not be allowed for both a (Task 2.600) and (Task 2.610). Please complete and attach Secondary Form Sec-C.2 for Task 2.620. Analytical costs are to be based only upon the source area sampling described in Task 2.600 and for the non-source area wells, TPH soil samples at point of well termination will be allowed. Where the installation of additional wells (beyond four total) is required, pre-approval from the UST Section will be required and the footage for the additional wells may also be claimed on Secondary Form Sec-C.2 with attached documentation from the UST Section verifying the necessity of the additional wells. Additional soil or groundwater samples resulting from these two situations may be similarly added to Secondary Form Sec-C.2, as well. DO NOT itemize the LSA activities on the claim form. All LSA activities are to be included and totals under Task Code 2.600 and CLEARLY indicate in the Project Summary and Secondary Forms that you have done so.

The rate for this activity is a maximum rate and reflects the completion of the full scope of work defined in the Reasonable Rate Document and this addendum. Failure to complete the basic requirements of this task may result in denial of all costs for this and other subsequent tasks. Failure to complete the full scope of work for this task will result in the reimbursement of only the applicable portions of the task, as described in the attached Secondary Form Sec-C.2. Failure to provide a thorough, accurate receptor survey may also result in denial of all costs for this and other subsequent tasks.

Task 2.620

Phase I Limited Site Assessment Report (utilizing previously-obtained groundwater assessment data): This task includes all aspects of the Limited Site Assessment Report: receptor survey, travel, report preparation, soil analytical, and any other miscellaneous costs needed to complete the requirements as described in the UST Guidelines for Assessment and Corrective Action. This task does not include the costs of the monitoring well installation and groundwater sample collection and analysis performed during tank closure/over-excavation assessment due to intersecting the water table or bedrock. Soil sampling for the evaluation of the

vertical extent of soil contamination may be necessary where the water table or bedrock was not intersected during the closure or subsequent over-excavation. The soil sample collection and analytical costs may be claimed on Secondary Form Sec-C.3, with documentation provided for the total boring depth. Soil boring and sample analytical costs will not be reimbursed for samples collected in excavation backfill material, or for duplicate assessment at sample depths previously evaluated during the initial abatement actions (for wells placed outside of the over excavation area). See Table 1 in the UST Section's Guidelines for Site Check, Tank Closure, and Initial Response and Abatement (March 1, 2007) for all appropriate analytical parameters. If the required analyses vary from those listed here, include documentation of the change and claim the additional costs on Secondary Form Sec-C.3. DO NOT itemize the LSA activities on the claim form. All LSA activities are to be included and totals under Task Code 2.600 and CLEARLY indicate in the Project Summary and Secondary Forms that you have done so.

The Limited Site Assessment report should incorporate the groundwater assessment data obtained during the tank closure activities and presented in the Initial Abatement Action Report.

Failure to complete the basic requirements of this task may result in denial of all costs for this and other subsequent tasks. The rate for this activity is a maximum rate and reflects the completion of the full scope of work defined in the Reasonable Rate Document and this addendum. Failure to complete the full scope of work for this task will result in the reimbursement of only the applicable portions of the task, as described in the attached Secondary Form Sec-C.3. Failure to provide a thorough, accurate receptor survey may also result in denial of all costs for this and other subsequent tasks.

Section 3 – Field Assessment Services

Pre-Drilling Tasks

3.025

Clearing Access: SOW includes clearing vegetation in order to provide access for drill rigs (does not include lawn mowing, weed eating, or removal of any materials/debris accumulated as a result of onsite activities). This task requires pre-approval from the UST Section. SOW includes submittal of the invoice. Although it is uncommon for costs to reach the Task 1.061 threshold, the Responsible Party or their designee must provide a copy of the invitation to bid letter and the written bids (3 bids required) from the vendors if the cost is expected to exceed \$5,000 and five (5) bids are required if the costs exceed \$25,000 Price is lowest qualified bid cost when applicable. Please submit Secondary Form Sec-J if applicable.

Please Note: The recent position taken by the NC Department of Transportation that the NC DOT takes no responsibility or liability for any assessment or remedial equipment or wells located within the right of way, including damage to this equipment or wells by NC DOT contractors, all effort should be made not to locate such equipment or wells within the NC DOT ROW. If encroachment is necessary and is not granted, reimbursement for these tasks will not be made. Once an agreement is in place, any damage, loss, or replacement of equipment or monitoring wells as a result of DOT ROW maintenance or construction will not be eligible for reimbursement and any resulting damage shall be applied toward insurance carried by the property owner and/or responsible party.

Acquisition of ROW by the NC DOT shall include costs of any abandonment of and required relocation/re-installation of any assessment or remedial equipment or wells required by the Department.

3.060

Cost for a Utility Clearance (Private Subcontractor): SOW includes hiring a contractor to locate underground utilities. Reimbursement under this task is limited to the location of public service utilities such as electricity, natural gas, water, sewer, and telephone not located by "NC One Call" or "NC 811" services. This task may be used during the LSA phase of work only if the USTs were not removed. If new underground utilities have been recently installed (since the last underground utility inspection) then the location of such utilities will be known. If it is necessary to go off-site for assessment and/or correction activities then this task may be used with written pre-approval if "NC one Call" or NC 811 services are insufficient. After the first location, any subsequent location event resulting from the installation of new private utility lines by the RP or current property owner would be at the RP's expense, and that any repairs due to hit lines using historic info would not be covered by the Fund (either the previous location was faulty, or the maintenance of the records [maps] was faulty.) Use of this task after completion of the LSA phase requires pre-approval from the UST Section. This task is not applicable for utility location through boring techniques (hand-auger, air knife, etc.) which are included in the per-foot tasks applicable for that boring type. This task is also not applicable for subsurface mapping techniques, such as ground-penetrating radar, which are tracked via Task 3.310. SOW includes submittal of invoice. Price is cost and, though it is uncommon for costs to reach the Task 1.061 threshold, this task is subject to the bidding requirement if in excess of \$5000. Please submit Secondary form Sec-J if applicable. If justification is given as to why the RP or their

designee needs to be onsite and preapproval is granted, then consultant mobe may be claimed under 12.050.

3.101

Supervision of Drilling: This SOW includes all field personnel, travel, and necessary equipment to supervise and manage drilling activities. Included in the SOW, the Responsible Party or their designee is required to ensure completion of all boring logs, well construction records, and retrieve all necessary soil samples from areas of contamination. Supervisory time may not be claimed if the driller is the supervisor. This task is not applicable for supervision of soil borings installed by hand- or power-auger, but may be used if wells are being installed by these methods as a N.C. Certified Well Driller is required for all well installation. This task is not to be used with screening techniques which utilize borings such as MIP/LIF/UVF/Mobile GC.

The maximum reimbursable cost for this task is \$10 per foot of total depth for soil boring and Type II well installations (1"-, 2"-, and 4"-diameter wells), and \$15 per foot for Type III telescoping well installations. Where compelling evidence is provided to show extreme difficulty in the installation of wells in competent bedrock, the \$15 per foot rate may also be preapproved for only the rock portion of the total boring, at the discretion of UST Section personnel. In all cases, total eligible well depth may not exceed the measured depth to water by more than 10 feet (unless otherwise authorized by the Division for deep and/or bedrock wells.) Please complete and attach Secondary Form Sec-F.

Multi-Phase Vertical Drilling

Please Note: Cost per foot includes, boring and drilling costs, complete well construction, all required labor, well development, equipment use, and well materials (i.e. well covers, above ground protectors, well I.D. plates, lockable well caps, solid casing, slotted screen casing, concrete pad, filter sand pack, Bentonite pellets, grout, etc.), and, drill cuttings removal,. Cost per foot also covers any repairs necessary to the wells as a result of onsite activities not directly authorized by the UST Section. Cost for installing wells also includes split spoon samples taken at 5-foot intervals, decontamination of all equipment and all setup charges, and permitting requirements by the NC DEQ. Counties requiring well permits should be claimed under 8.105.

Reimbursement is not allowed for the repair/replacement of wells that have been damaged/destroyed unless the damaged/destruction was necessary due to the excavation of soil performed under an approved soil cleanup or corrective action plan. Costs for the following tasks are not reimbursable if the wells were not installed in accordance with the N.C. well construction standards (15A NCAC 2C). Any issuance of a NOV for an installed well due to improper construction standards, location (ROW) or well maintenance that results in an order to replace the well will result in denial of reimbursement for all costs associated with the new well and any and all required sampling and reporting from the new well. For dry wells that could not have been anticipated, reimbursement of drilling is allowed at the same per foot rate as a soil boring.

Temporary or direct push wells will be reimbursed according to the diameter of the well and in accordance with the scope of work corresponding to the diameter of the well.

3.111

Cost for Soil Boring (Code HA or SB): Maximum rate includes all drilling costs including boring abandonment including direct-push sampling points. Field supervision costs (Task 3.101) for hand- and power-augered borings are not reimbursable. Please complete and attach Secondary Form Sec-F. Price is invoiced per foot rate not to exceed the established maximum.

3.112

Cost for 1-inch Permanent Monitoring Well (Auger/Air/Mud, Code 1A): Maximum rate includes all drilling and development costs. To qualify for reimbursement, the driller must be licensed by the State of North Carolina and well construction records must be included in the claim (attach to Secondary Forms). Please complete and attach Secondary Form Sec-F. Price is invoiced per foot rate not to exceed the established maximum.

3.113

Cost for 2-inch Permanent Monitoring Well (Auger/Air/Mud, Code 2A): Maximum rate includes all drilling and development costs. To qualify for reimbursement, the driller must be licensed by the State of North Carolina and well construction records must be included in the claim (attach to Secondary Forms). Please complete and attach Secondary Form Sec-F. Price is invoiced per foot rate not to exceed the established maximum.

3.114

Cost for 4-inch Permanent Monitoring Well (Auger/Air/Mud, Code 4A): Maximum rate includes all drilling and development costs. To qualify for reimbursement, the driller must be licensed by the State of North Carolina and well construction records must be included in the claim (attach to Secondary Forms). Please complete and attach Secondary Form Sec-F. Price is invoiced per foot rate not to exceed the established maximum

3.115

Cost for Telescoping Type III Permanent Monitoring Well (Auger/Air/Mud, Code T3): This well type may only be installed at the specific request of the regional office and where the outer casing is set into the shallow aquifer. Installations of this type of well are no longer a requirement for conducting a Limited Site Assessment Phase II. Maximum rate includes all drilling and development. To qualify for reimbursement, the driller must be licensed by the State of North Carolina and well construction records must be included in the claim (attach to Secondary Forms). Please complete and attach Secondary Form Sec-F. Price is invoiced per foot rate not to exceed the established maximum

3.116

Cost for 1-inch Well via Direct Push Technology (Code 1P): Maximum rate includes all drilling and development costs for the installation of a 1-inch well utilizing a Geoprobe. To qualify for reimbursement, the driller must be licensed by the State of North Carolina and well construction records must be included in the claim. Where groundwater samples are collected from screened direct push segments, only the boring cost under Task 3.111 may be claimed (no well construction required). Please complete and attach Secondary Form Sec-F. Price is invoiced per foot rate not to exceed the established maximum

3.117

Cost for 2-inch Well via Direct Push Technology (Code 2P): Maximum rate includes all drilling and development costs. To qualify for reimbursement, the driller must be licensed by the DWM/UST 10/17/17

State of North Carolina and well construction records must be included in the claim (attach to Secondary Forms). Where groundwater samples are collected from screened direct push segments, only the boring cost under Task 3.111 may be claimed (no well construction required). Please complete and attach Secondary Form Sec-F. Price is invoiced per foot rate not to exceed the established maximum

3.310

Cost for Specialty Drilling (Code S): Maximum rate includes all drilling and development. If installing a well, the driller must be licensed by the State of North Carolina and well construction records must be included in the claim (attach to Secondary Form Sec-F). Along with the invoice, the Responsible Party or their designee must provide a copy of the invitation to bid letter and the written bids (3 bids required) from the vendors if the cost is expected to exceed \$5,000 and five (5) bids are required if the costs exceed \$25,000 Price is lowest qualified bid cost (complete and attach Secondary Form Sec-J as well as the invoice). Also, the Responsible Party or their designee must provide total linear footage, boring diameter, and depths.

Specialty drilling includes, but is not limited, to:

- Drilling inside buildings (i.e. low clearances)
- Bore and Jack drilling
- Down hole geophysical logging
- Ground penetrating radar
- Packer tests (may be used in conjunction with pump test in Section 5.0)
- Remedial wells with large diameter bore holes (> 4-inchs)
- Multiple well points inside a single bore hole (i.e. vapor monitoring points)
- Horizontal Drilling
- Abandonment of large diameter wells (> 4-inchs)
- MIP/LIF/UVF/Mobile GC
- Pulling of well hosing and/or pumps for sampling directed by the UST Section
- DOT Encroachment Agreement (Monitoring Wells): SOW involves preparation and submittal of a standard DOT encroachment application for the installation of monitoring wells within a DOT right-of-way (ROW) for property not owned, operated or maintained by the NC DOT. SOW includes preparing maps, Right-of-Access Agreements from property owners, tax maps and list of addresses, well construction diagrams, proposed boring and well location maps, type of materials and sizes, load ratings (if applicable), traffic control plan (if required) and a brief discussion to justify borings and wells. Price is per Site. Reimbursement will not be given for sites owned, operated or maintained by the NC DOT or sites where no agreement is reached with the NC DOT.
- **DOT Encroachment Agreement (Remedial purposes):** This task will not be allowed unless analytical evidence shows that the plume has impacted the DOT Right-of-way and remedial action is required. This SOW will involve getting permission to install recovery wells, trenches, conduits, etc. on a DOT Right-of-way. SOW will be similar as outlined above. However, more detail of engineering design will be required (i.e. cross sections, list of material type, H-20 load ratings, equipment type, ASTM ratings, SDR ratings, etc.), detailed conduit and vault layout, calculations on design, plus a discussion of the work plan and contracted activities. It is the policy of DOT not to allow encroachments of this type. However, in some cases they may make exceptions if the plume has already contaminated

their right-of-way. Therefore, the Responsible Party or their designee should also include a brief discussion of the plume in relation to the right-of-way as well as a justification of the need to install recovery wells or to place discharge lines underground in the right-of-way or under roads. Price is per Site. Reimbursement will not be given for sites owned, operated or maintained by the NC DOT or sites where no agreement is reached with the NC DOT.

3.351

Surveying Top of Well Casing Elevations: SOW includes up to two qualified people to measure top-of-casing elevations at each well head. SOW includes accurately measuring all casing elevations. The Responsible Party or their designee should maintain a degree of accuracy within 0.01 feet. The benchmark used to establish the elevation **MUST** be clearly indicated on all site maps. Travel will not be allowed for this task unless pre-approved by the UST Section. The Responsible party or their designee should plan to conduct this activity either during well installation or during a sampling event. This task may not be claimed with Task 6.173. Price is per well.

3.398

Cost for Drilling Rig/Equipment Mobilization: SOW includes mobilization of all drilling equipment and personnel to and from the site. This task is limited to drill rigs only. Drill rigs are defined as such equipment that are self-propelled and require a driver or permanently mounted equipment on trucks or vans that cannot be moved by hand. Equipment capable of being moved by hand is not considered to be a drill rig. This task is not allowed for hand augurs, power augurs or other equipment not meeting this definition. If a well is installed with a hand auger, power auger or other non-drill rig equipment, the, subcontracted Certified Well Driller installing this well may use Task 12.010 for travel to and from the site. This task is limited to once per drilling event, regardless of the number of support vehicles or drilling rig types included in the event. If it is necessary to re-mob to a site due to the inability of the initially selected drilling technology to successfully advance the boring (e.g., to get access under a canopy, hit bedrock with an auger rig, or soft ground causing a big rig to sink) this task may not be requested for reimbursement for the additional trips. If the drilling activities require more than a single day to complete, then only the lessor of the cost for a re-mob or an overnight stay will be allowed. Please complete and attach Secondary Form Sec-F.

3.399

Well Abandonment: Maximum rate includes all personnel, equipment, and reporting. To qualify for reimbursement, the driller must be licensed by the state of North Carolina. Well abandonment records must be included in the claim (attach to Primary Form P-3c) pre and post abandonment site photographs are to be submitted along with the abandonment records. Responsible Party or their designee supervision is not required or reimbursed for this task. If wells are abandoned without the use of a drill rig, then consultant mobe may be claimed under 12.050. Proof of use of a drill rig for well abandonment is required for reimbursement. The well driller shall specify within the well abandonment form comment section the make and model of the drill rig used.

Section 4 – Sampling & Analytical Costs

4.031

Cost for Sampling a Monitoring Well: SOW assumes sampling of monitoring wells of any depth or diameter. SOW includes all necessary expendables, equipment, personnel, and sample prep, to perform required well gauging, sampling, and water level measurements conducted as part of sampling, purging, calculations, and groundwater sampling. SOW also includes performing field measurements such as: dissolved oxygen, pH, specific conductivity, temperature, ORP and CO2 as required. Please complete and attach Secondary Form Sec-G. Price is per well with the first well including one hour of prep time and each subsequent well not. Consultant mobe may be claimed under 12.050.

Please Note: If only water level measurements and field parameters only are to be collected, then use Code #810 from the Analytical Rates Table for Task 4.090.

4.041

Cost for Sampling Water Supply Wells: SOW assumes sampling of an off-site, non-responsible party, supply well and/or an initial on-site, responsible party owned supply well (subsequent RP wells samples will not be reimbursed it is the responsibility of the RP to check their own supply wells) (i.e. indoor or outdoor spigot). Prior to sampling water supply wells not immediately adjacent to the site of the contamination or where there is no documented groundwater contamination, pre-approval must be received by the Regional Office. SOW includes all necessary equipment; personnel, and sample prep to perform well purging followed by sampling. SOW also includes performing field measurements such as: pH, dissolved oxygen and specific conductivity as required. Please complete and attach Secondary Form Sec-G. Price is per well with the first well including one hour of prep time if not conducting any other sampling activities and each subsequent well not. Water supply wells are to be sampled while onsite for other site sampling activities. Water supply sampling as a standalone task requires pre-approval and under such conditions consultant mobe may be claimed under 12.050.

4.045

Cost for Sampling Contaminated Water Supply Wells (Third Party Expenses): SOW is identical to Task Code 4.041 with the exception that this task, the associated laboratory analysis, and all equipment, personnel, time and mileage are for expenses that apply to the third party deductible. Indicate the analytical methods under task code as 4.095 (not 4.090) when utilizing this task code. Point of Entry treatment system monitoring, even where no contaminates are detected in the influent sample, are considered third party deductible costs due to loss of normal use for the third party. RP-owned supply wells, either on-site or off-site, that are being sampled due to contamination or threat of contamination after a single initial sampling are considered self-inflicted "loss of normal use" and therefore are not eligible for reimbursement from the Trust Fund. Please complete and attach Secondary Form Sec-G. Price is per well with the first well including one hour of prep time if not conducting any other sampling activities and each subsequent well not. Water supply wells are to be sampled while onsite for other site sampling activities. Water supply sampling as a standalone task requires pre-approval and under such conditions consultant mobe may be claimed under 12.050.

4.051

Cost for Sampling Surface Waters: SOW assumes sampling of various types of surface waters (i.e. includes ponds, streams, creeks, etc.) to verify contamination. SOW includes all necessary equipment, sample prep, and personnel to perform sampling. Please complete and attach Secondary Form Sec-G. Pre-approval is required for this task. Price is per sample point with the first point including travel costs and each subsequent point not. Surface water samples are to be sampled while onsite for other site sampling activities. Surface water sampling as a standalone task requires pre-approval. Without pre-approval, the higher first surface water sampling cost is not eligible for reimbursement.

4.071

Cost for Sampling Soil Gas for Vapor Intrusion Monitoring: SOW assumes the collection of grab samples from soil gas, near-slab, sub-slab, indoor air quality stations where required by the Department. SOW will include all necessary equipment (including sample media), personnel, and sample preparation, to conduct VI sampling only. Indoor air sampling should only be performed where required by the Department and based on confirmation of a completed vapor pathway in the other soil gas samples. Use Task 4.090 Code #880 for the analytical costs. Please complete and attach Secondary Form Sec-G. Price is per sample location and requires pre-approval. This activity is to be conducted while onsite conducting other sampling activities.

4.090

Costs for Analytical and Shipping: SOW includes laboratory costs associated with all sampling of soil, water and air along with any quality assurance / quality control. The lab must be North Carolina certified and must be certified to perform the recommended sample methods as outlined in the UST Section Guidelines for Site Checks, Tank Closure, and Initial Response and Abatement, the Guidelines for Assessment and Corrective Action, and the Guidelines for Sampling at the time of sampling. Responsible Party or their designee must attach the laboratory invoice to the completed Secondary Form Sec-H. Lab analytical rates are not to exceed the Analytical Rate Table rates listed within the Price List. Bidding is not required for this task.

4.091

Costs for Sample Shipping: The SOW is for shipping of samples to an approved laboratory. A Shipping invoice from a recognized shipping service or courier must be attached to the lab invoice and Secondary Form Sec-H. If the lab provides shipping service, an invoice from the lab is required.

4.095

Costs for Analytical and Shipping (Third Party Deductible Costs): The SOW for this task is identical to Task 4.090 but is to be used when conducting third party sampling under Task 4.045. Responsible Party or their designee must attach the laboratory invoice to a completed Secondary Form Sec-H (use a separate Sec-H Form from the information provided for Task 4.090 above.)

4.096

Costs for Sample Shipping 3rd Party: The SOW is for shipping of samples to an approved laboratory. A Shipping invoice from a recognized shipping service or courier must be attached to the lab invoice and Secondary Form Sec-H. If the lab provides shipping service, an invoice from the lab is required.

Please Note: The tasks outlined in this section are for the purposes of determining various hydrogeological characteristics of a site in preparation of a corrective action plan. Reimbursement will not be allowed for these tasks after the submittal and approval of a CAP without a thorough explanation as to why such testing is necessary after a CAP is approved or by pre-approval from the UST Section.

Section 5 – Field Testing & Evaluation

5.010

Slug Test: This SOW includes all necessary field personnel, travel, and equipment to conduct one day of slug testing activities per the *UST Guidelines for Assessment and Corrective Action*. This also includes the costs for performing site assessment with a probe mounted Hydraulic Profile Tool (HPT). **This task requires pre-approval from the UST Section.**

5.020

Step Drawdown Test: SOW includes all necessary field personnel, travel, and equipment to conduct one day of step drawdown testing per the pump test requirements shown in the *UST Guidelines for Assessment and Corrective Action*. Price includes field supervision, project scheduling, data reduction/evaluation, oversight, and permitting requirements. Disposal of the contaminated groundwater or product resulting from the test is to be claimed under Task 9.020. **This task requires pre-approval from the UST Section.**

Please Note: This SOW is designed to assist in collecting data for performing the actual aquifer pump test. The step <u>drawdown</u> test is primarily used to establish well yield (gallons per minute - gpm) for establishing a constant flow rate for the aquifer test (5.030).

5.030

12-Hour Aquifer Test: SOW includes all necessary field personnel, travel, and equipment to conduct an aquifer test for a 12-hour duration, followed by a recovery test conducted for a duration that allows steady state conditions to be achieved or for a maximum duration of 12 hours, whichever occurs first. SOW also includes field supervision, project scheduling, data reduction/evaluation, site map production and oversight, and permitting. Disposal of the contaminated groundwater or product resulting from the test is to be claimed under Task 9.020. Aquifer tests must be performed in accordance with the *UST Guidelines for Assessment and Corrective Action*. **This task requires pre-approval from the UST Section.**

5.050

Soil Vapor Extraction Test: SOW includes all necessary field personnel, travel, and equipment to conduct one Soil Vapor Extraction test or one Bio-venting test or one Dual-Phase Extraction test for one full day. SOW includes field supervision, project scheduling, data reduction/evaluation and oversight. SOW also includes all sampling and analytical costs (i.e. BTEX) to show vapor recovery, a site map showing all wells and reported influences and results. **This task requires pre-approval from the UST Section.** Extended pilot tests that have been approved by the UST Section are also claimed under this task code.

5.060

In Situ Air Sparge Test: SOW includes all necessary field personnel, travel, and equipment to conduct one air sparge test. SOW assumes Task 5.050 has been completed. SOW includes establishing baseline measurements of water levels, hydrocarbons, dissolved oxygen (DO) and CO₂ at select monitoring and/or observation wells and sparge points as well as all necessary equipment. SOW assumes the test will include field supervision, project scheduling, data reduction/evaluation and oversight. SOW also includes generation of a site map showing all wells and reported influences and results. SOW also includes generating tables of dissolved oxygen and water levels from the various wells, and CFM vs. pressure of all AS wells during different intervals of the test. This task requires pre-approval from the UST Section. Extended pilot tests that have been approved by the UST Section are also claimed under this task code.

5.070

Contaminant Fate &Transport Modeling: This SOW includes identifying and evaluating any additional physical and chemical data to support natural attenuation pursuant to 15A NCAC 2L and performing necessary calculations and/or computer modeling to allow prediction of the extent and concentration of the contaminant plume over time. This task also incorporates development of a long range monitoring plan. The SOW does not include actual sample collection and analysis (see Sections 3.0 and 4.0). Information collected in this task should be compiled in the CAP (see Section 6). This task requires pre-approval from the UST Section.

Please Note: Tasks under this SOW will be reimbursed in addition to preparing a CAP under 15A NCAC 2L.

5.080

Hydrogeologic Parameter Test: SOW includes all necessary field personnel, and equipment to conduct the parameter test. The SOW is for specific or unique hydrogeologic tests, such as dye tracing, that are recommended by either the Regional Office or by the Responsible Party or their designee but are pre-approved by the Regional Office. All tests are to be conducted in accordance to both state and federal guidelines covering the test to be run. Three (3) bids are required if cost exceeds \$5,000 and five (5) bids are required if the costs exceed \$25,000. Please submit Secondary form Sec-J if applicable. This task requires pre-approval from the UST Section. If the test is innovative, it must first be approved by the Innovative Technology Committee in the Central Office.

Section 6 - Reports

Please Note: Each report must be completed, submitted, and approved by the UST Section prior to receiving reimbursement. Reports will not be reimbursed until the Regional Office has approved the submitted report. DO NOT SUBMIT INTERIM OR PARTIALLY COMPLETED REPORTS. These are not reimbursable. Multiple reports may not be combined into a single document and claimed separately as different report tasks. Please refer to the Guidelines for Assessment and Corrective Action and the Guidelines for Site Checks, Tank Closure, and Initial Response and Abatement for the specific requirements for the reports.

Please Note: Unless otherwise indicated, all reports must be formatted to meet the requirements as outlined in the Guidelines for Assessment and Corrective Action and the Guidelines for Site Checks, Tank Closure, and Initial Response and Abatement.

6.010

Cost for a 20-Day Report: SOW shall include preparation and submittal of a 20-day report. This report is to be submitted as the only report during non-regulated commercial UST removals were the tank closure sample indicates that a release has occurred. This report is to be submitted within 20 days of confirmation of a release (submitted analytical results). Please complete and attach Secondary Form 2G.

Please Note: This task should only be used for NEW releases, and is not repeatable (one per site). Please see the SOW for Task 2.610 for further clarification.

6.015

Initial Abatement Action Report: Upon completion of initial abatement actions for petroleum UST releases, the responsible party must submit an Initial Abatement Action Report (IAAR), a newly created report which follows the 20-Day Report. The purpose is to report the initial investigation that resulted in the discovery of the release and the initial response and abatement actions.

The SOW includes the preparation of a report that systematically;

- 1) presents site history and characterization,
- 2) incorporates the requirements of the previous **Site Check Report** and/or a **UST Closure Report**-(these reports are no longer reimbursable).
- 3) incorporates the requirements of a **Free Product Investigation and Recovery Report**, presenting the results of all free product investigation and recovery actions performed to date.
- 4) reports any groundwater and surface water investigation performed to date,
- 5) summarizes all initial response and abatement actions,
- 6) Describes soil excavation and reports subsequent confirmation soil sample analytical data to demonstrate the extent to which the contaminated soil has been removed.

The responsible party must submit the Initial Abatement Action Report within 90 days following the date of discovery of the release to the Corrective Action Branch of the UST Section (and to Permits and Inspections Branch, if the investigation was initiated by a UST inspector). The report format is presented in Appendix A, p. 60 of the Guidelines for Site Checks, Tank Closure, and Initial Response and Abatement.

The application of this task will be based on the four check-boxes designated in the IAAR report format under Appendix A of the March 1, 2007, *Guidelines for Site Checks, Tank Closure, and Initial Response and Abatement*. The first included report will be applied at a base rate of \$730, with each of the three accessory report subgroups adding an additional \$245 (i.e., one of the four boxes checked will equate to \$730, two boxes - \$975, and so on).

6.022

Free Product Recovery Report (Subsequent Reports After Initial Abatement Action Report): This SOW includes the preparation of a report, which provides information on product recovery activities over a **maximum duration of 12 months** (i.e. four recovery events in a 12-month period). Free product shall be defined as a measurable level (0.01 feet or more) that has accumulated on the groundwater, detectable by an oil/water interface probe from a groundwater monitoring well. Information from this report must be included in any Monitoring or Corrective Action Performance Report (Task 6.090 to 6.106) where applicable. Price is per report when not included in Task Codes 6.090 through 6.106. Please complete and attach Secondary Form 2G.

6.029

Accelerated Site Characterization (ASC) Report: This SOW includes preparation and submittal of a report detailing the screening of soil and/or GW utilizing MIP, LIF, or UVF or other screening tool approved by the UST Section in an effort to better delineate future monitoring well and soil sampling during a comprehensive sampling event. With the statute of limitation requirement that all work must be claimed for reimbursement within 12 months of completion of the activity, if the responsible party or their designee determine that a CSA will not be able to be completed within this time period due to the need for off-site access as supported by analytical information collected to date and agreed upon by the UST regional office incident manager, this report may be submitted until the formal CSA can be completed.

6.033

Site Check Report: This SOW is for the assessment of an underground storage tank at the specific request of the UST Section, under 2N .0602 and General Statute 143-215.94B(b)(8), The format for this report is the same as that of an UST Closure Report (UST-12) as described in the *UST Guidelines for Tank Closure*. Please complete and attach Secondary Form 2G. This report is not allowed if included with the Initial Abatement Action Report. This report shall be directed by the UST Section and eligible for reimbursement only if no release is detected. If a release is detected, this report is included within the Initial Abatement Action Report (IAAR) and may not be claimed under this task code.

6.040

Comprehensive Site Assessment Report - Soil Only (No groundwater contamination encountered; for high and intermediate risk sites only): This SOW includes preparation and submittal of a site assessment report where a site investigation has been performed.

6.041

Soil Assessment Report (For low risk sites only): This SOW includes the preparation of a Site Assessment Report.

6.050

Comprehensive Site Assessment Report – Soil and Groundwater (For high/intermediate risk sites only where groundwater contamination is encountered): This SOW includes the DWM/UST 10/17/17

preparation and submittal of a comprehensive site assessment report. This report relates to work performed in Sections 1 through 4.

6.060

CSA Report Addendum: This SOW includes preparation and submittal of an update to the current site assessment report as **pre-approved by the UST Section**. This task can only be utilized if conditions of the site (characterization) have changed (i.e. new release, plume migration, etc.). This assumes that a CSA was submitted and approved at a previous date. This SOW does not include submittal of information which was missing from the original CSA (i.e. information requested by the Regional Office for approval of a previously submitted CSA Report).

6.064

Plume Stability Analysis: This SOW covers the cost and reporting of a plume stability analysis utilizing the Mann Kendall analysis or other equivalent analysis. This report requires preapproval.

6.065

Corrective Action Feasibility Study: This SOW consists of a meeting of all parties to discuss the remedial strategy recommended in the CSA other than monitored natural attenuation or limited soil removal not resulting in a Corrective Action Design. Any pilot testing may be requested at this point with a follow up meeting for discussion. A Notice of Regulatory Requirements for a Corrective Action Plan Design will follow this meeting. This would include a "rough cost estimate (within 10 to 15% of actual)" of the various remedial technologies proposed in the site conceptual model developed within the CSA.

6 066

Corrective Action Design: This SOW consists of design, specification and bidding of the chosen remedial action. If monitored natural attenuation or any passive augmentation to MNA are chosen, this SOW will not be utilized. SOW includes data evaluation of site parameters and information obtained from pilot tests. This SOW requires the responsible party or their designee to prepare design drawings and equipment specifications for a turnkey remediation system or systems and bidding the system. Where costs are expected to exceed \$5,000 but less than \$25,000 three (3) competitive bids must be received, and bids greater than \$25,000 must receive five (5) competitive bids prior to the initiation of the action except where otherwise noted. Only the lowest qualified bid will be reimbursed. Failure to provide the required bid information will result in the claim being reimbursed for the maximum non-bid amount (\$5,000). The maximum rate for design, specification and bid preparation is \$5,000. Task Code 1.061 may not be claimed in association with this task code. If it is later determined that the designed system(s) is(are) inappropriate or ineffective, then this task will not be reimbursed for the design of a replacement, upgraded or new system. The individual or company that actually conducts this work and signs and seals the design is the one to whom reimbursement will be granted. Any company that must sub-contract out this work or requests that the system fabricator conduct this work is not eligible for reimbursement for this task. Prior to solicitation of the bid, the bid documents are to be submitted and reviewed by the UST Section. Bid documents that are submitted for solicitation without UST Section approval will not be reimbursed.

6.067

Corrective Action Record of Decision: This SOW consists of a final meeting of all parties to review the chosen remedial design, implementation, schedule for remediation, and remedial checkpoints prior to purchase and installation of the approved remediation. A formal record of the approved decision of all parties will be signed, after which purchase and installation may begin.

6.081

Soil Cleanup Plan (For sites reduced from high/intermediate risk to low risk on review of a CSA): This report should be used for low risk sites after the CSA.

6.082

Public Notification: This SOW includes all requirements of public notification outlined in the UST Guidelines for Assessment and Corrective Action.

6.090

Monitoring Report (Initial): This SOW includes preparation of an initial Monitoring Report that provides documentation of groundwater monitoring and sampling data plus laboratory analysis. This task will only be reimbursed one time. **This task requires pre-approval from the UST Section.**

Please Note: This report is inclusive of the Free Product Recovery Report. The UST Section may pre-approve separate Free Product Recovery Reports if required. The CSA must be completed prior to initiating this task. This report should only be utilized on high or intermediate risk sites.

6.091

Monitoring Report (Subsequent reports after initial Monitoring Report): This SOW includes the preparation of a Monitoring Report that provides documentation of groundwater monitoring and sampling data plus laboratory analysis. This task requires pre-approval from the UST Section.

Please Note: This report is inclusive of the Free Product Recovery Report. The UST Section may pre-approve separate Free Product Recovery Reports if required. The CSA must be completed prior to initiating this task. This report should only be utilized on high or intermediate risk sites

6.105

Corrective Action Performance Report (Initial): This SOW includes preparation and submittal of a report documenting the performance of the approved corrective action including system performance and remedial performance. Report shall include table, figures, etc., as necessary to document that the approved corrective action is proceeding as indicated in the record of decision.

6.106

Corrective Action Performance Report (Subsequent): This SOW includes preparation and submittal of a report documenting the performance of the approved corrective action including system performance and remedial performance. Report shall include updates to the initial tables,

figures, etc., as necessary to document that the approved corrective action is proceeding as indicated in the record of decision.

6.120

System Enhancement Recommendations: This report should only be submitted when requested by the UST Section for a major enhancement or change of an existing system requiring upgrades or significant enhancements to the fabricated system equipment. This task is only reimbursable where the proposed enhancement is not the result of an improperly designed CAP or improper or negligent installation or operation of an approved CAP. Addition or removal of wells or sparge points within the existing system's tolerances does not constitute major system enhancements and should be included in the recommendations presented in the Correction Action Performance Report. SOW includes the inspection of existing remediation equipment and a review of information gathered from task 6.105-6.106. SOW includes one site visit, with mileage plus project time to evaluate data plus investigate alternatives and propose solutions and recommendations to ensure system compliance. The recommendations should include alternatives or modifications to obtain efficient and effective site remediation, and an estimate of any lifetime cost adjustments expected to result from the changes. This report includes written recommendations plus preliminary engineering drawings for system modifications (if required). Any requests to modify an existing monitoring program should be incorporated into this document. This task requires pre-approval from the UST Section and, where applicable, the Innovative Technology Committee.

6.121

New Technology Cleanup Plan: SOW includes preparation of a report providing new remediation options and recommendations. This task will be allowed only when requested and approved by the UST Section and if the existing system clearly is no longer effective, and if it is clear that the Responsible Party or their designee's original design, installation, operation, and maintenance of the existing system was adequate and found not to have been inappropriately designed or installed, nor failure due to poor operation and maintenance. This task requires pre-approval from the UST Section and Innovative Technology Committee where applicable.

6.130

Air Emissions Monitoring Report: SOW includes preparation and submittal of a two-page letter report summarizing air emissions data for no more than a six-month period (semi-annually). The basic letter report shall include a description of the work performed during the reporting period, the frequency of monitoring, and the analytical results of air samples (outlined in a table). Mass balance calculations if necessary, and discharge rates. Includes system layout and site map. The SOW may vary dependent upon specific air permit requirements. This task is **only reimbursable for sites in a nonattainment area where such monitoring is required**.

6.140

Non-Discharge Permit Report: This SOW includes the preparation and submittal of the Underground Storage Tank Section's UST-59 Forms.

6.150

Publicly-Owned Treatment Works (POTW) Permit Report: This SOW includes the preparation and submittal of a report (if required by the POTW) summarizing the required POTW monitoring data for no more than a three-month period (quarterly). The basic letter report DWM/UST 10/17/17

will include a description of the work performed during the reporting period, the frequency of monitoring, and the analytical results of water samples. Mass balance calculations if necessary, discharge rates and whatever else required. This SOW may vary depending upon specific POTW permit requirements.

6.160

National Pollutant Discharge Elimination System (NPDES) Permit Report: This SOW includes the preparation of a brief report summarizing the required NPDES monitoring data. The basic report will include a description of the work performed during the reporting period, the frequency of monitoring, and the analytical results of water samples. Mass balance calculations if necessary, and discharge rates. Includes figures (site map and discharge location) and compiling the required Discharges Monitoring Reports (DMR). The SOW may vary depending on specific NPDES permit requirements (General versus Individual).

6.170

Site Closure Report (For high and intermediate sites only): This SOW includes the preparation of a report that documents the justification for a request for site closure not requested by the Department. The report is to summarize the past and present subsurface conditions, regulatory requirements and concerns, results of corrective actions taken to date and justifications for a request for closure. This task is not repeatable and will only be reimbursed upon approval from the Regional Office to close the site.

6.171

Soil Cleanup and Closure Report (For low risk sites only): This SOW includes preparation of the report.

6.173

Cost for a North Carolina Professional Surveyor for Deed Recordation/Restriction: SOW includes cost of a licensed N.C. surveyor who generates an accurate site map, including all well head elevations, above- and below-ground site features, utilities and necessary information as required by the Department for the development of a plot survey description as part of a deed recordation/restriction. Please submit Secondary form Sec-J if applicable. Price is per site.

6.174

Deed Recordation / Notice of Residual Petroleum with Land Use Restrictions: SOW includes preparation and filing of a deed recordation with the appropriate county register-of-deeds office for the purposes of UST incident closure. The instructions for preparing and filing a "Notice of Residual Petroleum" with land use restrictions may be obtained from the Division. Attorney's fees are not reimbursable. Price is once per site. This is not the Notice of Residual Petroleum required to be filed by property owners prior to a property transaction, which is not reimbursable.

6.180

Variance Request: This SOW includes the preparation of a Variance Request for site closure for submittal to the NC Environmental Management Commission (EMC). This report must document the justification that a variance be granted for the requirement to perform remediation and/or to close a site that has contaminant concentrations that remain above the groundwater standards. Reimbursement will not be granted until the Department approves the variance.

6.190

Miscellaneous Letter Report: SOW includes the preparation of a simple letter report, without historical tables or historical figures or graphs, that outlines the activities that have been requested at the written pre-approval of the incident manager. This task is to be used in lieu of other reports if the incident manager determines that the level of work being requested does not justify the preparation of one of the above reports. This task is not applicable for cover letters, email forwards, or fax covers attached to reports or documents generated by other parties (such as forwarding the driller's abandonment certifications generated under Task 3.399), for addenda or corrections for other incomplete or erroneous reports, or for routine correspondence. Price is per report.

Section 7 – Remedial Services

Design and Purchase Remedial System(s)

Please Note: This section relates to all phases of remediation, from data evaluation to system startup and operation. This section assumes that the Responsible Party or their designee has met with the UST Section and an agreed upon Corrective Action Plan (CAP) in which all available remedial technologies have been reviewed and the life-time cleanup costs have been presented, discussed and approved. All tasks in this section require pre-approval from the UST Section. Any technology not listed in this document must have prior approval from the Innovative Technology Committee before a CAP is initiated.

Reimbursement for all remedial activities will be limited to the amount approved in the CAP. For example, if the approved CAP, as presented to the UST Section, indicates that a SVE system, running for three (3) years will bring the contamination within the model projections that will allow natural attenuation to the applicable clean-up standards within 10 years, and the total cost for the system purchase, installation, O&M, sampling, permitting, reporting, etc. for three years is \$350,000, then that is the maximum amount that will be reimbursed for the active corrective action phase.

All Responsible Party or their designees and contractors must always compile sitespecific design information and a subsequent bid specification when purchasing a remediation system. This data should be sent out to the required number of equipment vendors, who provide turnkey systems after approval from the incident manager and UST Section PE.

A common problem with not being able to provide bids is that the design is left solely up to the equipment vendor. Some vendors cannot spend the extra time to do the work of the Responsible Party or their designee and therefore will decline to bid. It is very important that the Responsible Party or their designee provide an adequate design and specification to the equipment vendors. If the Responsible Party or their designee is not capable of providing the system specification, then they may not proceed with the work. The Responsible Party or their designee should also require design performance guarantees and a standard 12-month warranty on equipment, materials and workmanship.

7.020

Cost for a Turnkey Pump & Treat System: SOW includes payment for the Pump & Treat system. The Responsible Party or their designee must submit the bid specification work sheet, invitation to bid letters, all written bids from a minimum of three vendors (complete and submit Secondary Form Sec-J) and the invoice. Three written bids are required if cost exceeds \$5,000 and five (5) bids if the costs exceed \$25,000. The UST Section will only reimburse the lowest qualified bid. Payment will not be authorized without certification that the system that is approved is installed as designed. When

requesting reimbursement for the approved remedial system, the completed certification form must be included with the reimbursement claim.

7.040

Cost for a Turnkey Soil Vapor Extraction System: SOW includes payment for the SVE system. The Responsible Party or their designee must submit the bid specification work sheet, invitation to bid letters, all written bids from a minimum of three vendors (complete and submit Secondary Form Sec-J) and the invoice. Three written bids are required if cost exceeds \$5,000 and five (5) bids if the costs exceed \$25,000. The UST Section will only reimburse the lowest qualified bid. Payment will not be authorized without certification that the system that is approved is installed as designed. When requesting reimbursement for the approved remedial system, the completed certification form must be included with the reimbursement claim.

7.060

Cost for a Turnkey Air Sparge System: SOW includes payment for the AS system. Along with the invoice, the Responsible Party or their designee must provide a copy of the bid specification work plan, invitation to bid letters, all written bids from a minimum of three vendors (complete and submit Secondary Form Sec-J) and the invoice. Three written bids are required if cost exceeds \$5,000 and five (5) bids if the costs exceed \$25,000. The UST Section will only reimburse the lowest qualified bid. Payment will not be authorized without certification that the system that is approved is installed as designed. When requesting reimbursement for the approved remedial system, the completed certification form must be included with the reimbursement claim.

7.065

Cost for Multiple Technology Remediation System: SOW includes payment for combination remedial systems (e.g., air sparge and soil vapor extraction). This task should be used if multiple systems are bid together. Along with the invoice, the Responsible Party or their designee must provide a copy of the bid specification work plan, invitation to bid letters to all vendors, the written bids from those vendors (complete and submit Secondary Form Sec-J) and the invoice. Three written bids are required if cost exceeds \$5,000 and five (5) bids if the costs exceed \$25,000. The UST Section will only reimburse the lowest qualified bid. Payment will not be authorized without certification that the system that is approved is installed as designed. When requesting reimbursement for the approved remedial system, the completed certification form must be included with the reimbursement claim.

<u>Installation of Remediation System(s)</u>

7.081

Remedial System Installation Inspection/Certification: SOW includes project management and field coordination. SOW also includes one person to oversee the installation performed by a subcontractor not to exceed 8-hours of field time per week with the exception of the initial start date of the installation and the completion date of the installation. This is considered to be a Project Manager Level or Principal/Senior

Level as the person certifying the system installation must be the person who designed and sealed the system and is conducting this work activity or their responsible charge as defined by the appropriate board. Price is per hour. Consultant mobe may be claimed under 12.050.

7.100

Cost for Installing a Remediation System: SOW includes submitting the final invoice from the subcontractor for installing system conduits. Along with the invoice, the Responsible Party or their designee must provide a copy of the bid specification work plan, invitation to bid letters to all subcontractors and written bids from those subcontractors (complete and submit Secondary Form Sec-J). Three written bids are required if cost exceeds \$5,000 and five (5) bids if the costs exceed \$25,000. The UST Section will only reimburse the lowest qualified bid. Payment will not be authorized without certification that the system that is approved is installed as designed. When requesting reimbursement for the approved remedial system, the completed certification form must be included with the reimbursement claim.

<u>Installation of Recovery Trench(es)</u>

7.121

Recovery Trench Installation Inspection/Certification: SOW includes project management and field coordination. SOW also includes one person to oversee the installation performed by a subcontractor not to exceed 8-hours of field time per week with the exception of the initial start date of the installation and the completion date of the installation. Price is per hour. Consultant mobe may be claimed under 12.050.

7.140

Cost for Installing a Recovery Trench: SOW includes submitting the final invoice from the subcontractor for installing a recovery trench(es). Along with the invoice, the Responsible Party or their designee must provide a copy of the bid specification work plan, invitation to bid letters to all subcontractors and written bids from those subcontractors (complete and submit Secondary Form Sec-J). Three written bids are required if cost exceeds \$5,000 and five (5) bids if the costs exceed \$25,000. The UST Section will only reimburse the lowest qualified bid.

Installation of Infiltration Galleries

7.161

Infiltration Gallery Installation Inspection/Certification: SOW includes project management and field coordination. SOW also includes one person to oversee the installation performed by a subcontractor not to exceed 8-hours of field time per week with the exception of the initial start date of the installation and the completion date of the installation. Price is per hour. Consultant mobe may be claimed under 12.050.

7.180

Cost for Installing an Infiltration Gallery: SOW includes submitting the final invoice from the subcontractor for installing an infiltration gallery. Along with the invoice, the DWM/UST 10/17/17

Responsible Party or their designee must provide a copy of the bid specification work plan, invitation to bid letters to all subcontractors and written bids from those subcontractors (complete and submit Secondary Form Sec-J). Three written bids are required if cost exceeds \$5,000 and five (5) bids if the costs exceed \$25,000. The UST Section will only reimburse the lowest qualified bid.

Remediation System Operation & Maintenance

7.201

Cost for Remedial System Maintenance: This SOW includes site visits as indicated in the CAP as being required (e.g. monthly) to provide such maintenance necessary to ensure that the remedial system is operating effectively. Inspect and document system performance. Tabulate gauge and meter readings, inspect for leaks, excessive equipment heat and noise, equipment wear. Perform repairs or scheduled repairs during the site visit. Check recovery well pumps and components, change out filters, hoses, compressor oil, pressure steam stripper, backwash system to remove fouling and iron buildup. Price includes all necessary equipment, and personnel to operate and maintain the equipment. The labor tasks cover all onsite activities including required sampling and including those by vendors when the Responsible Party or their designee is not capable of completing the repairs (e.g., electrician, blower manufacturer repairs post-warranty, etc.) and for all personnel. Landscaping (raking, weed eating, mowing, etc), debris removal and pest removal are not reimbursable. The price does not include major repairs or extensive troubleshooting which may be covered by the manufacturer's warranty. This task does not include damage due to acts of negligence, vandalism, accidents, or acts of God/nature which are to be covered by the responsible party's or equipment owner's insurance. Only repair or replacement costs due to component aging or normal wear and tear are reimbursable under this task. Office coordination, scheduling, and telemetry time is included in the hourly price rate and therefore, only the actual time spent on-site is to be reimbursed. Please complete and submit Secondary Form Sec-I. Price is per hour but limited to the system maintenance requirements as outlined in the approved CAP for the site. This task may be used for additional maintenance needs outside of that indicated within the approved CAP if approved and sufficient documentation is provided to justify the maintenance request. Consultant mobe may be claimed under 12.050.

Please Note: If numerous site visits are expected, the Responsible Party or their designee should explore the use of remote telemetry and make every effort to minimize operation and maintenance costs. Additionally, pre-approval of this task does not guarantee payment for the total hours requested in the pre-approval without justification of the time being requested. It is the responsibility of the Responsible Party or their designate to provide the necessary documentation to support the request for maintenance hours.

7.250

Cost for Remediation System Maintenance Supplies and Equipment: SOW includes costs for regularly scheduled maintenance supplies and non-scheduled supplies, components and equipment replacement. Please complete and submit Secondary Form Sec-I. Three written bids are required if cost for any one item exceeds \$5,000 and five

(5) bids if the costs exceed \$25,000. (complete and submit Secondary Form Sec-J). SOW includes submittal of invoice(s).

Typical reimbursable supplies include:

- Oil, belts, filters (compressor components)
- Faulty float switches, relays, electrical components
- Leaky plumbing
- Worn out motors (blower, transfer pumps, etc.)
- Replace pressure switches and gauges
- Bag filters or cartridge filters
- Replenish green sand filters

SOW requires inclusion (at least in the TA's) of the maintenance breakdown from the CAP where it is required to show the cost effectiveness of the system. If system maintenance costs are significantly more than what was originally proposed in the original CAP cost analysis, then some changes in the system may need to be made to bring the maintenance back in line. This could be an earlier extension of any subsequent duration accountability requirement, when the system has significantly outlived its CAP-proposed operational schedule without achieving cleanup.

7.260

Cost for Utility/Operating Expenses for the Remediation System: SOW includes monthly overhead costs for operating the system. This SOW is limited to utility bills (must be pre-approved <u>prior</u> to month of service), including power, water, natural gas, and/or bottled gas usage, etc. Please complete and submit Secondary Form Sec-I. If monthly utility bills fluctuate significantly (e.g., the rate doubles), please provide an explanation for the fluctuation in the Description of Service Box on Secondary Form Sec-I. Price is cost. After the first six months of operation these costs should be requested during the pre-approval stage as a running average, not rounded guesses. Large deviations of utilities costs are indirect evidence of system performance issues.

7.261

Cost for GAC/AG (Carbon/Gravel) Unit Replacement: SOW is for the replacement of granular activated carbon and GAC aggregate gravel units. Please provide the invoice and complete Secondary Form 2F. Price is per pound.

Please Note: It is very important that a Pump & Treat system maintain a certain level of efficiency to prevent excessive carbon usage. In some cases, the Responsible Party or their designee should contract with a vendor to perform on-site regeneration or carbon change out to reduce down time of system, if possible. Additionally, mechanisms to handle iron-fouling and carbonate ooze problems should be addressed in the design tasks prior to system purchase (phosphates, sequestering agents, high pressure backwash systems, etc.).

Soil Excavation and Disposal

Please Note: Please refer to the <u>UST Guidelines for Assessment and Corrective Action</u> for information about these tasks. Please also note this section does not cover UST removals (see Section 2). The UST Section will only reimburse the most cost-effective technology for remediating contaminated soil.

7.361

Cost for Remedial Soil Excavation: This SOW includes <u>ALL</u> activities related to the removal, backfill, transport, and disposal of excavated materials conducted as part of preapproved remedial activities. <u>ALL</u> costs; oversight, materials, equipment, labor, travel, per diems, sampling, waste stream analysis, transportation, etc., are included in the per ton rate. Pre- screening with a mobile lab or equivalent should be listed under Task Code 3.310.. Documentation required to support this task includes:

- 1) Contaminated soil weight tickets sealed by a licensed public weighmaster,
- 2) certification of treatment for backfill if purchased from a treatment/disposal facility,
- 3) Waste manifests and disposal facility certificate of disposal,
- 4) analytical evidence to show that each truckload of soil meets the definition of "contaminated" under the 15A NCAC 2T rules in place at the time of soil removal and/or the current TPH action levels (i.e., at least one grab sample per truckload),
- 5) a surveyor's report if the materials are disposed of onsite under a Certificate of Disposal.

All weight tickets must be in accordance with the Weights and Measures Act of 1975 NCGS 81A-51(5) and in accordance with Trust Fund policy memo dated August 1, 2006 titled, "Amendment to Reasonable Rate Document Policy Concerning Requirements for Determining the Weight of Soil Excavated or Disposed".

Pursuant to Session Law 2015-241, costs associated with any noncommercial UST releases detected on or after October 1, 2015 or claimed on or after July 1, 2016 are no longer eligible to be reimbursed from the Leaking Underground Storage Tank Trust Fund.

Remedial Equipment Lease

7.390

Lease Charges for a Thermal or Catalytic Oxidizer: SOW includes submitting invoices from the vendor with the lowest qualified bid documented in Task 7.400. SOW shall include documenting all costs in the Secondary Form Sec-J. SOW excludes monthly power bills, propane usage, site visits and sampling. This task will only be reimbursable where necessary as a reasonably unforeseen additional requirement for effective operation of an approved CAP remediation system. Please attach invoice. Price is cost.

Please Note: The UST Section will only reimburse lease charges up to the purchase price of the equipment. The Responsible Party or their designee must be able to reasonably predict if a lease is the most cost-effective approach. The STF will track all lease charges for the above-referenced equipment and will immediately discontinue reimbursement once the purchase price is met. If a lease is expected to come within 15% of the purchase price, it is in the best interest of the Responsible Party or their designee to purchase the system and apply for reimbursement. If the system is purchased, the equipment will become the property of the State and will remain at the site until it is no longer needed or if closure is accomplished. Once closure is met, or if carbon polishing is more economical, the Responsible Party or their designee must notify the STF for equipment relocation purposes.

7.400

Purchase of a Thermal or Catalytic Oxidizer: SOW includes final invoice for purchase of a thermal or catalytic oxidizer. Responsible Party or their designee must include a copy of the bid specification work plan, invitation to bid letters to all vendors and written bids from those vendors (complete and submit Secondary Form Sec-J). As with Task 7.390 above, this task will only be reimbursable where necessary as a reasonably unforeseen additional requirement for effective operation of an approved CAP remediation system. Three written bids are required if cost exceeds \$5,000 and five (5) bids if the costs exceed \$25,000. Price is cost.

7.410

Lease Charges for Remediation System: Use of this task requires specific preapproval from the UST Section. SOW includes submitting invoices from the vendor. Please see secondary form for reimbursable costs for allowable remedial technologies. SOW shall include documenting all costs in the Secondary Form Sec-J. Price is cost.

Please Note: The UST Section will only reimburse lease charges up to the purchase price of the equipment. Three bids will be required to establish the purchase price of the system. The Responsible Party or their designee must be able to reasonably predict if a lease is the most cost-effective approach. The UST Section will track all lease charges for the above-referenced equipment and will immediately discontinue reimbursement once the purchase price is met. If a lease is expected to come within 15% of the purchase price, it is in the best interest of the Responsible Party or their designee to purchase the system and apply for reimbursement.

7.420

Costs for a Mobile Multi-Phase Extraction (MMPE) Event: The SOW includes all costs associated with leasing/operating a full MMPE system including power supply, blower and mobilization of both equipment and personnel. Allowable rates can be found on Secondary Form Sec-D. The Responsible Party or their designee must show that the use of this system is more cost efficient that a traditional fixed in place system over the projected cost of the cleanup. Use of POTW or NPDES permits is required where discharge points are available and water recovery rates are excessive, >15,000 gallons per month or limited permits are more cost effective than hauling of fluids to a disposal

facility. If less than 5,000-gallons of fluids are expected, then no tanker pump out or change out is necessary. If more than 5,000-gallons of fluids are expected then either tanker change out or tanker pump out, whichever is less, may be reimbursed. Vapor, pressure, and fluid recovery readings will be recorded every hour during manned operation. One grab sample is to be collected from each monitoring well being utilized in an MMPE event during each tanker change. Report must show stabilization of the wells and a calculation of total mass removed as both liquid and vapor. (after stabilization of the wells, at least four representative readings no less than one hour apart per day are required). An equipment hourly rate will be paid based upon documentation of system performance not to exceed the length of the event.

Relocation of Remedial Systems

7.500

Relocation of a Remediation System: In an effort to help control costs at UST Section reimbursable sites, the UST Section encourages the reuse of remedial systems at sites were active remediation has ceased. Responsible parties are required to allow the reuse of Trust Fund reimbursed remedial systems at other UST Section eligible sites, at no cost to the UST Section). If a system is relocated, the responsible party will not be responsible for ineligible costs for the replacement of the system should one be needed again for the same incident. If a system is being de-activated because the site has received a Notice of No Further Action letter from the UST Section, then the responsible party/system owner is required to notify the Trust Fund of the availability of the system. A Responsible Party or their designee who has knowledge of such a system and wishes to look at the system may be pre-approved for up to a one-day system inspection visit. Once written approval from the system owner is obtained for the relocation of the system, the UST Section will reimburse for the transportation, installation and needed maintenance of the system at the new site. This includes costs identified during the inspection that will be needed to bring the system into operation at the new site, but it will not cover any repairs to damage caused during the removal, transportation, or installation of the system at the new site. This task is meant for complete systems and replaces the application of the other system manufacture Tasks 7.020 to 7.065 above. Based on the estimated relocation costs, bidding may be required as described in 1.061. Attach Secondary Form Sec-J to document all bided costs. Reimbursement will not be given if the costs associated with relocating a system exceed the estimated costs of purchase and delivery of a new system.

Section 8 - Permits

Soil Disposal/Treatment Permits

Please Note: The following three permits are only reimbursable if it can been clearly shown that onsite disposal and the cost of these permits is a more cost-effective alternative to disposal of the soil at a permitted soil disposal facility.

8.010

Certificate of Disposal (Form UST-71): SOW includes preparation and submittal of a Certificate of Disposal UST-71 Form. This is considered to be a field technician level activity not to exceed one hour.

8.020

Permit for Land Application (UST-70): SOW includes preparation and submittal of a Permit for Land Application (Form UST-70. This task will also include an erosion control plan (if required) and the inspection of the proposed site by a NC Certified Soil Scientist. For surveying requirements, please use task codes 7.330 and 7.340. For reimbursement of the UST Section assessed permit fee, use Task 8.100 and include a copy of the permit and cancelled check showing payment. Commercial land farms or disposal facilities are not eligible for reimbursement of this task code or permit fee.

8.030

Agreement for Land Application (UST-72): SOW includes preparation and submittal of an Agreement for Land Application (Form UST-72). This is considered to be a field technician level activity not to exceed one hour.

Remedial Permits

Please Note: When submitting for reimbursement for the following permits, you must include the fee schedule from the appropriate State agency along with the invoice in order to receive reimbursement. Only approved permits will be reimbursed.

Please Note: When maintaining a permit for an approved remedial system that has been deactivated by the UST Section, it is the responsibility of the RP or their designee to ensure that maintenance of such a permit is necessary. If site conditions change such that the permit is no longer necessary, maintenance of the permit will not be reimbursed. No State agency has the authority under a permit to require any removal of UST Section required wells or equipment as a condition of permit closure. Wells or remedial equipment may only be removed from UST Section managed sites by approval of the UST Section or Department.

8.040

Air Quality Permit (for remediation systems; only where required): SOW includes preparation and submittal of the required permit application for nonattainment areas (includes modeling and design where applicable).

8.041

Air Quality Registration (for remediation systems): SOW includes preparation and submittal of a letter registering the remediation system in attainment areas.

8.050

Injection Well Permit: SOW includes preparation and submittal of a complete injection well permit application. Includes all necessary figures and design calculations.

8.055

Injection Well Permit By Rule Notice of Intent: SOW includes preparation and submittal of a shortened injection well permit by rule application. Includes all necessary figures and design calculations as well as injection frequency. Not allowed more than once per year per site.

8.060

Non-Discharge Permit: SOW includes preparation and submittal of a complete non-discharge permit. SOW will include a soil scientist performing an amoozemeter test or a double ring infiltrometer test to establish hydraulic load rating parameters. SOW includes injection design and system layout and design (includes detailed drawings and system schematic).

8.070

NPDES Individual Permit: SOW includes preparation and submittal of a complete NPDES Individual Permit Application (water quality). SOW includes modeling and design and system layout, proposed equipment types, proposed influent and effluent concentrations, etc. (sampling for design is not included in SOW).

8.080

NPDES General Permit: SOW includes preparation and submittal of a complete NPDES General Permit Application (water quality). SOW includes design and system layout, proposed equipment types, proposed influent and effluent concentrations, etc. (sampling for design is not included in SOW).

8.090

POTW Discharge Permit: SOW shall include preparation and submittal of a POTW Discharge Permit (where applicable). SOW shall also include modeling and design (sampling for design is not included in SOW). This is for the permit application only, not for renewal.

8.091

CAMA Minor Development Permit: SOW includes preparation and submittal of a complete CAMA Permit Application (where applicable). SOW includes all necessary information to complete the application.

8.092

CAMA Major Development Permit: SOW includes preparation and submittal of a complete CAMA Permit Application (where applicable). SOW includes all necessary information to complete the application.

8.100

Cost for Permit Fees (All Permits except county MW Permits): SOW includes payment to Responsible Party or their designee for fees associated with all required permits listed above as well as the renewals of these permits. A copy of the invoice from the agency requesting payment and any subsequent correspondence stating that the payment was received and the permit has been approved is required for reimbursement. Price is cost.

8.105

Cost for Monitoring Well Permit Fees (As Required): SOW includes payment to Responsible Party or their designee for fees associated with all required well construction permits. A copy of the invoice from the agency requesting payment and any subsequent correspondence stating that the payment was received and the permit has been approved is required for reimbursement. Price is cost for the initial well construction and not annual permitting fees.

8.110

Cost for Performing a Variance to any Permit: SOW includes preparation and submittal of a variance to an already existing permit. Reason for variance may include a request for alternative analytical methods or an alternative sampling frequency. Regardless of the reason, please use this task for all permits.

Section 9 – Disposal Services

9.020

Cost for Disposal of Free Product and Contaminated Groundwater: SOW includes submitting the final invoice from the vendor for the disposal of free product or contaminated groundwater collected as a result of skimming/product recovery, aquifer testing, and well development. This task may not be used for activities conducted as part of the Site Check, Limited Site Assessment phases, or de-watering excavation pits for the installation of new UST systems. Along with the invoice, the Responsible Party or their designee must submit a copy of the analytical results showing that the groundwater is contaminated, three written bids if cost exceeds \$5,000 and five (5) bids if the costs exceed \$25,000 and disposal manifests (complete and submit Secondary Form Sec-J if bidding is necessary). The UST Section will only reimburse the lowest qualified bid. Price is at cost per gallon.

9.040

Cost for Disposal of Sorbents (booms, well socks, etc.): SOW includes submitting the final invoice from the disposal contractor for the disposal of sorbents as a result of recovering free product from surface waters as well as disposal of free product recovery well socks. Along with the invoice, the Responsible Party or their designee must submit bidding documentation as described in Task 1.061 above, where applicable (complete and submit Secondary Form Sec-J if bidding is necessary). Price is cost per drum.

Section 10 – Site Repair

Please Note: Listed below are provisions for site restoration. These costs are only reimbursable for items which are <u>planned</u> such as an approved corrective action (excavation of soils, installation of trenches, infiltration galleries, etc) where the costs for repair activities should be included in the activity proposals themselves. This will also not cover any <u>accidental</u> damage (i.e. rupturing of water lines, telephone and fiber optic lines, cable lines, power lines, on-site underground utilities, etc). It is the responsibility of the Responsible Party or their designee to ensure proper utility clearance prior to performing field activities. This section may also not be used for repair necessitated by UST closure or Site Check activities.

10.010

Structure Repair/Stabilization: Structures that are repaired must be of same like and kind as original. Structures do not include appliances (i.e. air conditioning units, heating units, aboveground tanks, etc.) or components of the UST system. **This task requires pre-approval from UST Section for reimbursement.** This task will only be considered if it facilitates the most cost-effective remedial action. Along with the invoice, the Responsible Party or their designee must provide bidding documentation as described in Task 1.061 above (complete and submit Secondary Form Sec-J if bidding is necessary). If the subject structure is not owned by the responsible party, then the cost will be applied toward the third party deductible.

10.030

Cost for Replacing/Relocating Impacted Utilities: Utilities must be replaced in the exact manner in which they were removed unless relocation or alternative suitable materials that results in less expense to the Trust Fund can be used. SOW includes submitting the final invoice from the subcontractor. Along with the invoice, the Responsible Party or their designee must provide bidding documentation as described in Task 1.061 above (complete and submit Secondary Form Sec-J if bidding is necessary). If the utilities are not the responsibility of the responsible party, then the cost will be applied to the third-party deductible unless considered to be a remedial end point resulting is risk reduction. Public utilities only.

10.070

Cost for Repairing Asphalt and/or Concrete: SOW includes submitting the final invoice from the subcontractor and it is limited to only those areas required to be impacted by the assessment and/or remedial activities approved by the UST Section. Damages to asphalt or concrete caused by the Responsible Party or their designee or their sub-contractors to areas not related to the assessment or remedial areas (even if the damage was caused while conducting the required assessment and/or remedial activities) will not be reimbursed. Photographs of the impacted areas before and after the required assessment and/or remedial activities are required to be submitted along with the invoice. The Responsible Party or their designee shall ensure that the asphalt work reimbursed under this task is limited to only those areas that were impacted by the remedial activities.

Section 11 – Connecting to Public Water

Please Note: Connecting a well user or users to public water systems may be considered a cleanup cost if the UST Section determines that connection of the users and abandonment of appropriate supply and/or irrigation wells is a cost-effective means to lower the risk classification of the site (Reduction of risk from High to Intermediate or Low, not reduction of the Risk, Rank and Abatement Value). If the risk cannot be lowered, connecting a well user to municipal water is considered a third party cost and will only be reimbursed for sites where the well has been contaminated and the third party deductible of \$100,000 has been met. All Section 11 costs require pre-approval from the UST Section.

11.020

Agreements to Connect Water Supply Well Users to Public Water: This SOW consists of contacting water supply well users and providing them with an agreement to connect them to a public water system. SOW includes negotiating and meeting with the water supply well user concerning the connection. Please keep in mind that once the water line connection is made, all contaminated water supply wells must be properly abandoned and the UST Section will not reimburse monthly water bills. Price is per signed agreement.

11.040

Coordination and Verification of Water Line Connection: SOW will include coordinating and managing the subcontractor performing the specified connection of water supply well user(s). SOW also includes the verification of work once completed. Price is per connection.

11.050

Cost for Water Line Connections: SOW includes submitting the final invoice from the subcontractor conducting the work. This work is limited to only pay for water supply replacement, and not for property upgrades or running expanded services to accommodate future development (such as large diameter lines, hydrants, sewer, etc.) that directly results in the lowing of the *Risk*, *Rank and Abatement Value*, not the numerical ranking within a category. If multiple houses are to be connected, the bid is to include the connection of all the houses, not one house at a time. Along with the invoice, the Responsible Party or their designee must provide bidding documentation as described in Task 1.061 above. Price is cost and is to be presented as a price per foot or price per residence.

11.060

Cost for Water Line Fees Charged by Municipalities: SOW includes all costs charged by the water granting authority with the exception of capacity/use and pre-pay deposits. An invoice from the water granting authority is required.

Section 12 – Travel Time & Lodging

Please Note: Travel/Mileage costs under Task Code 12.010 are not reimbursable unless specifically pre-approved by the UST Section and will not be approved for any task code in which travel/mileage is included within the task or 12.050 is allowed for the task unless the exception below is met. Maximum mile roundtrip available for reimbursement is 250 miles. For most areas of the state, an environmental service provider capable of performing UST work can be obtained within a 125-mile radius. The responsible party may use a contractor located beyond this distance at their own expense. Exceptions to this 250-mile limit may be allowed for work performed in the following counties: Currituck, Camden, Pasquotank, Dare, Tyrrell, Gates, Perquimans, Cherokee, Clay, Macon, Hyde and Graham due to the extreme rural nature and limited road systems within these areas as long as the 125-mile radius is not expended BEFORE arrival in the incident county. The 250-mile limit would apply to work performed in all other counties of the State. When visiting multiple sites during a trip, the Responsible Party or their designee must evenly divide lodging and per diem costs among the sites visited. Mileage in lieu of per diem is allowed if it can be shown to be more cost effective and is limited to the lodging rate only. Out of state companies may only claim mileage from the closest entry point to the site on the NC state line if mobilizing from an out of state location with no in state office.

12.010

Required Responsible Party or their designee Travel: The price per mile includes the use of one completely equipped vehicle and is based upon 50 miles per hour traveled, and the average of the field technician and project manager hourly rates. Travel mileage is based on the distance to the site from the consultant's nearest office. Complete Primary Form P-12.

12.030

Overnight Lodging & Per Diem: Price includes overnight lodging and per diems for one person (any level). Per diems are only reimbursable for overnight stays between two working days (10 hours or more field time onsite or 15 total hours of field and travel combined), and are not reimbursable for staying the night before starting or night after completing the eligible activities (except where done as part of a milk-run with other eligible sites, with the per diem and travel costs divided evenly between them and all sites listed in the milk-run on each affected claim submitted). Please attach lodging and meal invoices. Price is per night not to exceed the NC general federal non-specified rate plus meals and incidentals in effect at the time the task was conducted. In the case of any event in which the responsible party or their designee does not wish to stay overnight but utilize the lodging portion of the task code for mileage, the mileage is capped at \$91. In order to be eligible for the per diem, an overnight stay is required. For activities which meet the overnight conditions stated above, if the total overnight cost exceeds the cost of mobilization to the site, the lessor of the two will be allowed. Activities that include the cost of mobilization will be reduced by the cost of Task Code 12.050 if conducted concurrently with other tasks in which mobilization was billed or following an over-night stay.

Please Note: Overnight lodging is only reimbursable where pre-approved by the UST Section.

12.050

Consultant Mobe: Price includes the use of one completely equipped vehicle and all personnel necessary to conduct the work. This task may not be stacked and may only be claimed once per incident per approved scope of work. For example, if the approved site activity is monitoring well, water supply well, and surface water sampling, only one mobe may be claimed. If site activities include a task in which mileage is included such as LSAs or drilling, then this task may not be claimed. Unjustified, consecutive site activates resulting in multiple mobes will not be allowed or approved unless it is shown to be the more cost effective option.