STATE OF NEVADA PETROLEUM FUND

COST GUIDELINES

SEPTEMBER 2024

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SECTION 1

1.1 Introduction

The Nevada Petroleum Fund (Fund) is administered by the Nevada Division of Environmental Protection (NDEP). This document has been prepared to facilitate the preparation and review of coverage applications, work scope cost proposals, claims for reimbursement, and proof of payment documentation submitted by petroleum storage tank operators and their Nevada Certified Environmental Managers (CEMs). All submittals are currently provided electronically via the Nevada Environmental Activities (NEA) online system at: https://nevadaenvironmentalactivities.ndep.nv.gov/. Any additional documents and forms referenced herein may be downloaded from our website at https://ndep.nv.gov/environmental-cleanup/petroleum-fund or requested from NDEP staff by calling (775) 687-9368.

1.2 Objectives

The objectives of this document are**:**

- Develop guidelines and provide mechanisms whereby cost controls are established for assessment and remediation following a discharge from a Petroleum Fund eligible storage tank system.
- Provide expectations for common Fund documentation submittals, including coverage applications, work scope cost proposals, claim submittals, and associated proof of payment documentation.
- Provide a documentation preparation and review process that is uniform and sufficiently flexible to account for differing site/contaminant conditions.
- Provide descriptions of common assessment and remediation tasks and their associated scopes of work.
- Emphasize the importance of CEM coordination with case officers.

1.3 Background

The Fund was established in 1989 by state legislation to facilitate environmental protection by assisting operators of regulated petroleum underground storage tank (UST) systems to meet federal requirements for financial responsibility pursuant to Title 40 of the Code of Federal Regulations (CFR), Part 280, Subpart H. The Fund provides reimbursement to qualified storage tank system operators for regulatory-required assessment and remediation costs (exceeding set deductible and co-payment amounts) associated with accidental petroleum releases. The Fund also allows voluntary enrollment of non-regulated petroleum tanks (e.g., aboveground storage tanks less than 30,000 gallons and farm/residential storage tanks), and automatically covers accidental releases from heating oil storage tanks used for onsite space heating. Reimbursements from the Fund are reviewed and authorized by the State Board to Review Claims (Board). The Fund is supported by a $0.0075 fee per gallon on petroleum products imported into the State, and an annual $100/storage tank registration fee.

Subsequent to implementation of the Fund, NDEP established a mechanism to manage the assessment and remediation costs associated with leaking petroleum storage tank sites. This mechanism included the submittal of not-to-exceed proposals (NTEPs) by petroleum storage tank operators or their CEMs prior to the commencement of assessment and remediation activities onsite. The NTEP system, implemented from June 1994 through 2022, was designed to evaluate proposed CEM levels of effort by establishing professional staff hours expected to carry out tasks necessary for assessment and remediation of a discharge.

Under this document, the Fund will implement a revised cost proposal system. Each cost proposal will include work scope tasks intended to allow a CEM the ability to manage staff levels of effort throughout various project phases. The Fund has established lump sum costs for many of the work scope tasks based on review of data submitted with NTEPs from December 2016 through May 2022. These lump sum costs take into account current

professional service rates, recent inflation, and will be revised periodically to account for future cost increases associated with economic conditions. In establishing a lump sum work scope task cost, as opposed to specifying the number of hours consulting staff may utilize, work can be streamlined based on the CEM's experience and site-specific needs.

1.4 Data Assimilation

In preparation of this document, data from previous NTEPs reviewed and approved by NDEP staff prior to this publication was compiled. Information gathered from previously approved NTEPs included the following:

- Identification of tasks necessary to perform assessment and remediation activities
- Professional time to perform the identified tasks
- CEM requested costs associated with performing an assessment or remediation task
- Types of investigative tools utilized
- Distance of sites from CEM's office location
- Geologic/hydrogeologic conditions
- Types of contaminants
- Regulatory agency requirements

1.5 Data Evaluation/Presentation

Following data tabulation as described in the previous section, professional hours and staff rates for each task were evaluated. Staff reviewed rate averages, medians, outliers, and considered inflation in an effort to account for short-term economic change. An overall cost with anticipated scope of work is provided for multiple tasks in Section 3 of this document.

In general, staff removed outlier values in the data and identified hours and rates that were most commonly used among professional staff. Median and average staff rates were calculated and adjusted for inflation over the past three years, and these rates were applied to hours commonly proposed for each task. For tasks that include unit-driven costs (e.g., number of wells installed or samples collected), rates have been provided and staff hours may be proposed where appropriate. Lastly, guidelines utilized in several other states, comments from CEMs, and NDEP case officer staff input were considered in the drafting of tasks and their associated scopes of work.

1.6 Eligible Versus Ineligible Costs

Fund coverage is typically provided for accidental discharges that have occurred from storage tanks registered and enrolled in the Fund at the time of the discharge discovery (refer to Section 2.1). Costs that can be covered by the Fund are referred to as "eligible costs" and are those costs directly associated with assessment and remediation activities approved by the case officer. With the exception of emergency abatement or initial abatement (refer to Section 1.7.7), activities directly associated with regulatory agency required work will be proposed in work plans and cost proposals and concurred with by the case officer. These guidelines include examples of many common tasks directly associated with assessment/remediation that are eligible for Fund coverage. Additional eligible costs for CEM field equipment, consumable materials, travel, and markup are outlined in Appendices A, B, C, and H, respectively. Subcontractor and vendor costs incurred under an approved work plan and cost proposal are also generally eligible costs.

Costs that are <u>not</u> covered by the Fund are referred to as "ineligible costs" and are associated with activities not required or previously approved by the case officer. Examples include, but are not limited to: costs associated with additional activities deemed necessary by the claimant and conducted for their convenience,

but not directly associated with assessment or remediation; rush turnaround fees on laboratory analyses if not requested/approved by the case officer; additional costs associated with utilizing an out-of-state consultant (non-reimbursable travel and per-diem); using a preferred contractor which charges more than known local vendors; intangible costs associated with financial risks such as high risk operators, and any cost for which the claimant was not billed. For a detailed discussion regarding reimbursable versus non-reimbursable costs, please see Appendix E.

1.7 Use of the Cost Guidelines Work Scope Tasks

It is important to note that this is **not** a document which provides direction on **how** to conduct assessment and remediation activities. Appropriate assessment and remediation activities must be conducted at sites pursuant to the request or authorization of the project case officer. Oversight of these activities are generally performed by an operator's CEM, and this document is not meant to limit the activities a CEM may perform.

1.7.1 Cost Proposals for CEM Oversight

For each phase of a project, a CEM may submit one or more cost proposals that will include one or more work scope tasks. Work scope tasks are outlined in Section 3 of this document and identify costs eligible for Fund reimbursement for CEM oversight of assessment and remediation activities routinely conducted at a site following a petroleum release. If a CEM identifies a predefined task where the scope of work or task cost will not completely support assessment or remediation activities due to site-specific conditions, a miscellaneous task may be used as outlined in Section 4 of this document. Complete justification for all miscellaneous tasks must be provided and concurred with by the case officer and Fund staff prior to performing the miscellaneous task activities. CEMs are encouraged to use predefined tasks whenever possible.

1.7.2 Work Scope Tasks

Section 3 of this document was intended to be as complete as possible in terms of services performed by CEMs for oversight of assessment and remediation of Fund eligible sites. Correspondingly, multiple characterization, remediation, monitoring, and closure tasks are provided to assist in cost proposal preparation and review.

Tasks are grouped together and generally correspond to the different project phases associated with assessment and remediation case. They are organized as follows:

- Site Characterization
    - Work plan preparation
    - Soil borings/well installations
    - Characterization reports and modeling
- Corrective Action Plan Preparation
- Aquifer & Pilot Testing
- Corrective Action Plan Implementation
    - Remediation system design, installation, and startup
    - Soil excavation
    - In-situ chemical oxidation solutions
- Permit Applications
- Corrective Actions
    - Remediation system operations, monitoring, and maintenance
    - Quarterly sampling, monitoring & status reporting
- Site Closure Activities
    - Exemption closure presentation to NDEP, if necessary

  - Remediation system decommissioning
  - Well abandonment
- Cost Proposal or Change Order Preparation
- Preparation of an Application for Petroleum Fund Coverage and State Petroleum Fund Reimbursement Claims
- Initial Abatement for Underground Storage Tank Releases

All assessment, remediation, reporting, and oversight must be performed pursuant to the requirements and standards stated in 40 CFR Part 280, Nevada Revised Statutes (NRS) 445C.150 through 445C.410, Nevada Administrative Code (NAC) 445A.226 through 445A.22755, NAC 445C.200 through 445C.390, NAC 459.970 through 459.9729, and NAC 459.9921 through 459.999. Assessment and remediation must proceed in accordance with regulatory directives regardless of Petroleum Fund coverage, cost proposal, or claim status.

1.7.3 Miscellaneous Tasks

Some projects phases may require miscellaneous tasks that do not conform with the predefined tasks presented in this document. In these cases, the CEM should not present a miscellaneous task that appears similar to an existing predefined work scope task. The proposed activities must be presented as a miscellaneous task in accordance with Section 4. The CEM will propose hours and skill level rates necessary to carry out the work as identified in Section 4. Any additional CEM costs allowed under Appendices A, B, and C may also be proposed under the miscellaneous task. Lastly, the CEM must provide a scope of work for the task and justification for the proposed hours and costs.

1.7.4 Cost Proposal Formatting and Submittal

Cost proposals and their associated work scope tasks must be structured in a way that is conducive to NDEP staff review. To facilitate a consistent preparation and submittal process, all cost proposals must be created and submitted online through the NEA system. Each cost proposal must identify a period of time during which all the work scope task activities will be completed. For example: *One year of remediation system operations & monitoring (January 1, 2023 through December 31, 2023)*, or *3rd and 4th quarter groundwater sampling and status reporting (July 1, 2023 through December 31, 2023), etc*.

Once submitted and approved within the system, each CEM invoice can be linked to the appropriate cost proposal while preparing a claim for reimbursement (refer to section 2.2). This ensures costs claimed for reimbursement are associated with cost proposals that have been authorized by the regulatory agency.

1.7.5 Cost Proposal Processing

NDEP case officers will review, approve, or deny cost proposals containing predefined work scope tasks for release sites they manage. For each task presented in a cost proposal, case officers will verify proposed tasks align with work plans previously submitted and approved. If a miscellaneous task is included in the cost proposal, both the case officer and Fund staff must approve the task. Case officers reserve the right to modify proposed levels of effort based on their knowledge of site assessment and remediation activities. Fund staff also reserve the right to deny miscellaneous tasks that appear to circumvent predefined work scope tasks and would result in increased CEM oversight costs without appropriate justification. Cost proposals are submitted and managed through NDEP's NEA online database system (https://nevadaenvironmentalactivities.ndep.nv.gov).

1.7.6 Cost Proposal Change Orders

If, during the course of a project, additional time will be required to complete one or more tasks that have already been approved under a cost proposal, the CEM is required to discuss the need for the change order with the case officer and gain approval before submitting the change order for the associated cost proposal. Change orders will be concurred with only if complete justification for the additional work is provided, which will be at the case officers discretion. In these cases, a new cost proposal should not be created, and any identical work scope tasks that overlap the same time period will be denied.

1.7.7 Emergency/Initial Abatement Activities

Emergency/initial abatement for heating oil USTs and commercial storage tanks includes activities designed to alleviate situations that are imminently dangerous to life and, health, or immediately prevent contaminant migration within the environment from a petroleum release. These activities may occur prior to specific regulatory agency direction, prior to a Fund coverage determination, prior to a cost proposal submittal and approval, and are not subject to bid requirements. However, any corrective action costs requested to be reimbursed by the Petroleum Fund that were performed as an emergency/initial abatement, must be submitted as a single claim using Task J.1 (heating oil storage tanks less than 1,100 gallons) or Task J.2 (all other storage tanks) of these Cost Guidelines. NDEP will require the CEM to contact a case officer, remediation supervisor, or Fund staff as soon as practical and not more than 24 hours after the discharge is observed to ensure proposed abatement activities will be eligible for reimbursement and to discuss existing site conditions. If the discharge is observed after business hours or initial contact attempts with NDEP are unsuccessful, call the NDEP Spill Hotline to request support (see Section 2.1). Please refer to Appendix F for a discussion regarding emergency/initial abatement activities.

1.7.8 Cost Guideline Updates and New Technologies

The Cost Guidelines is an evolving document. NDEP will periodically revise this document in an effort to keep the content up to date. Comments, questions, and suggestions from CEMs and members of the regulated community regarding the guidelines are encouraged and welcomed. Those wishing to make comments regarding this document may do so during the public comment portions of quarterly scheduled Board meetings. Any comments to be considered by Fund staff outside of a Board meeting must be summarized in writing and submitted to staff. Received comments will be considered and either presented to the Board or presented to CEMs and the regulated community, where appropriate, for input. Fund staff will notify the Board of all substantive modifications to the Cost Guidelines.

New site assessment and remediation technologies emerge over time. As new technologies and practices are accepted by CEMs and NDEP, they will be evaluated and added into this document, as applicable.

SECTION 2

2.1 Application for Coverage Filing Procedures

The operator of a petroleum storage tank system that has caused a discharge to the environment must report the discharge (release) to NDEP no later than the first working day following its discovery. Reporting may be done using the **NDEP Spill Hotline** at https://nevadaenvironmentalactivities.ndep.nv.gov or 1-888-331-6337.

Following the report of a discharge, the operator must submit an application for coverage (application) to the Fund within 12 months of the release discovery date using the online NEA system at: https://nevadaenvironmentalactivities.ndep.nv.gov. Submitted applications must be complete and provide all requested information. Attachments to the application (e.g., figures, photographs, written reports or summaries, etc.) can be uploaded during the submittal process in a PDF format. Incomplete applications will result in Fund staff returning the application and requesting additional information, which may cause processing delays. Criteria used by staff when considering eligibility for Fund reimbursement includes, but is not limited to:

- The leaking tank system must have been registered and enrolled in the Fund at the time of discharge discovery. The discharge discovery date is the date the operator knew or should have known that a discharge from his/her storage tank system occurred. Call all suspected releases into the NDEP Spill Hotline to avoid jeopardizing Fund reimbursement eligibility.

  Note, pursuant to NRS 445C.340.2, storage tank systems used to store heating oil for consumptive use on the same premises (space heating) are not required to register but are eligible for Fund coverage.

- Evidence must be provided showing a registered tank system was the source of the release, and the release resulted from an accidental discharge.

- The applicant must identify exactly what component of the enrolled tank system leaked (e.g., product piping failure, faulty dispenser shear valve, hole in the tank, etc.), and that the leaking component was repaired, replaced, or removed to prevent further discharge to the environment. Refer to Board Policy Resolution No. 2008-04 for additional information.

- NDEP's corrective actions bureau has assigned a leaking UST or remediation case ID, and a case officer has oversight of assessment and remediation activities following the release.

- Costs for regulatory-required assessment and remediation activities must total at least $5,000 for each facility with the exception of leaking heating oil storage tanks less than 1,100 gallons. For these small heating oil tank systems, cumulative assessment and remediation costs must be greater than $250.

- If the claimant chooses to hire a consulting firm to provide oversight of assessment and remediation activities, which is strongly recommended by NDEP, the individual overseeing work must be certified by the Division as an environmental manager (NAC 459.9704).

Upon approval of Fund coverage, an operator must register with the State of Nevada Controller's Office as a vendor to receive claim payments from the state. The Fund may authorize payment to an individual that owns or operates a business, the business as an entity, contractors, or vendors for site assessment and remediation activities. Payments are issued by the Nevada Controller's Office (separate state agency), which requires registration with the Nevada Vendor Registration Desk (Fund staff cannot register an operator). To register for a vendor account with the Nevada Controller's Office, visit the Vendor Services website at: https://controller.nv.gov/Buttons/VendorDB/.

In general, if the business has taken responsibility for, and is paying for, the assessment and remediation

activities onsite, Fund staff would expect to see the business name on the vendor registration record. Alternatively, if the claimant is a person that has taken responsibility for, and has paid for the assessment and remediation activities on site, staff would expect to see the individual's name on the vendor registration information. The entity on the vendor registration and the entity identified as the owner/operator on the application for coverage should match. The applicant (i.e., person that signs the application) will be claimant of record and will be the authorized representative of the business entity shown on the application. A change in business, claimant, responsible party, or authorized representative may require an update to the vendor registration with the Controller's Office as well as written notification to Fund staff using a form listed on our website at: https://ndep.nv.gov/environmental-cleanup/petroleum-fund/forms.

It is important to note that the Nevada Controller's Office will send tax forms related to any monies paid by the state throughout the year that were authorized by the Fund. Please visit the Fund program forms website at: https://ndep.nv.gov/environmental-cleanup/petroleum-fund/forms and review the section titled, "Tax Documentation for Fund Reimbursements" for more information regarding tax implications.

2.2 Cost Proposal Submittal Procedures

Once an application for coverage has been submitted, the operator with the assistance of their CEM, can submit a cost proposal to NDEP for review by the case officer. Cost proposals should be submitted prior to assessment and remediation work being performed and can be submitted prior to approval of Fund coverage. If an operator is seeking Fund coverage (i.e., has submitted an application), the CEM and operator are encouraged to submit cost proposals prior to a determination in coverage. An exception to the above includes emergency or initial abatement corrective actions that may occur prior to assignment of a case officer and/or Fund coverage. Emergency/initial abatement actions do not require cost proposals and are further discussed in Appendix F of this document.

Cost proposals must be submitted to the case officer online, using the NEA system at: https://nevadaenvironmentalactivities.ndep.nv.gov. Each submitted cost proposal is assigned a tracking number in the online database system. The CEM also has the ability to create a custom tracking number. The custom tracking number will be referenced on associated reimbursement claims and can be a name, internal project tracking code, the date which the proposal was prepared, or anything that facilitates CEM tracking. All cost proposals will list applicable work scope tasks from Section 3 of this document and include other CEM costs (refer to Appendix A, B, and C) that pertain to assessment and remediation activities deemed necessary by the CEM and are required/approved by the regulatory agency.

Cost proposals should be submitted timely in order to receive approval by the case officer prior to assessment or remediation activities being performed. NDEP staff typically review, approve, amend, or deny cost proposals within 30 days of receipt. If a CEM requires an expedited review, they must be in close communication with the case officer to facilitate a quicker review. In the event a cost proposal is submitted after site work has been performed, the case officer has discretion to accept, deny, or modify the cost proposal to align with necessity of the activities performed and/or services actually provided. If the case officer does not approve the CEM's justification for submitting a delayed cost proposal, Fund staff will not recommend reimbursement for the invoiced costs associated with those activities. This recommendation may be appealed to the Board.

Note, NDEP's concurrence with a cost proposal prepared pursuant to these guidelines does not guarantee reimbursement in full. Pursuant to NRS 445C.310.1(a), all final reimbursement decisions are pending subsequent authorization from the Board and requested/approved costs must be eligible in accordance Fund statutes, regulations, and Board policy resolutions. Please refer to Section 1.6 above and the Petroleum Fund

website at: https://ndep.nv.gov/environmental-cleanup/petroleum-fund.

2.3 Change Order Requests and Submittal Procedures

When a change in scope of work is necessary to complete field activities already approved, the CEM must use their judgment to complete the task as expeditiously and cost effectively as possible. The CEM should be in close communication with the case officer and contact the case officer from the site during field activities, when possible, to discuss a change order to the original cost proposal. Verbal request/concurrence for change order activities must be followed up with written confirmation from the case officer.

Circumstances that justify a change order include, but are not limited to:

- Unexpected site conditions that could not be anticipated based on prior site visits, characterization, or corrective actions.
- Observed site conditions warrant additional characterization/remediation activities that alter the approved scope of work (e.g., extending a boring/well/excavation, relocating boring/ well due to obstruction, etc.). The additional field activities should be completed using the existing onsite equipment/contractor and provide savings to the Fund with regard to future mobilization and demobilization costs.
- Additional pilot testing time.
- Design, installation, and/or repair of a complex remediation system.

Like cost proposals, change orders must be submitted to the case officer online using the NEA system and must be approved prior to claim submittal. Each change order will clearly identify the cost proposal being modified. Change orders must include descriptions of and justification for the additional work scope activities. If concurred with by NDEP, the original cost proposal will be amended.

2.4 Reimbursement Claim Filing Procedures and Summary

The CEM commonly prepares reimbursement claims for the claimant within the NEA system at: https://nevadaenvironmentalactivities.ndep.nv.gov. Each invoice that includes costs associated with site assessment and remediation are uploaded to the system. A value is then requested for reimbursement of invoiced costs within the system. The requested value may be the full invoiced amount or a partial amount if some of the invoiced services are not eligible for Fund reimbursement, are associated with another project, or will be requested on a future claim.

There are two categories of invoices: CEM invoices and non-CEM invoices. The CEM invoices are billed services, equipment, and materials provided by the CEM related to contaminant assessment, monitoring, and remediation oversight. Each of these invoices is linked to an approved cost proposal (discussed above), from which the amount billed is deducted from the total cost proposal amount. Non-CEM invoices typically include services provided by non-CEM contractors, remediation equipment vendors, laboratories, utility companies, etc. The non-CEM invoiced amounts are not deducted from cost proposals and are subject to bid requirements (discussed below). All invoices are consolidated and totaled under one claim document submitted to Fund staff for review. Staff will review each claim and verify requested costs for reimbursement do not exceed preapproved cost proposal amounts and are consistent with program statutes, regulations, and Board policy resolutions. Once the claim is accepted by staff, it will be placed on the next scheduled Board meeting for final approval. Board meetings are typically held quarterly.

The following documents are necessary to prepare a claim submittal:

- Each invoice or receipt for which reimbursement will be requested (PDF format)
- Previously approved cost proposals (created, tracked, and available in the NEA system)
- Bid packages for contractor services/equipment that exceed the threshold provided under NAC 445C.270(4)(e) and Board Policy Resolution No. 2015-01.
- When required, case officer concurrence correspondence (e.g., cost proposal change orders, bid approval greater than $25,000, etc.)
- Field and/or vehicle mileage logs
- Lodging receipts
- A list and description of remediation equipment used onsite (Onsite Equipment Form)

2.4.1 Reimbursement Claim Invoice Formatting

Each invoice must be in PDF format and include the following:

- Invoice number/identifier and date.
    - An account number may be used for utility bills.
- Identify the site project by name, address, or CEM project number.
- A description of services performed or equipment costs.
- Costs on invoices that are ineligible for Fund reimbursement or are otherwise not being requested for reimbursement on a claim, must be identified on the submitted invoice.
- Invoices that include services for multiple facilities must include a breakout showing amounts billed to each facility and the site-specific amount requested on the claim.
    - An invoice breakdown form is provided on the Petroleum Fund forms page at: https://ndep.nv.gov/environmental-cleanup/petroleum-fund/forms
- All costs requested for reimbursement must be billed to the claimant, or business they represent, which is on record with the Fund (generally the applicant or operator identified on the application for coverage).
    - For non-CEM invoices and services that are billed to the CEM on behalf of the claimant, the CEM must bill the claimant for those services. The CEM invoice must also clearly identify the non-CEM invoice number/services billed to the claimant, and the CEM must include the non-CEM invoices in the claim submittal.
- CEM invoices that include laboratory invoices for soil and groundwater analyses must include a description of the sample event (e.g., 1st Qtr. GWM, Remediation system influent/effluent, excavation confirmation sampling, etc.). Laboratory chain of custody forms are also recommended.
    - Note, sample analyses must be performed by a laboratory certified by NDEP for each specific analysis requested for Fund reimbursement. Information on NDEP's Laboratory Certification program may be found at: https://ndep.nv.gov/water/lab-certification.

Additional information required on CEM invoices:

- The billing period during which services were performed.
- The cost proposal tracking number the invoiced services were applied.
    - If services provided on a single invoice were approved under multiple cost proposals, billed services must be separated and subtotaled under each cost proposal tracking number.
    - Alternatively, separate CEM invoices may be submitted for each cost proposal.
- Markup on non-CEM invoices must be clearly identified
- Each CEM invoice should include the following, when applicable (forms are available on the Petroleum Fund Forms page at: https://ndep.nv.gov/environmental-cleanup/petroleum-fund/forms):

- CEM field/usage logs showing in-house equipment and materials used onsite.
- CEM vehicle mileage logs identifying the date(s) of vehicle use, start/end mileage, start/end locations, and purpose for site visit.

Additional information required on non-CEM invoices:

- For non-CEM subcontractor invoices and/or receipts, the date(s) on which the work or service was performed.
- For invoices submitted for impacted soil/groundwater transfer, disposal, or treatment must include documentation of disposal/treatment unless the transport company is a waste treatment/disposal facility.
- For invoices that exceed the bid threshold, bid documentation prepared in accordance with Section 2.4.3 (below), NAC 445C.270(4)(e), and Policy Resolution 2015-01.

2.4.2 Invoice Itemization Sheets

Once all claim invoices are uploaded, the system will compile them into two separate itemization tables on the claim document. The first table details CEM costs, and the second shows non-CEM costs. CEM and non-CEM costs are identified by the CEM when an invoice is uploaded to the system.

CEM costs typically include billable hours by a consulting firm's staff, equipment used by consultant staff for sampling, field consumables, travel, etc. The CEM Cost Invoice Itemization table also identifies an approved cost proposal using the CEM-assigned tracking number detailed in Section 2.2. Non-CEM costs may include services subcontracted by a CEM, laboratory costs, utility bills, etc. For non-CEM invoice costs that are included on a CEM's invoice (e.g., a subcontractor bills the CEM who then bills the claimant), the requested CEM costs are shown on the CEM Cost Itemization table and do not include the values of non-CEM services included on the CEM invoice. Instead, the non-CEM costs will display below on the Non-CEM Cost Itemizations table. This allows staff to deduct CEM costs from an approved cost proposal and separately track non-CEM costs.

2.4.3 Bid Requirements for Non-CEM Costs

With the exception of soil disposal/treatment, laboratory analytical, and utility costs, or unless otherwise approved by the NDEP, a minimum of three valid, signed bids must be submitted for non-CEM services or equipment purchases that exceed $7,000 (bid threshold) in accordance with NAC 445C.270(4)(e). Valid bids must be provided in accordance with Board Policy Resolution No. 2015-01 and include the following:

- Site specific name, address, and case ID of the facility where the work will be conducted.
- Pricing for the services solicited and/or equipment to be purchased.
- Bid summary and certification forms (https://ndep.nv.gov/environmental-cleanup/petroleum-fund/forms).
- Bid submittal forms that are structured in a manner that allows direct comparison to the other bid submittals.
- Written approval from NDEP or supporting documentation that NDEP did not respond to the bid review request within 10 business days, if costs will exceed $25,000.
- Signatures by the contractors/vendors who prepared the bids, the CEM, and the operator.

Note, it may be necessary to request bids from more than three vendors in order to receive three valid bids. Correspondence from a vendor that they cannot or do not wish to provide a bid may not constitute receipt

of a valid bid. The following are examples under which the NDEP may consider bid packets that contain less than three bids:

- Not able to obtain three bids prior to case officer deadline to perform the work.
- There are less than three vendors who can provide the service or product due to the specialized nature of the deliverable.
- The service or product is proprietary to its company.

For bid packets that include less than three bids or where the lowest bid is not selected, a written bid waiver from the case officer must be provided with the bid packet.

In the event an invoice submitted with a claim is greater than the accepted bid amount, justification must be provided and the approved bid rates/unit costs for contractor time and materials must be used. An exceedance that occurs for a bid where lump sum pricing was accepted may not be reimbursed by Fund staff if original bid rates cannot be determined. For significant cost increases due to a change in the scope of work, written approval from the case officer will also be required. A Bid Excess Justification/Concurrence form may be downloaded from the Petroleum Fund Forms page at: https://ndep.nv.gov/environmental-cleanup/petroleum-fund/forms.

Justifiable reasons for bid exceedance include, but are not limited to:

- Additional boring footage advanced during boring/well installation.
- Additional 55-gallon drums necessary for drilling activities.
- Freight costs for remediation equipment not provided with bid.

Fund staff may recommend denial of invoiced costs for failure to obtain bids in the following circumstances:

- A single non-CEM invoice with an amount greater than the bid threshold is split into multiple invoices, each having an invoice amount less than the amount that bids are required.
- Circumventing the bid process by requesting an amount less than the bid threshold value for a non-CEM invoice where the invoiced amount exceeds the bid threshold.
- Costs associated with routine or repeat services/purchases multiple times throughout the year, and the annual invoiced costs exceed the bid threshold (e.g., subcontracted non-CEM monitoring, third-party remediation equipment operation/maintenance, etc.).
    - Bids should be obtained in accordance with this subsection on an annual basis.

2.4.4 Reimbursement Claim Submittal Processing

Once all invoices, bid packages, and other supporting documents discussed above are uploaded to the NEA system, the CEM must obtain the claimant's approval (i.e., signature). Upon receipt of that approval, the claim will be submitted electronically to Petroleum Fund staff for review.

Fund staff will conduct a review of the claim to ensure costs are eligible for payment in accordance with Fund statutes, regulations, and Board policy resolutions. Following claim review, staff will either recommend payment for all CEM costs that are associated with an approved cost proposal as well as non-CEM costs required by the case officer for site assessment and remediation, or staff will recommend denial of costs that cannot be substantiated or are ineligible (disallowance). In the case of a disallowance or improperly prepared claim, staff will provide the CEM and claimant the opportunity to address/correct the ineligible cost by returning the claim or requesting additional documentation. Any dispute that cannot be resolved by Fund staff, the claimant, and their CEM may be appealed to the Board to Review Claims at the next scheduled meeting.

Once a claim has been reviewed and accepted by Fund staff, the claimant and CEM will be notified of staff's payment recommendation to the Board. The notification will be received by email and direct both the claimant and CEM to a claim recommendation letter, which will be presented to the Board during the next quarterly meeting.

2.4.5 Claim Submittal Deadlines

Fund staff establish quarterly claim submittal deadlines approximately 6 weeks prior to each scheduled Board meeting. Generally, claims received on or before the meeting deadline will be presented before the Board. Staff also make every effort to review and process claims submitted after the meeting deadline as well but cannot guarantee they will be placed on the meeting agenda if received after the meeting deadline. Meeting deadlines are posted to the Board to Review Claims meeting website at: https://ndep.nv.gov/environmental-cleanup/petroleum-fund/board-meeting-agendas-minutes.

In addition to the above quarterly meeting deadlines established by Fund staff, the Board has adopted regulations to ensure claims for individual projects are processed timely and lack of a Fund payment does not delay site assessment or remediation. In accordance with NAC 445C.310(2), an operator or CEM seeking reimbursement by the Fund for assessment and remediation costs must:

- Submit the initial claim within 12 months of discovering a release from a registered storage tank.
- Submit subsequent claims within 12 months of assessment or remediation work being performed.
- Submit the final claim for reimbursement within 12 months of the completion of corrective action activities onsite ("No Further Action" letter issued by the case officer).

A waiver for the above deadlines may be issued by the Fund program supervisor if good cause is shown in accordance with Board Policy Resolution No. 2022-01.

2.5 NEA Document Submittal and Signatures

Signatures for documents submitted via the NEA system must be applied electronically as a user logged into the system, or the corresponding downloadable signature page must be used. The signatory can sign the signature page, scan it to PDF format, and upload it to the applicable document. Fund staff will not accept signatures applied to the downloadable signature page through electronic signature software such as Adobe or DocuSign, nor should signatures be copied/pasted onto the signature page. If the claimant has not created an account within the NEA system, contact Fund staff.

The purpose of the above is to ensure a claimant has been provided with the appropriate document and they have reviewed the documentation they are signing. The following language, or similar, is provided on each signature page downloaded from the system and must be included with the claimant's hand-written signature:

- "I have reviewed and understand the proposed tasks summarized in this cost proposal. I understand that I am responsible for any costs not recommended for reimbursement by the State of Nevada Petroleum Fund staff, and which I have agreed with the CEM are appropriate to incur, and/or have directed to incur such costs on the subject project."

All signatories must review the documents they are signing and approving. If the information in the document is not clear, it should be reviewed with the CEM and/or Fund staff. Documents submitted without the appropriate signature and the above acknowledgement will not be processed by Fund staff.

2.6 Payments by the Fund

Accounting staff will process standard payments from the Fund to an operator typically within one week after a quarterly Board meeting. Once processed, the operator can expect payment to their account within 3 to 5 business days. The receipt of payment by the operator starts a time period during which a CEM, vendor, or contractor that performed site work must be paid (refer to proof of payment section below). An operator can also provide approval to pay a CEM, vendor, or contractor directly; however, Fund staff are not responsible for contractual arrangements between the operator and their CEM, vendors, and contractors.

An alternative to a standard payment as outlined above is to request a direct payment. This payment process can expedite a Fund reimbursement payment at any time throughout the year in as little as 2-3 weeks. Once Fund staff have approved a claim, the operator can submit a declaration indicating they do not contest the staff recommended value of the claim. Upon receipt of this declaration, Fund staff may authorize a reimbursement payment on behalf of the Board. Please refer to Board Policy Resolution No. 2017-02 for additional information.

2.7 Proof of Payment to Contractors/Vendors

Pursuant to NAC 445C.310, all payments received from the Fund shall be paid by the operator or CEM to the contractors/vendors that provided assessment or remediation services within 60 days of receiving the Fund payment. If an operator fails to pay their contractors/vendors within 60 days of receiving payment, the money paid by the Board shall be refunded back to the Fund and any subsequent claims will be held for future payment until the money is refunded. Documentation confirming proof of payment to contractors/vendors shall also be submitted to Fund staff no later than 60 days after the operator or CEM receives payment from the Fund. Failure to provide proof of payment documentation will also render subsequent claims ineligible for approval until the second Board meeting following receipt of documentation.

If an operator submits a declaration as described in Board Policy Resolution No. 2017-02 and requests a direct payment, all payments must be made to the contractors/vendors within 30 days. Additionally, proof of payment documentation must be submitted to Fund staff within 30 days.

Examples of acceptable proof of payment documentation include documentation from a financial institution of wire transfer or other electronic fund transfer initiated by the recipient to the contractor/vendor or copies of the cancelled checks issued by the recipient for the payment of reimbursable costs. A complete description of acceptable documentation is available through User Guides located in the NEA system. This documentation must be uploaded to the NEA system within the deadlines specified above.

2.8 Required Operator Cost Allocation

In accordance with NAC 445C.310(5)(c), the operator (i.e., claimant) must demonstrate they are paying the applicable cost allocation outlined in NRS 445C.380. Most operators will need to demonstrate they have paid 10% of the approved claim costs (the Fund pays the remaining 90%). Exceptions to this allocation amount include small business operators (5% cost allocation, up to $50,000 dollars) and an agency, department, division or political subdivision of the State (10% cost allocation, up to $10,000). Proof of payment records will be used by Fund staff to verify an operator has met their payment allocation for each claim.

2.9 Appeals

Denied coverage applications, claims, and individual invoices may be appealed to Fund staff and to the Board, if necessary. If monies requested in a claim are not recommended for payment, and the CEM or claimant

believes they are reimbursable costs, the denied amount should first be appealed to Fund staff. Appeals should be provided in a written format (email or letter). The following information should be included:

- Copies of all denied invoices.
- The total amount being appealed.
- The amount of each invoice being appealed.
- Justification why the denied reimbursement should be recommended for payment.
- Supporting documentation as needed (e.g., bid waiver, mileage sheets, etc.).

The appeal will be reviewed by Fund staff. If approved, the CEM will resubmit the invoices on a separate claim with the concurrence document attached. If the amount appealed remains denied, the denied amount may be appealed to the Board.

2.10 Maintaining Records

Pursuant to NAC 459.9729(1)(i), a CEM shall maintain a written record of each project requiring certification for 3 years after the project is completed. The Division may inspect those records during normal business hours.

Types of records that shall be maintained include but are not limited to:

- Field notes, both written and electronic
- UST compliance documentation
- Leaking UST compliance documentation
- Invoices
- Claims
- NTEPs and cost proposals
- Bids packages
- Timesheets
- Financial institution statements
- All records associated with Fund reimbursement/payment

SECTION 3: WORK SCOPE TASK TABLES

A. SITE CHARACTERIZATION

WORK SCOPE TASK A.1:
ASSESSMENT OF SITE CONDITIONS PURSUANT TO RELEASE DISCOVERY

Task Preparation and Oversight Cost: $3,400.00

Scope of Work: This task consists of all consulting services to assess initial site conditions following a release and preparation of a response to the regulatory agency's request for information pursuant to applicable regulations (e.g., R-Spill Response). Information unknown at the time of the release (extent of the release, volume of contaminated soil, subsurface lithology, etc.) will be submitted in a subsequent Site Characterization Report.

Activities include communication with the case officer, collection of release information, and submittal of a written response to NDEP. Any deficiency in the response identified by the case officer must be addressed as a part of this scope of work. If the case officer requests additional follow up information that was not part of the initial release discovery request, a change order to this task may be submitted for case officer review and approval.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK A.2:
WORK PLAN PREPARATION
SMALL-SCALE SITE CHARACTERIZATION

Task Preparation and Oversight Cost: $2,100.00

Scope of Work: This task consists of all consulting services to prepare and produce a work plan to perform a small-scale site characterization. The work plan shall include a description of proposed activities to quantify the extent of the release and may include installation of soil borings and/or one groundwater monitoring well to evaluate whether or not groundwater has been impacted. These soil and groundwater characterization activities are generally associated with a release from small storage tank systems with products that have a lower potential to migrate (e.g., heating oil or waste oil storage).

Activities include communication with the case officer, site visit(s), review of previous assessment work performed at the site, general project management, drafting of site diagrams showing boring/well location(s), preparation and submittal of a site characterization work plan. Any deficiency in the work plan identified by the case officer must be addressed as a part of this scope of work.

Note, Task A.3 may be used for preparation of a work plan for site characterization of a large site or a large volume of product released that would result in a higher potential for constituent migration to groundwater (e.g., fueling facility with multiple large storage tank systems and/or release sources).

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK A.3:
WORK PLAN PREPARATION
LARGE-SCALE SITE CHARACTERIZATION

Task Preparation and Oversight Cost: $4,300.00

Scope of Work: This task consists of all consulting services to produce a work plan to perform a site characterization to delineate the extent of petroleum contamination at a site where soil and/or groundwater contaminant levels exceed regulatory action levels. This type of site assessment consists of soil characterization (e.g., soil boring advancement, push-drive technology, etc.) and/or groundwater characterization (e.g., installation of groundwater monitoring wells, etc.) at a facility with multiple release sources and/or a significant release from one or more large storage tank systems (e.g., tanks used at a fueling facility) that have a higher potential to migrate.

Activities include communication with the case officer, site visit(s), review of previous assessment work performed at the site, general project management, drafting of site diagrams showing boring/well location(s), preparation and submittal of a site characterization work plan. Any deficiency in the work plan identified by the case officer must be addressed as a part of this scope of work.

Note, Task A.2 should be used for preparation of a work plan for site characterization of a small site or single soil release with low potential to migrate to groundwater (e.g., heating oil and waste oil products).

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK A.4:
WORK PLAN PREPARATION
LIMITED CHARACTERIZATION OR CORRECTIVE ACTION ACTIVITIES

Task Preparation and Oversight Cost: $2,100.00

Scope of Work: This task consists of all consulting services to produce a work plan to perform limited corrective action activities, including but not limited to extended pilot testing, excavation and disposal of contaminated soils, or propose the installation of additional soil borings and/or monitoring wells to further delineate subsurface contamination.

Activities include communication with the case officer, site visit(s), review of previous assessment work performed at the site, general project management, drafting of site diagrams showing facility structures and existing boring/well location(s), and preparation/submittal of a limited site characterization or corrective action work plan. Any deficiency in the work plan identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK A.5:
HEALTH AND SAFETY PLAN PREPARATION

Task Preparation and Oversight Cost: $1,000.00

Scope of Work: This task consists of all consulting services necessary to produce the initial site-specific health and safety plan for a site. The plan should address pertinent worker safety standards in accordance with federal, state, and local requirements for meeting OSHA and HAZWOPER provisions. Any deficiency in the plan identified by an authority having jurisdiction must be addressed as a part of the scope of work.

Activities include site visit(s) and preparation of a site-specific health and safety plan. The plan must be provided to the authority having jurisdiction or NDEP upon request.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK A.6:
HEALTH AND SAFETY PLAN UPDATE

Task Preparation and Oversight Cost: $400.00

Scope of Work: This task consists of all consulting services necessary to update a site-specific health and safety plan. Updating may be necessary on an annual basis or when site activities are modified. The plan should address pertinent worker safety standards in accordance with federal, state, and local requirements for meeting OSHA and HAZWOPER provisions. Any deficiency in the plan identified by an authority having jurisdiction must be addressed as a part of the scope of work.

Activities include site visit(s) and preparation of an updated health and safety plan. The plan must be provided to the authority having jurisdiction or NDEP upon request.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK A.7:
UTILITY CLEARANCE COORDINATION

Task Preparation and Oversight Cost: $1,000.00

Scope of Work: This task consists of all consulting services necessary to coordinate the clearance of public and/or private utilities prior to soil boring advancement, well installation, trenching activities, etc.

Activities include site visit(s) to demarcate area for public and/or private utility clearance, project management, and communication with the case officer. Any deficiency identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK A.8:
SUBSURFACE SOIL INVESTIGATION BY SOIL BORING ADVANCEMENT

Task Preparation and Oversight Cost: $1,400.00

Scope of Work: This task includes project management and costs associated with oversight of subcontractors to perform a subsurface investigation to determine the extent of soil contamination utilizing soil boring advancement and sampling. Soil borings installed under this task will not be converted to groundwater monitoring or remediation wells. Please refer to work scope task A.9 for well construction activities. If soil borings and new wells will be installed concurrently at the site, costs for each may be proposed under their respective work scope tasks.

Site activities should include, but are not limited to the following:

- Solicit bids for contractor services if costs will meet or exceed the bid threshold
- Coordinate and oversee advancement of soil borings
- Collection of soil samples for analyses
- Decontamination of equipment between samples/borings
- Borehole logging
- Borehole abandonment
- Coordinate disposal of soil cuttings
- Time to prepare and deliver samples to a NDEP certified laboratory, or prepare sample shipping package
- Staff travel time if the site is located within metropolitan area of consultant
- CEM coordination of traffic control vendor, if necessary (traffic plans, barricade placement and rental, etc.)
- Coordinate offsite boring activities with private property owners, if necessary

Additional compensation for field oversight of drilling and sampling activities may be claimed using the following rates:

- For each consecutive field day after the first (subsequent day), 25% of the Task Preparation and Oversight Cost.
- For each linear foot drilled - $10
- Drill rig set up time between borings - $63.50 (each subsequent boring after the first)
- Sample collection - $63.50 (each borehole sample)

Please note that costs associated with drill rig repairs and/or weather delays are not reimbursable.

Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK A.9:
GROUNDWATER MONITORING OR REMEDIATION WELL CONSTRUCTION

Task Preparation and Oversight Cost: $1,500.00

Scope of Work: This task includes project management and oversight of subcontractors to install groundwater monitoring or remediation wells, which includes the recovery of soil samples from the boreholes, logging of the boreholes, and coordinating waste disposal.

Site activities should include, but are not limited to the following:

- Solicit and evaluate bids if costs will meet or exceed the bid threshold
- Coordinate the preparation and submittal of Notice of Intent card(s) to the Division of Water Resources.
- Coordinate the preparation and submittal of Affidavit of Intent to Abandon Monitoring Well form(s) to the Division of Water Resources.
- Oversee advancement of soil boring(s) to be converted to well(s)
- Collect soil samples from borehole(s) and borehole logging
- Decontamination of contractor equipment between samples/borings
- Coordinate/oversee construction of well(s), including wellheads
- CEM equipment calibration and decontamination
- Time to prepare and deliver samples to a NDEP certified laboratory, or prepare sample shipping package
- Travel time if site is located within metropolitan area of consultant
- Coordinate disposal of soil cuttings
- Verify well development by subcontractor, if not performed by consultant staff
- Coordination of well survey(s)
- CEM coordination of traffic control vendor, if necessary (traffic plans, barricade placement and rental, etc.)
- Coordinate offsite investigation activities with private property owners, if necessary

Additional compensation for field oversight of drilling and sampling activities may be claimed using the following rates:

- For each consecutive field day after the first (subsequent day), 25% of the Task Preparation and Oversight Cost.
- For each linear foot drilled - $18
- Drill rig set up time between wells - $63.50 (each subsequent well after the first)
- Sample collection - $63.50 (each borehole sample)

Please note that costs associated with drill rig repairs and/or weather delays are not reimbursable.

Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK A.10:
GROUNDWATER MONITORING OR REMEDIATION WELL DEVELOPMENT/REDEVELOPMENT

Task Preparation and Oversight Cost: $800.00

Scope of Work: This task provides allowable costs for development or redevelopment of groundwater monitoring or remediation wells. The task assumes that well development or redevelopment will be performed by consultant staff as opposed to the driller or other non-CEM contractors.

Site activities should include, but are not limited to the following:

- Prepare equipment
- Development or redevelopment of the first or only well
- Coordinate disposal of well water
- Coordination of traffic control plan and placement of traffic barriers, if necessary
- Coordinate offsite well development/redevelopment activities with private property owners, if necessary
- Travel time if site is located within metropolitan area of consultant

Additional compensation for development/redevelopment of subsequent wells (after the first) will be paid at a unit cost rate of $293.00 per well.

Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK A.11:
SUBSURFACE INVESTIGATION USING PUSH-DRIVE TECHNOLOGY

Task Preparation and Oversight Cost: $1,200.00

Scope of Work: This task includes project management and oversight of subcontractors to perform a subsurface investigation to determine the extent of soil and/or groundwater contamination utilizing push-drive technology (Geoprobe™, HydroPunch™, etc.). The Fund recognizes that push-drive technology may not be appropriate for certain subsurface conditions, so use of this technology should be based upon known site conditions. **Costs associated with an unsuccessful push-drive investigation will not be recommended for reimbursement;** however, an unsuccessful boring advancement due to probe refusal may be claimed if the overall subsurface investigation is successful. A successful investigation is one that results in meeting all the goals required by the case officer for this activity.

Site activities should include, but are not limited to the following:

- Solicit bids for contractor services if costs will meet or exceed the bid threshold
- Coordinate and oversee push-drive boring advancement
- Collection of soil samples for analyses
- Time to prepare and deliver samples to a NDEP certified laboratory, or prepare sample shipping package
- Borehole logging
- Borehole abandonment
- Coordinate disposal of soil cuttings
- Travel time if site is located within metropolitan area of consultant
- Consultant coordination of traffic control plan and placement of traffic barriers, if necessary
- Coordinate offsite investigation activities with private property owners, if necessary

Additional compensation for field oversight of boring and sampling activities may be claimed using the following rates:

- For each consecutive field day after the first (subsequent day), 25% of the Task Preparation and Oversight Cost.
- For each linear foot drilled - $10
- Drill rig set up time between borings - $63.50 (each subsequent boring after the first)
- Sample collection - $63.50 (each borehole sample)

Please note that costs associated with drill rig repairs and/or weather delays are not reimbursable.

Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK A.12:
SUBSURFACE INVESTIGATION USING TEST PITS

Task Preparation and Oversight Cost: $1,000.00

Scope of Work: This task includes project management and oversight of subcontractors to perform a subsurface investigation utilizing test pit excavations. Collected samples will be used to determine the extent of soil contamination.

Site activities should include, but are not limited to the following:

- Solicit bids for contractor services if costs will meet or exceed the bid threshold
- Coordinate and oversee excavation and backfilling of test pits
- Collection of soil samples for analyses
- Decontamination of equipment between samples
- Time to prepare and deliver samples to a NDEP certified laboratory, or prepare sample shipping package
- Coordinate disposal of contaminated soils, if applicable
- Travel time if site is located within metropolitan area of consultant
- Consultant coordination of traffic control plan and placement of traffic barriers, if necessary

Additional compensation for field oversight of excavation and sampling activities may be claimed using the following rates:

- For each consecutive field day after the first (subsequent day), 15% of the Task Preparation and Oversight Cost.
- Unit cost for each test pit and associated sample collection - $254.00

Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK A.13:
SITE CHARACTERIZATION REPORT PREPARATION
SMALL-SCALE INVESTIGATION

Task Preparation and Oversight Cost: $3,600.00

Scope of Work: This task consists of all consulting services to produce a site characterization report for a soil-only site investigation and/or less than five groundwater monitoring wells were installed.

The submitted report must include the following:

- A brief background on site conditions and release discovery
- Summary of site characterization activities, including handling/disposal of investigation derived waste
- Characterization data, evaluation, and interpretation
- Recommendations for additional site characterization activities, if necessary
- Discussion and preliminary recommendations for contaminant remediation
- Data tables, site figures (site plan, boring/well locations, contaminant plume map, etc.), boring logs, and laboratory reports for collected samples
- Additional information requested by the case officer

Any deficiency in the report identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK A.14:
SITE CHARACTERIZATION REPORT PREPARATION
LARGE-SCALE INVESTIGATION

Task Preparation and Oversight Cost: $5,300.00

Scope of Work: This task consists of all consulting services to produce a site characterization report for a site where five or more groundwater monitoring wells were installed.

The submitted report must include the following:

- A brief background on site conditions and release discovery
- Summary of site characterization activities, including handling/disposal of investigation derived waste
- Characterization data, evaluation, and interpretation
- Recommendations for additional site characterization activities, if necessary
- Discussion and preliminary recommendations for contaminant remediation
- Data tables, site figures (site plan, boring/well locations, contaminant plume map, etc.), boring logs, and laboratory reports for collected samples
- Additional information requested by the case officer

Any deficiency in the report identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK A.15:
FATE AND TRANSPORT MODELING

Task Preparation and Oversight Cost: $5,200.00

Scope of Work: This task consists of all consulting services to produce a fate and transport model (e.g., BioScreen or equivalent) or calculations that can be used by risk assessors and others to estimate the migration and chemical alteration of contaminants as they move through environmental media (e.g., vadose zone soils, aquifer/aquitard materials, and groundwater). The submittal will include a summary and interpretation of all data and visual outputs.

The activities included under this task and deliverables include the following:

- Discussion with the case officer to ensure proposed modeling accurately addresses project needs
- Review of historic, site-specific characterization and monitoring data
- Calibration of model with acceptable methods and practices
- Identify model/calculation inputs, outputs, assumptions
- A description of the selection and source of input values (e.g., site specific or default values), how they were developed, and citation of literature sources
- Evaluation of model using model predicted values versus field data (e.g., modeled concentrations vs. field concentration, modeled plume size vs. known extent, etc.)
- Discussion of discrepancies and outliers when model results are compared with field contaminant data
- Identification of direct exposure scenarios, if applicable
- Visual representation and description of where the contaminants of potential concern (COPCs) attenuate to action levels or remediation standards relative to identified receptors or other points of demonstration

Publicly available models or calculations are to be used and referenced (or the model/calculation must be provided) to allow reproducibility of results by NDEP Staff. Any deficiencies identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK A.16:
SENSITIVE RECEPTOR SURVEY

Task Preparation and Oversight Cost: $2,200.00

Scope of Work: This task includes of all consulting services to conduct a survey to determine the existence of sensitive receptors within a given radius from a site with groundwater contamination. Sensitive receptor surveys are required to establish a groundwater action level for MTBE remediation and may also be requested by the case officer for a variety of other reasons, including establishment of the receptor location(s) and its distance from the edge of a contaminant plume.

Activities include communication with the case officer, review of historical site data (including any previous sensitive receptor surveys), State Division of Water Resources records review and well log database search, drafting of scaled figure(s) showing well location(s) and other receptors relative to contaminant plume(s), preparation and submittal of sensitive receptor survey report.

Additional compensation for field verification of sensitive receptors may be proposed (up to 8 hours) with justification and case officer approval.

Any deficiency in the sensitive receptor survey identified by the case officer must be addressed as a part of this scope of work.

Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK A.17:
HUMAN HEALTH RISK ASSESSMENT/RISK BASED CORRECTIVE ACTION*
(SUBCONTRACTED ONLY)

Task Preparation and Oversight Cost: $3,900.00

Scope of Work: This task consists of all consulting services to prepare the data needed for a site-specific Human Health Risk Assessment (HHRA)** or Risk Based Corrective Action (RBCA)***. The task assumes the CEM will subcontract the HHRA or RBCA and subsequently review the findings to determine they meet the requirements necessary to satisfactorily characterize the nature and magnitude of potential health risks to humans (e.g., residents, commercial workers, utility workers) from chemical contaminants that may be present in the environment. The HHRA is to include all contaminants of potential concern (COPCs), potential receptors, and all possible pathways. The HHRA can be developed to quantify the potential risk COPCs pose to receptors through completed pathways in accordance with USEPA HHRA guidance documents (USEPA 1989 - 2009). A RBCA (ASTM 1995) is one recommended approach to remediating large and/or complex sites, especially when achieving the Regional Screening Levels in site media is technically difficult or site conditions allow for alternative concentrations that meet the necessary degree of health and environmental protection. The RBCA process can be used to determine threshold values (site-specific target levels) below which an acceptable level of risk may be present. Guidance from the regulatory case officer should be sought and a determination should be made regarding the type of deliverable needed when considering a subcontracted HHRA or RBCA.

The activities under this task should include, but are not limited to the following:

- Discussion with the case officer to ensure the proposed HHRA or RBCA will address contaminant exposure concerns
- Site data preparation
- Bid solicitation if subcontracted cost will equal or exceed the bid threshold
- Coordination with subcontracted firm developing the risk assessment
- HHRA or RBCA review and revision
- Revision to submittal if determined to be deficient by case regulatory officer
- CEM ensures that:
    - All references, equations, and assumptions are provided
    - All COPCs, receptors, and pathways are included
    - All input values are clearly tabulated and referenced (site-specific or default, cite references)
- Submittal of HHRA to NDEP staff

The HHRA or RBCA must be prepared by a subcontracted professional with risk assessment experience and qualifications. Any deficiency in the studies identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

Notes:

* If CEM will prepare a HHRA/RBCA in-house, without the use of a subcontractor, a miscellaneous work scope task proposal shall be submitted and titled "CEM-Prepared HHRA/RBCA."
** Human Health Risk Assessment guidance is available from USEPA, *Risk Assessment Guidance for Superfund*, multiple publications, 1989-2009
*** Risk Based Corrective Action standard is available from ASTM E 1739-95 *Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites*

WORK SCOPE TASK A.18:
PREPARATION OF 2-DIMENSIONAL GEOLOGIC CROSS-SECTION(S)

Task Preparation and Oversight Cost: $4,000.00

Scope of Work: This task consists of all consulting services to use site specific data to produce a 2-dimensional geologic cross-section(s) at a facility. A minimum of two cross-sections are prepared; one longitudinal along the contaminant axis and a second one approximately perpendicular to the contaminant axis. The cross-sections are to be drawn to scale and use conventional methods to reflect site-specific lithology and the position of encountered groundwater. The location of screened intervals in monitoring wells, discrete soil samples, residual contaminants, and range of water levels are to be shown to facilitate understanding of site conditions. Represented features are to be tied to land surveys which are tied to mean sea level.

Site activities should include, but are not limited to the following:

- Review historic site-specific data, soil boring logs, and monitoring well construction logs to be used in the production of geologic cross-sections. The reviewed data should include:
  - Soil type;
  - Depth-to-water;
  - Water level range over time;
  - Contaminant concentrations and distribution
- Cross-section development
- Cross-section submittal including all outputs and visual interpretations

Any deficiency in the geologic cross-section submittal identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK A.19:
INITIAL CONCEPTUAL SITE MODEL (CSM)

Task Preparation and Oversight Cost: $6,800.00

Scope of Work: This task consists of all consulting services to produce an initial Conceptual Site Model (CSM) and following updates through the characterization phase. A conceptual site model is a three-dimensional understanding of site conditions that conveys what is known or suspected about the release source(s), release mechanisms, contaminant fate and transport, exposure pathways, potential receptors, and possible risks to humans and ecological receptors (e.g., birds, fish, and wildlife). The CSM should be a summary of data already compiled under previous tasks such as Fate and Transport Modeling (A.15), Sensitive Receptor Survey (A.16), 2-D Geological Cross Sections (A.18), Groundwater Monitoring/Remediation Status reports (F.5), etc. The CSM is generally a dynamic model that should be updated periodically as more data becomes available.

The activities under this task should include, but are not limited to the following:

- Close communication with the case officer to ensure the CSM accurately meets project needs
- Review and evaluate historic, site-specific data to be used in the CSM
- Discussion of data compiled to date, potential data gaps, evaluation of risks due to contamination present, and recommendations for additional characterization, remediation, or no further action
- Drafting (e.g., site plan, potentiometric map(s), isocontour map(s), soil boring logs, contaminant plume maps, cross-sections, fence diagrams)
- Report submittal with all model outputs and visual interpretations

Any deficiency in the CSM submittal identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

Note: Reader is guided to ASTM E 1689 *Standard Guide for Developing Conceptual Site Models for Contaminated Sites*, or an equivalent method.

Also consider: ASTM E 2531-06 *Development of CSM for LNAPL Sites.*

WORK SCOPE TASK A.20:
CONCEPTUAL SITE MODEL (CSM) UPDATE

Task Preparation and Oversight Cost: $3,700.00

Scope of Work: This task consists of all consulting services to produce an update to a Conceptual Site Model (CSM) following the characterization phase of a project. Project milestones that may warrant an update include but are not limited to achieving contaminant source and groundwater plume reduction remediation goals, remedial action optimization, and changes to the originally selected remedial alternative for the site. The CSM may also need to be updated when remediation goals, requirements, and conditions are satisfied in support of a request for exemption from further groundwater corrective actions in accordance with NAC 445A.22725. The CSM update must include accurate data already compiled during earlier versions of the CSM and groundwater monitoring/remediation status reports. Additionally, this task should include updates to fate and transport modeling, 2-D geological cross sections, and any additional characterization completed for the site. The CSM is generally a dynamic model that should be updated periodically by the CEM and upon request of the case officer. Task A.19 may be used for the initial CSM.

The activities under this task should include, but are not limited to the following:

- Close communication with the case officer to ensure the CSM accurately meets project needs
- Review and evaluate historic, site-specific data compiled in the initial CSM and groundwater monitoring/remediation status reports
- Updates to fate and transport modeling, 2-D geological cross sections, etc.
- Discussion of data compiled to date, potential data gaps, evaluation of risks due to contamination present, and recommendations for additional characterization, remediation, or no further action
- Drafting (e.g., site plan, potentiometric map(s), isocontour map(s), soil boring logs, contaminant plume maps, cross-sections, fence diagrams)
- Report submittal with all model outputs and visual interpretations

Any deficiency in the CSM submittal identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

Note: Reader is guided to ASTM E 1689 *Standard Guide for Developing Conceptual Site Models for Contaminated Sites*, or an equivalent method.

Also consider: ASTM E 2531-06 *Development of CSM for LNAPL Sites.*

B. AQUIFER & PILOT TESTING

WORK SCOPE TASK B.1:
WORK PLAN PREPARATION FOR PILOT TESTING

Task Preparation and Oversight Cost: $2,900.00

Scope of Work: This task consists of all consulting services to produce a work plan to perform aquifer testing to determine aquifer hydrogeologic characteristics, or pilot testing to evaluate the effectiveness of a remediation technology (soil vapor extraction, dual-phase extraction, etc.).

Activities include communication with the case officer, site visit(s), review of previous assessment/remediation work performed at the site, general project management, aquifer test or pilot test system design (including applicable equipment schematics and calculations), description of all data to be collected during testing, drafting of site diagrams showing equipment/well location(s), and preparation and submittal of the aquifer test or pilot test work plan.

Any deficiency in the work plan identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK B.2:
AQUIFER SLUG TEST

Task Preparation and Oversight Cost: $3,000.00

Scope of Work: This task consists of all consulting services to perform an aquifer slug test to determine hydraulic characteristics using one or more existing wells onsite.

Site activities should include, but are not limited to the following:

- Set-up and performing slug test in one well
- Recording field data
- Waste disposal, if applicable
- Data analysis and interpretation for inclusion in CAP, RAS, and/or other regulatory report (hydraulic conductivity, seepage velocity, radius of influence, etc.)
- Travel time if site is located within metropolitan area of consultant

Additional compensation for performing slug tests on subsequent wells (after the first) may be paid at a unit cost rate of $762.00 per well. Case officer concurrence is required.

Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK B.3:
AQUIFER TEST

Task Preparation and Oversight Cost: $5,500.00

Scope of Work: This task consists of all consulting services to perform a continuous aquifer pumping test (up to 12-hours) to determine hydraulic characteristics using an existing well onsite and assumes a recovery time of 2-4 hours.

Site activities should include, but are not limited to the following:

- Set-up and performing the aquifer test
- Recording field data, including pre/post sampling of the extraction well and observation wells if requested by the case officer
- Waste disposal, if applicable
- Data analysis and interpretation for inclusion in CAP, RAS, and/or other regulatory report (hydraulic conductivity, seepage velocity, radius of influence, etc.)
- Travel time if site is located within metropolitan area of consultant

Additional compensation for staff oversight of testing anticipated to exceed 12 hours may be paid at a rate of $127.00/hour if prior justification is provided and the case officer concurs.

Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK B.4:
SOIL VAPOR EXTRACTION PILOT TEST

Task Preparation and Oversight Cost: $3,800.00

Scope of Work: This task consists of all consulting services to perform an 8-hour soil vapor extraction pilot test using one or more existing wells onsite.

Activities included in total hours for above task:

- Set up and performing the test
- Recording field data, including airflow/vacuum measurements, pre/post sampling of the extraction well and observation wells, or other data requested by the case officer
- Treatment of soil vapor, if applicable
- Data analysis and interpretation for inclusion in CAP, RAS, and/or other regulatory report (hydraulic conductivity, seepage velocity, radius of influence, petroleum vapor concentrations, etc.)
- Travel time if site is located within metropolitan area of consultant

Additional compensation for staff oversight of testing anticipated to exceed 8 hours may be paid at a rate of $127.00/hour if prior justification is provided and the case officer concurs.

Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK B.5:
SOIL VAPOR EXTRACTION AND AIR SPARGE PILOT TEST

Task Preparation and Oversight Cost: $7,500.00

Scope of Work: This task consists of all consulting services to perform a 6-hour soil vapor extraction (SVE) test, a 4-hour air sparge (AS) test, and an 8-hour combined SVE/AS pilot test using existing wells onsite. The combined duration of these tests should be approximately 18 hours.

Site activities should include, but are not limited to the following:

- Set up and performing the tests.
- Recording field data, including airflow/vacuum measurements, pre/post sampling of the extraction well and observation wells, etc.
- Treatment of soil vapor, if applicable
- Data analysis and interpretation for inclusion in CAP, RAS, and/or other regulatory report (hydraulic conductivity, seepage velocity, radius of influence, petroleum vapor concentrations, etc.)
- Travel time if site is located within metropolitan area of consultant

Additional compensation for staff oversight of testing anticipated to exceed 18 hours (combined) may be paid at a rate of $127.00/hour if prior justification is provided and the case officer concurs.

Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK B.6:
INJECTION TEST

Task Preparation and Oversight Cost: $3,000.00

Scope of Work: This task consists of all consulting services to perform an injection test (up to 6-hours) using an existing well onsite to determine aquifer characteristics for the re-injection of treated groundwater, injection of solutions to enhance in-situ oxidation, etc.

Site activities should include, but are not limited to the following:

- Set-up and performing the injection test
- Procurement and preparation of solutions to be injected
- Recording field data
- Data analysis and interpretation for inclusion in CAP, RAS, and/or other regulatory report (hydraulic conductivity, seepage velocity, radius of influence, etc.)
- Travel time if site is located within metropolitan area of the consultant
- Coordinate waste disposal

Additional compensation for staff oversight of testing anticipated to exceed 6 hours may be paid at a rate of $127.00/hour if prior justification is provided and the case officer concurs.

Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK B.7:
PILOT TEST REPORT PREPARATION

Task Preparation and Oversight Cost: $4,100.00

Scope of Work: This task consists of all consulting services to produce a report summarizing aquifer tests or pilot testing results.

The submitted report must include the following:

- A description of testing method(s) used
- Description of handling/disposal of investigation derived waste
- Testing results, data evaluation, and interpretation
- Summary of subsurface characteristics (e.g., radius of influence (ROI), hydraulic conductivity, seepage velocity, etc.)
- Summary of the pilot test's success or limitations
- Recommendation for permanent contaminant remediation technology or alternatives based on the test results
- Data tables
- Site figures, including a site plan, aquifer/pilot test well soil boring logs and locations, ROI, remediation well locations, etc.)
- System schematic with data collection point locations (e.g., gauges, sample ports), if applicable
- Additional information requested by the case officer

Any deficiency in the report identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

C. CORRECTIVE ACTION PLAN (CAP) PREPARATION

WORK SCOPE TASK C.1:
CORRECTIVE ACTION PLAN PREPARATION
PASSIVE SITE REMEDIATION OR UPDATE TO EXISITNG CAP

Task Preparation and Oversight Cost: $5,000.00

Scope of Work: This task consists of all consulting services to produce a comprehensive corrective action plan (CAP) and design for the remediation of soil and/or groundwater contaminated by petroleum product that does not require the installation of an active remediation system (refer to Task C.2). Examples include in-situ remediation technologies, passive free phase product skimmers, etc. Additionally, this task may be used to update an existing CAP.

The submitted CAP must include the following:

- A discussion of pilot testing (if testing was performed)
- Develop and list the Remedial Action Objectives (RAOs) that are protective of human health
- An evaluation of at least three remedial alternatives
- Detailed remediation methodology cost comparisons
- Provide rationale for selection of proposed remedial methodology
- Design of the remediation system (including calculations and schematics, if applicable)
- A discussion of permitting requirements for the selected remediation methodology
- A discussion of post-remediation monitoring plan
- Additional information requested by the case officer

Any deficiency in the CAP identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK C.2:
CORRECTIVE ACTION PLAN PREPARATION
ACTIVE SITE REMEDIATION

Task Preparation and Oversight Cost: $7,500.00

Scope of Work: This task consists of all consulting services to produce and submit a comprehensive corrective action plan (CAP) for the remediation of soil and/or groundwater contaminated by petroleum product. This plan will include a recommendation to install onsite equipment capable of performing active remediation of impacted soil and/or groundwater (e.g., soil vapor extraction, air sparging, ozone injection, pump and treat, etc.). Note, Task C.1 should be used for passive site remediation or updates to a previously approved CAP.

The submitted CAP must include the following:

- A discussion of pilot testing (if testing was performed)
- Develop and list the Remedial Action Objectives (RAOs) that are protective of human health
- An evaluation of at least three remedial alternatives
- Detailed remediation methodology cost comparisons
- Provide rationale for selection of proposed remedial methodology
- Conceptual design of the remediation system (including calculations and schematics, if applicable)
- A discussion of permitting requirements for the selected remediation methodology
- A discussion of post-remediation monitoring plan
- Additional information requested by the case officer

Any deficiency in the CAP identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK C.3:
REMEDIAL ALTERNATIVE STUDY OR REMEDIATION SYSTEM OPTIMIZATION

Task Preparation and Oversight Cost: $4,300.00

Scope of Work: This task consists of all consulting services to review and evaluate multiple remedial alternatives or an underperforming remediation technology using site specific data. This task is not to be requested concurrently with Task C.1 or C.2 (Corrective Action Plan tasks) but may be used upon the request of the case officer when the current CAP-identified and implemented remediation method is not effective in reducing contaminants of potential concern to action levels or meeting established remedial action objectives (RAOs) for the site have not been achieved.

The submitted Remedial Alternative Study (RAS) or Remediation System Optimization (RSO) must include the following, as applicable:

- Description of current RAOs for the site based on prior assessment and remediation
- A minimum of three remediation methods that are viable for use at the project site based on known contaminant(s), site characteristics, and current assessment or remediation status of the site (RAS only)
- Feasibility and cost associated with each proposed remedial alternative (RAS)
- Feasibility and cost associated with proposed system modification (RSO)
- Selection of a new remediation methodology (or system modification for RSO) that has the greatest potential of cleaning up the site based on long-term effectiveness, feasibility, cost, and is protective of human health
- Preliminary design of the remediation system (including calculations and schematics, if applicable)
- An estimated schedule for permitting, construction, and implementation to achieve site closure
- Additional information requested by the case officer

Any deficiency in the plan identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

D. CORRECTIVE ACTION PLAN IMPLEMENTATION

NDEP understands that no two remediation systems are identical due to site specific conditions. The level of appropriate effort for remediation system design also varies dependent upon the individual CEM. The following Guideline Task Tables associated with remediation system design tasks are presented as general guidelines only. If it is anticipated that the level of remediation system design effort will exceed the hours and costs summarized in the following tables, the higher level of effort should be proposed using a miscellaneous task and accompanied by complete justification.

WORK SCOPE TASK D.1:
DESIGN FOR SINGLE-SYSTEM TECHNOLOGY

Task Preparation and Oversight Cost: $6,900.00

Scope of Work: This task consists of all consulting services to design a remediation system consisting of a single remediation technology (groundwater pump and treat; free product recovery; soil vapor extraction; ozone sparging; etc.) This task does not include design of a passive remediation system.

Activities include an engineered system design with associated calculations, project management, solicitation and evaluation of bids, preparation of "as planned" construction drawings and specifications, production of all site diagrams, and communication with the case officer. Any deficiency in the plan identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK D.2:
SYSTEM DESIGN FOR REMEDIATION OF SOIL AND GROUNDWATER

Task Preparation and Oversight Cost: $9,800.00

Scope of Work: This task consists of all consulting services to design a system for the remediation of both soil and groundwater (soil vapor extraction with air sparge, dual-phase extraction, etc.).

Activities include an engineered system design with associated calculations, project management, solicitation and evaluation of bids, preparation of "as planned" construction drawings and specifications, production of all site diagrams, and communication with the case officer. Any deficiency in the plan identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK D.3:
CEM-CONDUCTED REMEDIATION SYSTEM INSTALLATION, START-UP & CALIBRATION

Task preparation and oversight costs will be approved as a miscellaneous task.

Scope of Work: The scope of work for this task consists of all CEM consulting services to perform installation, start-up and calibration of a soil and/or groundwater remediation system. **This assumes that system installation activities are conducted by a CEM who possesses an appropriate contractor's license.** Since the time necessary to perform this task will vary for each project due to site-specific parameters, costs must be presented in accordance with Section 4 (Miscellaneous Tasks) and will be evaluated at the time of cost proposal review.

Activities Necessary to Include in Proposed Task:

- Soliciting and evaluating bids
- Coordination with contractors/subcontractors
- Regulatory agency liaison
- Travel time
- Start-up, optimization, and performance monitoring plan
- Start-up & calibration of remediation system to meet performance specifications
- Vehicle mileage, CEM in-house supplies, per diem & vendor markup

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

Note: Refer to Task D.5 for “As Built” construction drawings.

WORK SCOPE TASK D.4:
CEM OVERSIGHT OF REMEDIATION SYSTEM INSTALLATION, START-UP & CALIBRATION

Task Preparation and Oversight Cost: $7,200.00

Scope of Work: The scope of work for this task consists of all consulting services to provide a start-up, optimization, and performance monitoring plan and coordinate/oversee the installation, start-up and calibration of a soil and/or groundwater remediation system. **This task assumes that the CEM is supervising an outside (non-CEM) contractor who is performing system installation activities.**

Activities include project management, solicitation and evaluation of bids, coordination with contractors/subcontractors, inspections and observations during remediation system construction, start-up and calibration of system to meet performance specifications, and communication with the case officer. Any deficiency in the plan identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK D.5:
REMEDIATION SYSTEM AS-BUILT AND START-UP REPORT

Task Preparation and Oversight Cost: $4,800.00

Scope of Work: This task consists of all consulting services to produce an "As-built & Start-up Report" for submittal to the NDEP. The Report is to reflect the "as-built" configuration of the remediation system(s), document baseline and start-up conditions, and provide a description for any deviations from the "As-Planned" design. All submitted drawings, plans, and schematics are to be an updated version of the construction drawings used to solicit bids and construct the system.

The submitted report must include the following:

- A description of the remediation system(s) and identification of major components
- Discussion of the remediation system installation and any deviation from the "As-planned" design
- Inclusion of scaled drawings, figures, and schematics that represent the "As-built" configuration for the remediation system
- Discussion of remediation system(s) start-up activities
- Identify remedial action objectives, performance measures, and remediation system metrics along with any calculations (equations) to be used to demonstrate remediation system performance
- Provide monitored baseline start-up conditions (e.g., influent & effluent vapor concentrations, influent & effluent mass removed/destroyed, and influent & effluent water quality, air flow rates, etc.) to allow comparison to future monitoring data and evaluation of overall remediation system performance
- A manual outlining general system(s) operations, monitoring, and maintenance schedule
- Additional information requested by the case officer

Any deficiency in the report identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK D.6:
OVERSIGHT OF CONTAMINATED SOIL EXCAVATION

Task Preparation and Oversight Cost: $1,900.00

Scope of Work: This task includes project management and oversight of subcontractors to perform excavation of petroleum impacted soils and transport those soils to a treatment and/or disposal facility. Sample collection and analysis should be used to determine the extent of soil contamination unless the source has been delineated by other means. Reporting of these activities shall be included under another task (e.g., Task A.1, A.13, F.5, G.1, or G.2, as appropriate).

Site activities should include, but are not limited to the following:

- Soliciting and evaluating bids if cumulative costs for excavation equipment mobilization/demobilization, soil excavation, loading, hauling, and treatment/disposal will equal or exceed the bid threshold
- Coordinating field activities
- Onsite observation and direction of excavation activities
- Collection of soil samples
- Preparation and delivery of samples to a NDEP certified laboratory, or prepare sample shipping package
- Coordinate treatment/disposal of contaminated soils at a facility permitted to accept petroleum impacted soil
- Obtain documentation of impacted soil treatment/disposal
- Provide copies of soil treatment/disposal records with the report submittal
- Coordinate/oversee backfill of excavation with clean material

Additional compensation for staff oversight of excavation activities and sampling may be paid at a rate of $127.00/hour if excavation will extend beyond one day. Prior justification must be provided, and the case officer must concur.

Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK D.7:
INJECTION OF IN-SITU CHEMICAL OXIDATION SOLUTIONS

Task Preparation and Oversight Cost: $1,000.00

Scope of Work: This task consists of all consulting services to procure solutions, prepare the solution by dilution or mixing (if necessary), and deploy the in-situ chemical oxidation solutions into the subsurface utilizing existing injection wells and/or trenches to enhance contaminant degradation. It is assumed the injection event can be performed during one field day. A summary of injection activities should be included in the groundwater monitoring/remediation status report (Task F.5) unless directed to do otherwise by the case officer.

Additional compensation for technician oversight of set up and injection activities may be paid at a rate of $100.00/hour if subsequent consecutive days (i.e., more than one day) are necessary. Prior justification must be provided, and the case officer must concur.

Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

E. PERMIT APPLICATIONS

WORK SCOPE TASK E.1.1:
AIR QUALITY PERMITS
APPLICATION FOR NDEP: CLASS III OPERATING PERMIT
NOT MORE THAN 5 TONS OF EMISSIONS PER YEAR

Task Preparation and Oversight Cost: $1,400.00

This task consists of all consulting services to prepare and submit a permit application to the NDEP Bureau of Air Pollution Control for a Class III Operating Permit (not more than 5 tons of emissions per year), when required to perform assessment and remediation activities. Activities include project management, communication with the case officer, preparation, review, and submittal of the application. Any deficiency in the application must be addressed as a part of this scope of work. Claimants and CEMs should recognize that the Task Preparation and Oversight Cost listed above does not include permit/renewal fees (non-CEM costs) or report preparation costs (use other work scope task).

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

Note: Air quality permitting for remediation systems operating in Clark County is performed by Clark County, Department of Air Quality (CCDAQ). Washoe County air permitting is performed by the Washoe County Health District. Permitting for the remaining portions of the state is performed by NDEP's Bureau of Air Pollution Control.

WORK SCOPE TASK E.1.2:
AIR QUALITY PERMITS
APPLICATION FOR NDEP: CLASS II OPERATING PERMIT
GREATER THAN 5 TONS, NOT MORE THAN 25 TONS OF EMISSIONS PER YEAR

Task Preparation and Oversight Cost: $3,000.00

This task consists of all consulting services to prepare and submit a permit application to the NDEP Bureau of Air Pollution Control for a Class II Operating Permit (not more than 25 tons of emissions per year), when required to perform assessment and remediation activities. Activities include project management, communication with the case officer, preparation, review, and submittal of the application. Any deficiency in the application must be addressed as a part of this scope of work. Claimants and CEMs should recognize that the Task Preparation and Oversight Cost listed above does not include permit/renewal fees (non-CEM costs) or report preparation costs (use other work scope task).

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

Note: Air quality permitting for remediation systems operating in Clark County is performed by Clark County, Department of Air Quality (CCDAQ). Washoe County air permitting is performed by the Washoe County Health District. Permitting for the remaining portions of the state is performed by NDEP’s Bureau of Air Pollution Control.

WORK SCOPE TASK E.1.3:
AIR QUALITY PERMITS
CLARK COUNTY: DEPARTMENT OF AIR QUALITY
MINOR STATIONARY SOURCE PERMIT

Task Preparation and Oversight Cost: $3,000.00

This task consists of all consulting services to prepare and submit a permit application to the Clark County Department of Air Quality for a Minor Stationary Source Permit, when required to perform assessment and remediation activities. Activities include project management, communication with the case officer, preparation, review, and submittal of the application. Any deficiency in the application must be addressed as a part of this scope of work. Claimants and CEMs should recognize that the Task Preparation and Oversight Cost listed above does not include permit/renewal fees (non-CEM costs) or report preparation costs (use other work scope task).

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

Note: Air quality permitting for remediation systems operating in Clark County is performed by Clark County, Department of Air Quality (CCDAQ).

WORK SCOPE TASK E.1.4:
AIR QUALITY PERMITS
WASHOE COUNTY HEALTH DISTRICT
AUTHORITY TO CONSTRUCT PERMIT

Task Preparation and Oversight Cost: $1,900.00

This task consists of all consulting services to prepare and submit a permit application to the Washoe County Health District for an Authority to Construct Permit, when required to perform assessment and remediation activities. Activities include project management, communication with the case officer, preparation, review, and submittal of the application. Any deficiency in the application must be addressed as a part of this scope of work. Claimants and CEMs should recognize that the Task Preparation and Oversight Cost listed above does not include permit/renewal fees (non-CEM costs) or report preparation costs (use other work scope task).

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

Note: Washoe County air permitting is performed by the Washoe County Health District.

WORK SCOPE TASK E.2:
5- YEAR WATER DISCHARGE (NPDES) PERMITS

Task Preparation and Oversight Cost: $4,700.00

This task consists of all consulting services to prepare and submit a permit application to the NDEP Bureau of Water Pollution Control for a 5-Year Water Discharge (NPDES) Permit, when required to perform assessment and remediation activities. Activities include project management, communication with the case officer, preparation, review, and submittal of the application. Any deficiency in the application must be addressed as a part of this scope of work. Claimants and CEMs should recognize that the Task Preparation and Oversight Cost listed above does not include permit/renewal fees (non-CEM costs) or report preparation costs (use other work scope task).

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

Note: All National Pollutant Discharge Elimination System (NPDES) Permits in the State of Nevada are processed by NDEP, Bureau of Water Pollution Control, Carson City, Nevada.

WORK SCOPE TASK E.3.1:
UNDERGROUND INJECTION CONTROL (UIC) PERMIT:
INDIVIDUAL PERMIT

Task Preparation and Oversight Cost: $3,000.00

This task consists of all consulting services to prepare and submit a permit application to the NDEP Bureau of Water Pollution Control for an Underground Injection Control (UIC) Permit, Individual Permit, when required to perform assessment and remediation activities. Activities include project management, administrative support, communication with the case officer, preparation of required graphics, and preparation, review, and submittal of the application. Any deficiency in the application must be addressed as a part of this scope of work. Claimants and CEMs should recognize that the Task Preparation and Oversight Cost listed above does not include permit/renewal fees (non-CEM costs) or report preparation costs (use other work scope task).

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

Note: All UIC permits in the state of Nevada are processed by NDEP, Bureau of Water Pollution Control, Carson City, Nevada.

WORK SCOPE TASK E.3.2:
UNDERGROUND INJECTION CONTROL (UIC) PERMITS

Task Preparation and Oversight Cost: $1,800.00

This task consists of all consulting services to prepare and submit a permit application to the NDEP Bureau of Water Pollution Control for an Underground Injection Control Permit, General Permit, when required to perform assessment and remediation activities. Activities include project management, administrative support, communication with the case officer, preparation of required graphics, and preparation, review, and submittal of the application. Any deficiency in the application must be addressed as a part of this scope of work. Claimants and CEMs should recognize that the Task Preparation and Oversight Cost listed above does not include permit/renewal fees (non-CEM costs) or report preparation costs (use other work scope task).

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

Note: All UIC permits in the state of Nevada are processed by NDEP, Bureau of Water Pollution Control, Carson City, Nevada.

WORK SCOPE TASK E.4:
PERMIT TO APPROPRIATE THE PUBLIC WATERS OF THE STATE OF NEVADA (ENVIRONMENTAL APPROPRIATIONS PERMIT)

Task Preparation and Oversight Cost: $1,400.00

This task consists of all consulting services to prepare and submit a permit application to the Nevada Division of Water Resources for a Permit to Appropriate the Public Waters of the State of Nevada, when required to perform assessment and remediation activities. Activities include project management, communication with the case officer, coordination of site surveying, and preparation, review, and submittal of the application. Any deficiency in the application must be addressed as a part of this scope of work. Claimants and CEMs should recognize that the Task Preparation and Oversight Cost listed above does not include permit/renewal fees (non-CEM costs) or report preparation costs (use other work scope task).

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

Note: All appropriation permits in the state of Nevada are processed by the Division of Water Resources, Carson City, Nevada. All water rights maps must be prepared by a State of Nevada Water Rights Surveyor.

WORK SCOPE TASK E.5:
MISCELLANEOUS PERMITS

Task preparation and oversight costs will be approved as a miscellaneous task.

NDEP understands that the level of effort to prepare permits not summarized above varies depending upon permit type (building, encroachment, etc.) and the requiring agency (NDOT, city, etc.). Costs for preparing these miscellaneous permits should be proposed as a miscellaneous work scope task, providing full justification of all efforts. See Section 4 of this document for a discussion of miscellaneous work scope tasks.

F. CORRECTIVE ACTIONS MONITORING & MAINTENANCE

WORK SCOPE TASK F.1:
REMEDIATION SYSTEM OPERATIONS AND MONITORING

Task Preparation and Oversight Cost: $1,800.00

Scope of Work: This task consists of all consulting services to verify system operation, minor system adjustments, and collection of vapor or groundwater monitoring data associated with most soil and/or groundwater remediation systems. The task includes up to four site visits in a one-month period (approximately once per week). For systems that extend offsite, sites that incorporate more than two remediation technologies/systems, or the case officer requires site visits on a more frequent schedule, a miscellaneous task may be used instead. A summary of system operation and monitoring activities should be included in the groundwater monitoring/remediation status report (Task F.5) unless directed to do otherwise by the case officer.

Site activities may include, but are not limited to the following:

- Site visit(s)
- Review of previous operation and monitoring data
- Inspection of remediation system components
- Making adjustments to optimize remediation system performance
- Collection of influent/effluent vapor or groundwater monitoring samples
- Packaging monitoring samples for analysis at an NDEP certified laboratory
- Update the onsite log with operational status and system parameters (e.g., operation hour readings, flow rates, pressures, vacuum, etc.).

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK F.2:
CEM-CONDUCTED REMEDIATION SYSTEM MAINTENANCE

Task Preparation and Oversight Cost: $1,500.00

Scope of Work: This task consists of all consulting services to perform monthly maintenance procedures of a soil and/or groundwater remediation system. Also included under this task is maintenance of LNAPL recovery systems (automated and/or passive). For systems that extend offsite, sites that incorporate more than two remediation technologies/systems, or the case officer requires site visits more frequently than once per week, a miscellaneous task may be used instead. A summary of system operation and monitoring activities should be included in the groundwater monitoring/remediation status report (Task F.5) unless directed to do otherwise by the case officer.

Site activities may include, but are not limited to the following:

- Site visit(s)
- Review of system manufacturer maintenance/service schedule(s)
- Inspection of remediation system components
- Performing or providing oversight of manufacturer recommended service on system components
- Calibrating equipment to optimize remediation system performance
- Coordinate activated carbon change outs
- Change out oxygen release compounds, remove/replace oxygen bottles for diffusion systems, etc.
- Maintenance of LNAPL recovery equipment, emptying LNAPL collection vessels, etc.
- Coordinate repairs with subcontractor (in accordance with manufacturer guidelines) for non-operational equipment if the repair cannot be performed by consultant staff or is covered under warranty
- Update the onsite equipment log with maintenance, calibration, and repairs performed while onsite.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK F.3:
REMEDIATION SYSTEM PERMIT REPORT PREPARATION

Task Preparation and Oversight Cost: $800.00

Scope of Work: This task consists of all consulting services to produce a report for an agency or NDEP program outside of the Bureau of Corrective Actions (BCA) as stipulated in required permits (e.g., Air Quality, NPDES, UIC, Environmental Appropriations permit, etc.). Costs allowed under this task include the preparation and submittal of one permit report. These reports shall not be submitted more frequently than required by the permit, and this Task should not be proposed if copies of quarterly Status Reports created under Task F.5 (routinely submitted to BCA case officers) are being forwarded to outside agencies to satisfy permitting requirements.

Activities include data assimilation, preparation and submittal of the permit report, and communications with the outside regulatory agency or program. Any deficiency in the report or additional requests made by an agency outside of BCA is not part of this scope of work, nor eligible for reimbursement by the Fund.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK F.4: GROUNDWATER MONITORING WELL SAMPLING AND/OR FREE PRODUCT REMOVAL

Task Preparation and Oversight Cost: $900.00

Scope of Work: This task consists of all consulting services to purge and sample one or more groundwater monitoring wells for analyses of dissolved petroleum hydrocarbon constituents and in-situ oxidation bioremediation parameters. This task also includes removal of LNAPL from wells (e.g., hand bailing, change out of passive product absorbent socks/skimmers, etc.) performed by consultant staff during a sampling event. This task may also be used for sampling remediation wells if requested by the case officer. A summary of sampling activities and laboratory analyses of groundwater samples should be included in the groundwater monitoring/remediation status report (Task F.5) unless directed to do otherwise by the case officer.

Site activities should include, but are not limited to the following:

- Coordination of traffic plan and placement of traffic barriers, if necessary
- Coordinate offsite monitoring activities with private property owners, if necessary
- Procure, prepare, and decontaminate sampling equipment
- Remove LNAPL, if present and recoverable
- Purge monitoring well(s) prior to sample collection
- Monitor groundwater stabilization data during well purging
- Collect groundwater samples for analyses of petroleum constituents and any other groundwater parameters required by the case officer
- Prepare and deliver samples to a NDEP certified laboratory, or prepare sample shipping package
- Coordinate storage and disposal of LNAPL/purge water
- Obtain documentation of treatment/disposal and provide in report submittal
- Record the number of wells sampled, the number of wells where LNAPL is present, and the depth to water/product within the wells

The above task amount is for sampling the first or only well onsite. Additional compensation for sampling subsequent wells (after the first) will be paid at a unit cost rate of $190.50 per well.

Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK F.5:
GROUNDWATER MONITORING / REMEDIATION
STATUS REPORT PREPARATION

Task Preparation and Oversight Cost: $2,700.00

Scope of Work: This task consists of all consulting services to produce a status report summarizing all ongoing assessment or remediation activities. This report is primarily used to present groundwater monitoring and sampling results (Task F.4), but may also include:

- Remediation system operations, maintenance, and monitoring activities (Task F.1 and F.2)
- Discussion of limited soil excavation activities (Task D.6)
- Discussion of injection of in-situ chemical oxidation solutions (D.7)
- A request for "No Further Action", when appropriate

These reports are commonly prepared on a quarterly basis but may also be used semi-annual or annual reporting per the direction of the case officer.

Activities include project management, data assimilation, preparation of report, production of all site diagrams, and communication with the case officer. Any deficiency in the report identified by the case officer must be addressed as a part of this scope of work.

The submitted report may include, but is not limited to the following:

- Communication with the case officer to ensure the report addresses the remedial action objectives for the site
- A summary of all monitoring activities and remediation system performance during reporting period (commonly quarterly)
- Description of handling/disposal of investigation derived waste
- Reporting, evaluation, and interpretation of collected site data, including a Mann-Kendall Trend Test when data is sufficient and requested by the case officer
- Recommendations for additional site characterization or remedial activities, if necessary
- Request for site closure, if appropriate
- Data tables, site figures (site plan, boring/well locations, contaminant plume map, etc.), boring logs, and laboratory reports for collected samples
- Preparation and submittal of the status report to the case officer

Any deficiency in the report identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK F.6:
REMEDIATION EQUIPMENT SITE AUDIT

Task Preparation and Oversight Cost: $500.00

Scope of Work: This task consists of all consulting services to meet with NDEP staff onsite to verify presence and operation of Fund reimbursed remediation equipment (e.g., packaged remediation systems, blowers, carbon vessels, etc.). The task also includes updating the Onsite Equipment Status Form (if necessary) and providing documentation requested by NDEP following a site audit or change in equipment status.

Activities include communication with Fund staff or the case officer to coordinate a site visit, meet with NDEP staff onsite, inventory system components, verify the equipment status form is current, verify the remediation system(s) is operational, review of the onsite remediation system operations, maintenance, and repair log, and provide follow up documentation following a change in equipment status. Documentation may include an updated Onsite Equipment Status Form, system diagram/schematic, operation/maintenance records, and photographs of the remediation system components.

Note, the Onsite Equipment Status Forms must be kept current and include a complete listing of Fund reimbursed remediation equipment located onsite. The form may be updated with claim submittals or on the NEA case dashboard. Updates are required for the following circumstances:

- Purchase of new remediation equipment or transfer of equipment to the site
- Removal or transfer of remediation equipment from a site (requires case officer and Fund staff approval). Equipment no longer present onsite shall be identified by the "Date Removed" entry on the form. Equipment should not be deleted from the form.
- Following major system component repairs/replacement/modifications

Any deficiency in requested site audit documentation identified by NDEP staff must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

G. SITE CLOSURE ACTIVITIES

WORK SCOPE TASK G.1:
NO FURTHER ACTION REQUEST
CONTAMINATION DOES NOT EXCEED STATE ACTION LEVELS
(CLEAN CLOSURE)

Task Preparation and Oversight Cost: $1,800.00

Scope of Work: This task consists of all consulting services to produce a stand-alone report requesting a regulatory determination of no further action (NFA) with no known soil and/or groundwater contamination meeting or exceeding state action levels left in place. **This task should only be proposed if the case officer has requested a stand-alone report in lieu of submitting a NFA request within another report (e.g., status report, site characterization report, etc.).**

The submitted report must include the following:

- A brief background on site conditions and release discovery
- Summary of site characterization and/or remediation activities
- Site data compilation and interpretation
- Data tables, site figures (site plan, boring/well locations, etc.)
- Discussion and recommendation for no further assessment or remediation action onsite
- Additional information requested by the case officer

Any deficiency in the report identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK G.2:
NO FURTHER ACTION REQUEST
CONTAMINATION EXCEEDING STATE ACTION LEVELS

Task Preparation and Oversight Cost: $2,800.00

Scope of Work: This task consists of all consulting services to produce a stand-alone report requesting a regulatory determination of no further action (NFA) with known soil and/or groundwater contamination meeting or exceeding state action levels left in place. The report must present data with supporting calculations and modeling that indicate known soil contamination will not impact groundwater or other sensitive receptors and/or the groundwater contaminant plume will attenuate by natural processes before it migrates offsite or impacts sensitive receptors. **This task should only be proposed if the case officer has requested a stand-alone report in lieu of submitting a NFA request within another report (e.g., status report, site characterization report, etc.).**

The submitted report must include the following:

- A brief background on site conditions and release discovery
- Summary of site characterization and/or remediation activities
- Site data compilation and interpretation
- Calculations and modeling results supporting contamination has been mitigated
- Data tables, site figures (site plan, boring/well locations, location of residual impacted soils, groundwater plume map(s), receptor location(s), etc.)
- Discussion of future land use
- Discussion and recommendation for no further assessment or remediation action onsite
- Additional information requested by the case officer

Any deficiency in the report identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK G.3:
SITE CLOSURE PRESENTATION

Task Preparation and Oversight Cost: $4,100.00

Scope of Work: This task consists of all consulting services to produce a Site Closure Presentation summarizing all historic assessment, remediation, and sampling activities into a package that requests an exemption from corrective actions for contaminated groundwater in accordance with NAC 445A.22725(2). The closure presentation is an interactive presentation between the operator and/or their certified environmental manager and NDEP staff considering the request for a no further action determination. The presentation may be requested by NDEP following submittal and review of other site-closure-related documents (e.g., no further action request and modeling). The presentation will take place in a forum that allows discussion of whether or not the site meets the exemption criterion (e.g., in-person or remote meeting technology). Close communication with the case officer is necessary to ensure the presentation will adequately address case closure concerns.

The presentation should include, but is not limited to the following:

- Preparation of an electronic deliverable (PowerPoint or similar technology) for presentation
- Summary of all site activities during the life of the project, including:
  - Site history and source identification;
  - Corrective actions and remediation history;
  - Magnitude and extent of contamination;
  - Hydrogeologic setting and conditions;
  - Groundwater contaminant plume stability;
  - Amount of contaminant mass and concentration reduction; and
  - Current contaminant concentrations and distribution.
- Summary and visual representation of decreasing contaminant concentrations over time
- Current contaminant plume maps and other figures as required by the case officer
- Potential receptors near the site and possible contaminant transport pathways
- Identification of institutional, engineering, or natural controls in place to prevent further migration of contaminates of concern
- A request for no further action, if appropriate

Note, two hours of senior staff time is included under this task to present the above information to NDEP. If more than two hours are required for the closure presentation, a change order may be submitted to account for additional presentation time.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK G.4:
COORDINATION OF PERMANENT WELL CLOSURE

Task Preparation and Oversight Cost: $2,500.00

Scope of Work: This task consists of all consulting services to coordinate the permanent closure of groundwater monitoring and/or remediation wells (i.e., plugging and abandonment) following receipt of a no further action determination from the Bureau of Corrective Actions (BCA).

Activities include communication with the case officer, soliciting and evaluating bids if subcontracted well abandonment costs will meet or exceed the bid threshold, coordination of field activities, first day of field time for a technician to ensure wells are abandoned in accordance with applicable state requirements (NRS/NAC 534), coordination of waste disposal, submittal of well abandonment logs and closure letter to Division of Water Resources and NDEP (provide copies to the BCA case officer).

Additional compensation for subsequent days of field oversight of well abandonment activities by a technician may be proposed with justification and case officer approval. A daily rate for subsequent days of well abandonment oversight shall not exceed $816.00.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK G.5:
REMEDIATION SYSTEM DECOMMISSIONING AND SITE RESTORATION

Task Preparation and Oversight Cost: $2,000.00

Scope of Work: This task consists of all consulting services to coordinate the decommissioning/removal of project remediation system(s), all associated equipment, and perform site restoration activities. This task assumes that field work will be performed by a subcontractor with oversight by the consulting company.

Activities include communication with the case officer, soliciting and evaluating bids if subcontracted equipment removal costs will meet or exceed the bid threshold, coordination of field activities, coordination of equipment transfer/disposal, coordination of waste disposal, update the Onsite Equipment Status Form with completed "Date Removed" fields. The form may be updated with the final claim submittal or on the NEA case dashboard.

This task includes first or only day for field oversight of remediation system decommissioning, transfer, disposal, and restoration activities. Additional compensation for subsequent days of field oversight by a technician may be proposed with justification and case officer approval. A daily rate for subsequent days of well abandonment oversight shall not exceed $816.00.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK G.6:
SHAPEFILE PREPARATION

Task Preparation and Oversight Cost: $1,400.00

Scope of Work: This task consists of all consulting services to prepare a shapefile. Shapefiles are required and used to identify the location of groundwater contamination left in place at the time of site closure. The NDEP requires the shapefile be compatible with ESRI ArcMAP, which can be developed and formatted using readily available freeware.

Activities include data evaluation, shapefile attribute table development, plume contour generation, GIS formatting, production of all site diagrams, and submittal to the NDEP case officer. Any deficiencies identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

H. COST PROPOSAL OR CHANGE ORDER PREPARATION

WORK SCOPE TASK H.1:
COST PROPOSAL PREPARATION

Task Preparation and Oversight Cost: $800.00

Scope of Work: This task consists of all consulting services to produce a cost proposal in accordance with Section 2.2 of these guidelines and assumes related tasks necessary to carry out a case officer approved work plan or routine site activities will be grouped under a single cost proposal. Any deficiency in the proposal identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK H.2:
COST PROPOSAL CHANGE ORDER PREPARATION

Task Preparation and Oversight Cost: $600.00

Scope of Work: This task consists of all consulting services to produce a change order summarizing and requesting additional work not discussed in an existing cost proposal. A change order is prepared using cost proposal task forms and is accompanied by a cover letter discussing the necessity for the additional work and any other pertinent information. The change order must clearly identify the existing cost proposal it is associated with. Please see the discussion regarding change orders in Section 2.3 of this document. Any deficiency in the proposal identified by the case officer must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

I. PREPARATION OF APPLICATION FOR PETROLEUM FUND COVERAGE AND REIMBURSEMENT CLAIMS

WORK SCOPE TASK I.1:
PREPARATION OF APPLICATION FOR PETROLEUM FUND COVERAGE

Task Preparation and Oversight Cost: $2,800.00

Scope of Work: This task consists of all consulting services for the preparation and submittal of an Application for Petroleum Fund coverage, including all pertinent information, necessary forms, and signatures in accordance with Section 2.1 of these guidelines. Any deficiency in the application and subsequent follow up requested by Fund staff must be addressed as a part of this scope of work. Application deficiencies include, but are not limited to:

- Failure to identify the storage tank component that caused a discharge to the environment
- Failure to provide all required release detection records for the tank(s) and associated product piping leading up to the discharge
- For systems that are placed back into service following a discharge, documentation of replacement or repair of the failed component and subsequent release detection records indicating the system is no longer leaking
- Reporting, investigation, and mitigation documentation following indication of a release (e.g., failed release detection test or monitoring sensor alarm)
- Documentation demonstrating fuel was removed from the system or actions taken to prevent further discharge to the environment following the release discovery
- Discussion of prior site releases and impact of new release to an existing cleanup, if applicable

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

WORK SCOPE TASK I.2:
PREPARATION OF PETROLEUM FUND REIMBURSEMENT CLAIM

Task Preparation and Oversight Cost: $1,400.00

Scope of Work: This task consists of all consulting services for the preparation and submittal of a reimbursement claim to the State of Nevada Petroleum Fund. Reimbursement claims are commonly submitted on a quarterly basis to coincide with scheduled Board meetings, and the task amount reflects the level of effort expected for a quarterly claim submittal. Claims must be submitted in accordance with Sections 2.4 through 2.8 of these guidelines. Any deficiency in the claim identified by Fund staff must be addressed as a part of this scope of work.

The above task amount includes all consultant staff services the Petroleum Fund will reimburse for oversight of the activities described above. Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

J. INITIAL ABATEMENT ACTIVITIES

WORK SCOPE TASK J.1:
INITIAL ABATEMENT FOR HEATING OIL TANK CLEANUP ACTIVITIES

This task includes two separate cost control limits for initial abatement activities associated with heating oil storage tank systems with a capacity of 1,100 gallons or less. Consulting staff activities associated with project management, oversight of subcontractors, and documentation submittal include, but are not limited to the following:

- Coordinating field activities such as underground utility surveys, excavation equipment mobilization/demobilization, loading, hauling, and treatment/disposal of petroleum impacted soil following a heating oil storage tank discharge.
- Onsite observation and direction of excavation activities.
- Collection of soil samples.
- Coordinate/oversee backfilling of the storage tank excavation with clean material.
- Preparation and delivery of samples to a NDEP certified laboratory, or preparation of the sample shipping package.
- Obtain documentation of soil treatment/disposal.
- Closure report submittal with NFA request, if applicable.
- Petroleum Fund application submittal.
- Petroleum Fund initial abatement claim submittal.

CEM Costs Not to Exceed: $6,300.00

Fund eligible activities performed by subcontractors (i.e., non-CEM costs) include, but may not be limited to:

- Removal of one or more heating oil storage tank systems.
- Transport and disposal of removed storage tank(s).
- Perform excavation of contaminated soils that have been impacted by the petroleum discharge (see limitations and exclusions below).
- Load and transport impacted soils to an offsite facility approved for treatment/disposal of petroleum impacted soil.
- Petroleum impacted soil treatment/disposal.
- Backfill the excavation with clean/imported material.
- Laboratory analyses of collected samples.
- Site restoration, if approved by the case officer (may require bids).

Non-CEM Costs Not to Exceed: $27,200.00
Heating Oil Tank Removal Defrayment: $2,000.00

Total Fund Reimbursable Task Cost for a Single Tank System: $35,500.00*
*Excludes laboratory analyses costs

Additional costs associated with the above activities may also be reimbursed by the Fund, as applicable, in accordance with Appendix A (Field Equipment/Materials), Appendix B (Travel, Mileage, and Per Diem), Appendix C (Miscellaneous Equipment Rates), or Appendix E (Reimbursable vs Non-Reimbursable costs).

NDEP will require the CEM to contact a case officer, remediation program supervisor, or Fund staff as soon as practical and not more than 24 hours after the discharge is observed to ensure proposed abatement activities will be eligible for reimbursement and to discuss existing site conditions. If the discharge is observed after business hours or initial contact attempts with NDEP are unsuccessful, the CEM should call the NDEP Spill Hotline to request support.

Initial abatement activities may occur prior to assignment of a an NDEP case ID/case officer; however, Fund reimbursement will not be provided until both a case ID and case officer have been assigned to the project. As such, it is the CEM's responsibility to ensure a Fund eligible discharge has occurred and petroleum impacted soils exceed reporting and actionable concentrations/quantities. Generally, there should be at least 3 cubic yards of impacted soil with a minimum total petroleum hydrocarbon (TPH) concentration of 100 mg/Kg confirmed by sampling prior to proceeding with excavation of impacted soil. The CEM must provide direct oversight of subcontractors during the initial abatement phase of a cleanup project, which ends once equipment used for tank removal and excavation is demobilized from the site and/or the excavation is backfilled. If additional characterization or corrective action is required for the site, those activities must be requested through cost proposals and performed under case officer concurrence (refer to Appendix F).

To minimize safety concerns with having an open excavation and facilitate rapid initial abatement activities, the Fund will reimburse rapid turnaround results for laboratory analyses for soils that have "apparent petroleum impacts" (defined below). Rapid turnaround times should not be pursued if there are no obvious signs of a discharge to the environment.

Upon receiving Fund coverage and with the submittal of the initial claim, detailed non-CEM invoices must be provided to NDEP supporting initial abatement costs. Invoice details must include but are not limited to a description of UST removal activities, soil excavation activities, any change orders to initial tank removal/soil treatment contracts, daily activity logs, transportation and disposal of impacted soil, backfill, laboratory analysis of samples, lodging, equipment and/or rental costs, and any site restoration. Soil disposal/treatment manifests, certificates, and profile analyses must also be included with the initial abatement reimbursement claim.

INITIAL ABATEMENT TASK CONSIDERATIONS, LIMITATIONS, EXCLUSIONS:

- Soils that have "apparent petroleum impacts" must exhibit saturated petroleum product characteristics, have elevated volatile organic compounds identified via field equipment (e.g., PID), or have obvious petroleum staining with strong odor. Costs associated with excavation, disposal, and sampling of impacted soils will <u>not</u> be reimbursed if the initial storage tank closure sample results are below NDEP action levels.

- Quantity, locations, and type of analyses for initial abatement soil sampling must conform with NDEP guidance or NDEP staff recommendations.

- For a site where two or more heating oil storage tanks are removed and each has caused a discharge to the environment, the Fund may reimburse the following additional costs:
    - Up to $3,000 in CEM oversight and sampling costs.
    - Up to $27,200 in non-CEM costs associated with initial abatement of two or more leaking storage tanks.

Any additional characterization or remediation exceeding the limits specified in this task are considered beyond the scope of initial abatement and require separate consideration by the case officer and Fund staff. Prior to additional work being performed, the CEM must contact the case officer to initiate the required cost control measures established through a cost proposal and bids.

- Initial abatement excavation is specific to removal of impacted soil only (confirmed by laboratory analyses). Additional excavation or soil work to facilitate future site use plans are not eligible for Fund reimbursement (e.g., the deepening or expansion of the storage tank pit to facilitate installation of future structures such as building footings or new tank systems).

- The Fund will consider reimbursement of costs to restore a site to its previous condition following remediation activities. For full consideration of concrete, asphalt, or landscaping costs, detailed site diagrams and photographs of the site before and after remediation activities must be submitted to NDEP.

  Site restoration does not include upgrading landscaping features or restoring site structures that were removed for reasons other than access to contaminated soil. Some site restoration activities may fall outside of the initial abatement timeframe and require submittal of a cost proposal and bids.

Note: Fund Coverage of initial abatement activities will not be provided unless a leaking UST/remediation case number and case officer are assigned. For site-specific situations where the above task costs do not cover initial abatement expenses, the case will be referred to the Board to Review Claims to make a final determination of coverage.

WORK SCOPE TASK J.2:
INITIAL ABATEMENT FOR COMMERCIAL STORAGE TANK CLEANUP ACTIVITIES

This task includes two separate cost control limits for initial abatement activities associated with all storage tank systems not covered under Work Scope Task J.1 (e.g., regulated underground storage tank (UST) systems, heating oil tank systems greater than 1,100 gallons, and aboveground storage tanks). Consulting staff activities associated with project management and oversight of subcontractors include, but are not limited to the following:

- Coordinating field activities such as underground utility surveys, excavation equipment mobilization/demobilization, loading, hauling, and treatment/disposal of petroleum impacted soil following a discharge from a petroleum storage tank system.
- Consultant coordination of traffic control plan and placement of traffic barriers, if necessary.
- Initial assessment (i.e., storage tank system closure sampling) required by the implementing agency immediately following UST removal.
- Onsite observation and direction of excavation activities.
- Collection of soil samples for laboratory analyses.
- Coordinate/oversee backfilling of the storage tank excavation with clean material.
- Preparation and delivery of samples to a NDEP certified laboratory, or preparation of the sample shipping package.
- Obtain documentation of soil treatment/disposal.
- Inclusion of a description of initial abatement activities in the UST closure report submittal, if applicable.
- CEM equipment, per diem, and mileage.

CEM Task Preparation and Oversight Costs Not to Exceed: $25,000.00

Fund eligible activities performed by subcontractors include, but may not be limited to:

- Perform excavation of contaminated soils that have been impacted by the petroleum discharge (see limitations and exclusions below).
- Load and transport impacted soils to an offsite facility approved for treatment/disposal of petroleum impacted soil.
- Backfill the excavation with clean/imported material.
- Laboratory analyses of collected samples.

Non-CEM Costs Not to Exceed: $75,000.00

Total Fund Reimbursable Task Cost: $100,000.00

Initial abatement activities may occur prior to assignment of a NDEP case ID/case officer and Petroleum Fund coverage; however, Fund reimbursement will not be provided until both a case ID and case officer have been assigned to the project and the Fund has approved coverage for the storage tank(s) that caused the discharge to the environment. As such, it is the CEM's responsibility to ensure a Fund eligible discharge has occurred and petroleum impacted soils exceed reporting and actionable concentrations/quantities. Generally, there should be at least 3 cubic yards of impacted soil with a minimum total petroleum hydrocarbon (TPH) concentration of 100 mg/Kg confirmed by sampling prior to proceeding with excavation of impacted soil. The CEM must provide direct oversight of subcontractors during the initial abatement phase of a cleanup project, which ends once equipment used for tank removal and excavation is demobilized from the site and/or the excavation is backfilled. If additional characterization or corrective action is required for the site, those activities must be requested through cost proposals and performed under case officer concurrence (refer to Appendix F).

NDEP will require the CEM to contact a leaking UST case officer, remediation program supervisor, or Fund staff as soon as practical and not more than 24 hours after the discharge is observed to discuss existing site conditions. In general, discussion of initial abatement should occur after a release has been confirmed (e.g., after closure sample analytical results are received, obvious petroleum impact to soil, etc.). Obtaining verbal concurrence for initial abatement activities will help ensure proposed abatement activities are eligible for reimbursement. If initial abatement activities need to occur after normal business hours or when NDEP offices are closed (weekends, holidays, etc.), the CEM must call the NDEP Spill Hotline to request support to expedite initial abatement activities and minimize project costs.

Since the above activities may be performed prior to Fund coverage being established for the facility, the CEM must understand and inform the operator that any costs incurred under this task shall be borne by the operator if reimbursement coverage is denied. Additionally, if coverage is granted with a reduction, reimbursement by the Fund for these initial abatement activities will be reduced. For additional information on reductions or potential denial of Fund coverage, please review Petroleum Fund Board Policy Resolution #94-023 at: https://ndep.nv.gov/uploads/env-petro-docs/Board_Policy_Resolution_94-023.pdf.

Upon receiving Fund coverage and with the submittal of the initial claim, detailed non-CEM invoices must be provided to NDEP supporting initial abatement costs. Invoice details and supporting documentation must include but are not limited to a description of UST removal activities and soil excavation activities, any change orders to initial tank removal/soil treatment contracts, daily activity logs, transportation and disposal records of impacted soil, excavation backfill activities, laboratory analysis of samples, lodging, equipment and/or rental costs. Soil disposal/treatment manifests, certificates, and profile analyses must also be included with the initial abatement reimbursement claim.

INITIAL ABATEMENT TASK CONSIDERATIONS, LIMITATIONS, EXCLUSIONS:

- Soils that have "apparent petroleum impacts" must exhibit saturated petroleum product characteristics, have elevated volatile organic compounds identified via field equipment (e.g., PID), or have obvious petroleum staining with strong odor. Costs associated with excavation, disposal, and sampling of impacted soils will not be reimbursed if the initial storage tank closure sample results are below NDEP action levels (i.e., petroleum contamination must be confirmed by laboratory analysis of the closure samples prior to excavation activities).

- To expedite the UST closure sampling and post-excavation confirmation sampling as well as minimize safety concerns with having an open excavation, the Fund will reimburse rapid turnaround results for laboratory analyses for soils that have “apparent petroleum impacts”. Rapid turnaround times should not be pursued if there are not obvious signs of a discharge to the environment.

- Quantity, locations, and type of analyses for initial abatement soil sampling must conform with NDEP guidance or NDEP staff recommendations.

- Initial abatement excavation is specific to removal of impacted soil only (confirmed by laboratory analyses). Additional excavation or soil work to facilitate future site use plans are not eligible for Fund reimbursement (e.g., the deepening or expansion of the storage tank pit to facilitate installation of future structures such as building footings or new tank systems).

The above task costs are meant to include all CEM and non-CEM costs associated with initial abatement activities at a storage tank site, regardless of the number of tank systems contributing to the release. Any additional characterization or remediation costs exceeding the limits specified in this task are considered beyond the scope of initial abatement and require separate consideration by the case officer and Fund staff. Prior to additional work being performed, the CEM must contact the case officer to initiate the required cost control measures established through cost proposals and bids. For site-specific situations where the above task costs do not cover initial abatement expenses, the case will be referred to the Board to Review Claims to make a final determination of coverage and associated reimbursement.

SECTION 4
MISCELLANEOUS WORK SCOPE TASKS

4.1 Miscellaneous Work Scope Task Cost Proposals

NDEP understands that some assessment and remediation activities cannot be accomplished using a predefined task or that the levels of effort vary so greatly site-to-site that designating a specific value for reimbursement may not be an appropriate mechanism. In Section 3 of this document, a task may not have a designated "*Task Preparation and Oversight Cost."* For these tasks, and tasks not provided in these guidelines, a Miscellaneous Task cost proposal may be submitted.

For any task in Section 3 that does not provide a "Task Preparation and Oversight Cost" but does outline expected site activities and/or deliverables, the predefined scope of work is a minimum, unless directed otherwise by the case officer or Fund staff. These tasks will be submitted as a miscellaneous work scope task, which must include the provided task language from this document, any additional language that is applicable to the specific site needs, and proposed number of hours for necessary consulting staff. Consulting staff skill levels and rates have been established by Fund staff for miscellaneous tasks. The CEM may request applicable CEM-owned/rented equipment, travel, and per diem as defined in Appendices A, B, C, and D.

For assessment and/or remediation tasks that have not been predefined within this document, the CEM will provide a detailed scope of work for each miscellaneous task, including proposed staff skill levels necessary to perform the task, proposed hours and duties of CEM staff, applicable CEM-owned/rented equipment, travel, and per diem. Any deliverables to be provided to NDEP following task activities will also be listed in the task description.

All miscellaneous work scope task cost proposals must include a date range of when the activities will occur and a justification for the use of a miscellaneous work scope task. These proposals will receive a secondary review by Fund staff following case officer review. Detailed submittal instructions are available within the NEA online system User Guides.

4.2 Consultant Staff Skill Levels and Rates

CEM personnel skill levels and general responsibilities are provided below. Appropriate skill levels and corresponding hourly rates must be utilized for the level of effort presented in a miscellaneous task. The following table contains Fund established skill level titles, general responsibilities, suggested general qualifications, and billing rates to be applied to a miscellaneous work scope task proposal. The skill levels listed below and used in a miscellaneous task must correspond with those billed on a CEM invoice.

Skill Level Title	General Responsibilities	General Qualifications	Hourly Rate
Administrative Assistant	Assists in report formatting, invoicing, Fund submittals and project related office services.	N/A	$80

Skill Level Title	General Responsibilities	General Qualifications	Hourly Rate
Drafter	Prepares project graphics with or without computer-aided graphic packages including site plans, cross sections, contour maps, and engineering design drawings.	• Relevant experience in CADD or technical drawing	$105
Technician	Assists with well installation, performs sampling of monitoring wells, collects samples as stipulated by remedial permits, remediation system installation, operates and maintains remedial equipment in accordance with O&M manual.	• High School Diploma • Minimum of one year relevant training • Health & safety training such as 40 Hour OSHA, 29 CFR Part 1910.120	$100
Staff Professional	Collects and compiles field data. Logs soil borings and/or excavation activities. Summarizes findings in reports and/or on maps. May prepare preliminary data analyses and proposed course of action. Coordinates routine project tasks and supervises subcontractor activities. May also prepare Fund submittal packages. May prepare preliminary construction drawings and specifications for remediation systems.	• BS in Engineering or Geoscience discipline with a minimum of two years of applicable experience, or MS in Engineering or Geoscience discipline with a minimum of one year of applicable experience. • Health & safety training such as 40 Hour OSHA 1910	$125
Project Manager	Manages assessment/remediation projects involving data collection, and analyses, and the formulation of conclusions and recommendations. Directly responsible for client relations, project budget and schedule and subcontractors on individual projects. Ensures project/client goals are met. Independently evaluates data and selects course of action. May communicate with regulatory agencies on client's behalf.	• Professional registration (e.g., CEM, PE) • BS in Engineering or Geoscience discipline with a minimum of five years of applicable experience, or MS in Engineering or Geoscience discipline with a minimum of three years of experience.	$155

Skill Level Title	General Responsibilities	General Qualifications	Hourly Rate
Senior Professional	Directs or conducts collection and analyses of data. Responsible for selected subcontractor's performance. Coordinates completion of individual field or office tasks within a project. Prepares remedial option analyses and preliminary selection and design. Coordinates and/or prepares project reports. Provides recommendations for remediation system design & enhancement based on data analyses.	• BS in Engineering or Geoscience discipline with a minimum of three years of applicable experience, or MS in Engineering or Geoscience with a minimum of two years of applicable experience.	$175
Principal	Overall responsibility for all technical, regulatory and budgetary aspects of projects. Assigns project managers to individual projects. May directly manage special projects of major scope. On individual routine project basis oversees that appropriate technical and regulatory approaches are being followed by staff and client/project goals are met.	• Professional registration (e.g., CEM, PE) • BS in Engineering or Geoscience discipline with a minimum of ten years of applicable experience, or MS in Engineering or Geoscience discipline with a minimum of six years of applicable experience.	$195

APPENDIX A

CEM-PURCHASED/RENTED EQUIPMENT RATES

NDEP recommends CEMs purchase the equipment necessary to conduct business and will recommend reimbursement of the following rates for CEM-purchased equipment. A CEM may choose to rent equipment necessary to carry out site assessment or remediation activities; however, rental rates will not be reimbursed above the rates provided below. A CEM may propose a usage rate for equipment that does not appear in the below table using the CEM Equipment Usage Rate Calculation provided in Appendix C. Field usage logs must be submitted with each claim requesting reimbursement for the below equipment usage/rental costs.

CEM-OWNED OR RENTAL EQUIPMENT	RATE/DAY
PID – OVM	$125
Single-Speed Well Pump or Peristaltic Sampling Pump (Including Controller)	$50
Variable-Speed Submersible Sampling Pump (Including Controller)	$100
Bladder Sampling Pump (Including Controller/Compressor)	$130
Multi-Parameter Sampling Meter (Includes Flow-Through Cell)	$115
Multi-Meter Sensor: Dissolved Oxygen, pH, Temp., Conductivity, Redox, Turbidity (Each sensor used as identified on equipment usage log)	$25
pH/Conductivity/Temp Meter	$25
Dissolved Oxygen Meter	$25
Water Level Meter	$45
Anemometer	$35
Redox Meter	$25
Ozone Meter	$35
Gas Level Meter (LEL, CO, H2S, O2)	$25
Air Sample Pump	$25
Oil/Water Interface Probe	$75
Data Logger (Including Transducers)	$125
Portable Generator	$60
Purge Bailer	$15
Hand Auger	$10
Digital Camera	$10
Oxidant Injection Trailer	$110

NDEP will also recommend reimbursement for the following consumable materials used to carry out site assessment, monitoring, remediation, and closure activities onsite.

CONSUMABLE MATERIALS	COST
Disposable Bailer (Each)	$10
Bladder Sampling Pump Bladder (Each)	$20
Sample Grab Plate (Each)	$18
Air Sample Bag (Each)	$15
Poly Sampling Tubing (Per Foot)	$0.65
Dual Bonded Tubing (Per Foot)	$1.20
Peristaltic Pump Tubing (Per Foot)	$2.40
55-Gallon Drum (Each)	$100
Tyvek Coveralls (Each)	$12
GENERAL FIELD SUPPLIES RATES*	**COST**
Per Remediation System O&M Visit	$15
Per Excavation, Characterization, or Monitoring Event – Up to 20 samples	$30
Per Excavation, Characterization, or Monitoring Event – Greater than 20 samples	$60

* The Fund recognizes there are incidental costs incurred by CEMs in carrying out NDEP required sampling or remediation equipment maintenance. The above field supply rates are meant to supplement these costs and may not cover all costs incurred by a CEM to carry out their normal course of business (i.e., cost of doing business). Receipts are not required unless specifically requested by Fund staff and supplies costs will be approved at staff's discretion during claim review based on supporting documentation (i.e., field activity logs). General field supplies rates apply to the following materials, but are not limited to: ice, gloves, small hand/sampling tools, decon solution/water, signage, locks, pest/weed control, fire prevention, bailer string, rags, etc.

APPENDIX A-2

CEM-OWNED MOBILE REMEDIATION SYSTEMS

This appendix establishes rates for use of CEM-owned mobile remediation systems in lieu of requiring bids to rent mobile systems from a third-party vendor for pilot testing, short-term remediation projects, or interim cleanup while a permanent system undergoes the permitting/installation process onsite. These rates may be used for up to one-year, after which a permanent system must be installed or the CEM must demonstrate the mobile system will clean up the site within a 6-month extension period (i.e. post remediation monitoring will commence no more than 18 months after the mobile system is brought online). Any extension beyond 18 months must be approved by both the remediation case officer and Petroleum Fund staff. CEMs and case officers should evaluate the effectiveness of the system's performance at least every 3 months. If the system is not performing as expected, it must be optimized to achieve cleanup goals, or an alternative remediation method should be pursued.

Mobile remediation systems are systems that can be easily moved from one location to another with minimal aboveground infrastructure/time to bring the system into or out of service. These systems are typically trailer-mounted or skid-mounted. The below rates are inclusive of any costs for operational service, repair, calibration, fuel, and mobilization associated with using the system onsite. These rates should only be invoiced for days the equipment is operating onsite. System downtime not concurred with by the regulatory case officer is not eligible for reimbursement. Costs associated with CEM personnel optimization, maintenance, and sampling may be requested under the tasks outlined in Section 3 of these Guidelines. These systems are the responsibility of the CEM. The Fund will not reimburse costs associated with disrepair, theft, vandalism, or damage. Also, similar to other CEM equipment in Appendix A, markup is not eligible for reimbursement.

SYSTEM TYPE	DAILY RATE	WEEKLY RATE	MONTHLY RATE
Air Sparge with Soil Vapor Extraction	$660	$2,200	$6,000
Self-Powered Air Sparge with Soil Vapor Extraction	$880	$2,900	$8,000
Pulse-Ox	$660	$2,200	$6,000
Ozone Sparge	$550	$1,800	$5,000

* Daily Rate = Up to 24hours; Weekly Rate = Greater than 3 days (72 hours); Monthly Rate = Greater than 14 days

Note, for use of a mobile remediation system that is not CEM-owned (i.e. rented from a third-party in accordance with Appendix D), where rental costs will likely exceed the bid threshold, Section 2.4.3 of these Guidelines apply.

APPENDIX B

CEM TRAVEL AND PER DIEM RATES

CEM TRAVEL AND PER DIEM RATES

For all projects receiving reimbursement from the State of Nevada Petroleum Fund, the CEM must analyze travel cost efficiency regarding field work performed at remote sites. An analysis of costs associated with per diem (lodging and meals in the project town, or the town located closest to the project site) must be evaluated against costs that will be accrued traveling to and from the site on a daily basis, including staff overtime hours.

Meals, lodging, CEM vehicle mileage, and travel expenses will be recommended for reimbursement pursuant to allowable state rates only. To request these expenses for reimbursement, the claim must include information specifying the following:

- Number of CEM staff associated with each individual daily per diem request (e.g., two people for one night lodging @ $94/night; dinner for two people @ $23/dinner, etc.)
- Number and type (i.e., breakfast, lunch, dinner) of meal(s)
- Number of nights claimed for lodging, with associated receipts.

For rental vehicles, NDEP will reimburse for either vehicle mileage (as summarized below) or the actual cost of the rental. Actual vehicle rental fees must be requested as non-CEM costs. Additionally, justification for the usage of a rental vehicle rather than a CEM-owned vehicle must be provided.

Because allowable state rates are subject to change, NDEP recommends the CEM check our website at https://ndep.nv.gov/environmental-cleanup/petroleum-fund/cost-guidelines-rates or contact Fund staff at (775) 687-9368 for the latest information regarding allowable rates.

PER DIEM REIMBURSEMENT:

- Receipts are not necessary for meals.
- **Receipts are necessary for lodging.**
- Lodging room tax and misc. fees are reimbursable.

NDEP's reimbursement recommendation policy for CEM meal and lodging expenses are as follows:

- **Nevada-Based CEMs:** NDEP will recommend reimbursement for meals and lodging associated with sites located 50 miles or more from the CEM's office, unless the site is located in the Las Vegas, or Reno-Carson City areas.
- **Out-of-State CEMs:** NDEP will recommend reimbursement for meals and lodging associated with sites located 50 miles or more from the Las Vegas, Harry Reid International Airport or the Reno-Tahoe International Airport.

TRAVEL REIMBURSEMENT: NDEP's reimbursement recommendation policy for CEM vehicle mileage and travel costs is as follows:

Nevada-Based CEMs: Vehicle mileage costs will be recommended for reimbursement for project-related travel when a mileage log is provided that includes the date(s) of travel, starting and ending vehicle mileage, and purpose of site visit. Upon staff request, a justification must be provided for requested mileage that exceeds round-trip mileage from a CEM's office and the site. Note, the following considerations, limitations, and exceptions regarding Nevada-based CEM travel:

- If an operator with a project site located within the Las Vegas or Reno-Carson City

metropolitan areas elects to contract a non-local CEM, the CEM's vehicle mileage costs accrued from their out-of-town office to the project site will not be recommended for reimbursement.

- CEM air travel and vehicle rental costs within the state may be considered for reimbursement if prior justification and preapproval is obtained from NDEP. Written concurrence must be provided with the claim and the air fare and rental car fees must be requested as non-CEM costs.
- For consulting companies that have multiple offices within the state, staff mileage will be reimbursed from the office closest to the project site.

Out-of-State CEMs:

- Costs associated with out-of-state travel (from a CEM office located outside the state to a site in Nevada) are not reimbursable.
- Vehicle mileage or airline ticket costs associated with traveling to a site located in the Las Vegas or Reno-Carson City areas will not be recommended for reimbursement.
- Vehicle mileage costs associated with traveling to a rural Nevada site (outside the Las Vegas or Reno-Carson City metropolitan areas) will be recommended for reimbursement, beginning from the Las Vegas, Harry Reid International Airport or the Reno-Tahoe International Airport to the site.
- Project-related vehicle mileage costs within the area of the site will be recommended for reimbursement.
- Rental vehicle costs for work performed in the Las Vegas or Reno-Carson City areas will **not** be recommended for reimbursement.
- Rental vehicle costs for work performed in rural Nevada sites will be recommended for reimbursement, from the Las Vegas, Harry Reid International Airport or the Reno-Tahoe International Airport to the site. Justification for using a rental vehicle must be provided with any reimbursement claim.

APPENDIX C

CEM EQUIPMENT USAGE RATE CALCULATION

CEM EQUIPMENT USAGE RATE CALCULATION

NDEP will not recommend reimbursement for the purchase of CEM-owned equipment. The below calculation is provided to facilitate a reimbursable usage rate for CEM equipment that is not listed in Appendix A. If a usage rate is later established under Appendix A for equipment previously approved under Appendix C, Fund staff will recommend reimbursement at the rate established in Appendix A (i.e., rates of Appendix A supersede any rates established by Appendix C).

- Cost of equipment X 1.5 (to allow for overhead and maintenance) = adjusted cost
- Adjusted cost/500 hours = hourly rate
- Hourly rate X 8 hours = daily rate
- Hourly rate X 35 hours = weekly rate
- Hourly rate X 100 hours = monthly rate

Example:

- $1,000 piece of equipment
- $1,000 X 1.5 = $1,500
- $1,500/500 hours = $3/hour
- $3 X 8 hours = $24/day
- $3 X 35 hours = $105/week
- $3 X 100 hours = $300/month

The CEM must submit an equipment usage request via the online NEA system (https://nevadaenvironmentalactivities.ndep.nv.gov) to establish the usage rate for the equipment. The request must include the type of equipment, a description, a serial number, the cost, the original invoice number, the original invoice date, and a PDF of applicable invoice(s) or receipt(s). The database will show proposed rates pursuant to the above calculations. NDEP will concur electronically if the equipment is approved. The newly established rates must be selected for use with each cost proposal. Usage billing must be provided on CEM invoices and include a field usage log identifying the equipment.

The above method is only to be used for equipment owned and operated by CEMs. NDEP recommends CEMs purchase the equipment necessary to conduct business. **If a CEM rents commonly used equipment from a rental company, NDEP will recommend reimbursement for no more than the rates listed in Appendix A**.

APPENDIX D

REMEDIATION EQUIPMENT PURCHASE VERSUS RENTAL EVALUATION

REMEDIATION EQUIPMENT PURCHASE VERSUS RENTAL EVALUATION:

Purchase:

The purchase of remediation equipment is a major cost associated with remediation of a leaking petroleum storage tank site. Such equipment (packaged or site-constructed air sparge systems, soil vapor extraction systems, dual-phase extraction systems, etc.) commonly costs tens of thousands of dollars. The case officer must formally provide concurrence for the type of proposed remedial methodology and the associated remediation system that will be utilized at a site. A minimum of three bids must be evaluated prior to the acquisition of such equipment if the equipment costs meet the bid threshold. NDEP's policy regarding the reimbursement of such equipment is as follows:

- NDEP will recommend reimbursement for the purchase of the equipment if the case officer has concurred with the remedial methodology and a minimum of three valid bids (if necessary) are provided.

Rental:

If a claimant proposes to rent remediation equipment from a vendor, Fund staff must approve a proposed rental rate schedule that verifies the ultimate cost of renting (for the estimated remediation phase duration) will not exceed the cost of purchasing the equipment. If the cumulative rental costs exceed the bid threshold, bids will need to be obtained for the rental cost over the period of time it is expected to be used. **NDEP will recommend reimbursement for accrued remediation equipment rental costs up to the purchase price only**. Some examples:

- A remediation system is priced at $50,000, including tax, excluding shipping. A claimant proposes to rent the equipment from a vendor, which will cost $2,500/month. At this rate, it will take 20 months for the rental rate to equal the purchase cost, at which time reimbursement for rental of the equipment will cease. In this case, if the equipment is still needed on the site, additional rental costs will be the full responsibility of the claimant.

- The same $50,000 remediation system is rented to the claimant at $2,500/month, and the case officer allows removal of the system following 12 months of usage. The resulting accrued rental costs of $30,000 will be recommended for reimbursement. The claimant has saved both himself and the Fund costs associated with the difference between the purchase price and the resulting rental cost ($20,000).

A Rental Rate Schedule must be proposed through the online database system and established with Fund Staff prior to requesting remediation equipment rental costs for reimbursement. Each proposed remediation equipment Rental Rate Schedule must include:

- Equipment name
- Description of equipment
- Bid price including taxes
- Expected monthly rental cost
- Copies of invoices/receipts and bids for equipment, including applicable taxes

The online system will calculate and display the number of months the piece of equipment may be rented, given the expected purchase price.

Summary:

Pursuant to an established Rental Rate Schedule, NDEP will recommend reimbursement for remediation equipment rental fees up to the point where the total accrued rental costs equal the purchase price only. The above-referenced cost analysis will include the projected time the equipment will be needed on the site. NDEP recommends claimants to rent equipment if they are sure the total rental fees will be less than the purchase price. Conversely, if it is believed that the equipment may be used on the site for a prolonged period of time, purchasing the equipment will be more cost effective.

APPENDIX E

REIMBURSABLE VERSUS NON-REIMBURSABLE COSTS

FUND ELIGIBLE VERSUS INELIGIBLE COSTS

Costs that are eligible for reimbursement are referred to as "eligible costs", which are costs directly associated with assessment and remediation activities that are authorized or concurred with by the case officer. With the exception of initial abatement or emergency abatement, activities directly associated with regulatory agency required work must be included in Work Plans and/or cost proposals and concurred with by the case officer. Therefore, this appendix provides examples of common tasks directly associated with assessment and remediation. CEM equipment (meters, pumps, etc.), consumable materials (disposable bailers, 55-gallon drums, etc.), and travel costs (vehicle mileage, meal and lodging per diem) are reimbursable at the rates listed in Appendices A and B.

Ineligible costs are not reimbursable and are associated with activities not specifically concurred with by the case officer. Examples of ineligible costs include additional activities required by the claimant to be conducted for their convenience but not directly associated with assessment or remediation (e.g., rush turnaround fees on laboratory analyses not specifically allowed by a work scope task, hiring an out-of-state consultant (non-reimbursable travel and per-diem), intangible costs associated with financial risks such as high risk operators, using a non-local "preferred contractor" which charges more than known local vendors, etc.).

Assessment and remediation costs that will be recommended for reimbursement (eligible costs) include, but are not limited to:

1. The cost of a specific item or service for which a case officer has provided concurrence, plus eligible markup. Please refer to Appendix G for a discussion regarding reimbursable markup.
2. State reimbursement rates for CEM equipment and materials usage, vehicle mileage and per diem, as summarized in Appendix A and Appendix B.
3. Usage rates for CEM equipment that is not listed in Appendix A, which have been calculated pursuant to Appendix C. Please note that Fund staff must review and approve all usage rates calculated pursuant to Appendix C.
4. Shipping costs for laboratory samples and remediation equipment.
5. Claimant-provided goods and services at cost. A claimant cannot profit from providing goods and services.
6. Well vault replacement, if it can be verified that the damage is from normal wear and tear.

Costs associated with the following will not be recommended for reimbursement (ineligible costs) and include, but are not limited to:

1. Supplies that the CEM requires to perform daily business such as office equipment (computers, software, copiers, etc.), purchase of in-house field equipment that is subsequently invoiced based on a usage rate, work clothing, fuel for company vehicles, tools necessary to maintain and repair remediation systems (wrenches, saws, etc.).
2. CEM or claimant attendance at training classes, workshops or seminars.
3. CEM usage fees for office equipment such as computers and copiers.
4. Phase I and II Environmental Site Assessments for real estate transactions.
5. Confirmation of a UST system release, such as the performance of voluntary assessment activities, release confirmation laboratory analyses, voluntary UST system removal, etc.
6. Relocation of inhabitants (may be reimbursable if third party claimant).
7. Site restoration due to issues not associated with remediation unless concurrence is provided by the Fund.

8. UST system repairs or upgrades.
9. Assessment and/or remediation activities that have not been authorized by the case officer (excludes emergency/initial abatement).
10. Activities, equipment or materials which are solely for the convenience of the claimant, such as additional fees attributed to using an out-of-state CEM, non-regulatory required rush laboratory turn around fees, replacement of wells due to site improvements (construction, site facility demolition and re-building, etc.).
11. Demolition or replacement of site structures or appurtenances unless concurred with by the case officer to facilitate efficient and less costly remediation methods (e.g., removing an abandoned structure to allow contaminated soil excavation, etc.).
12. Non-justified emergency/initial abatement as discussed in Appendix F, and as determined by the case officer.
13. UST system removal costs unless required by the case officer to facilitate site remediation.
14. Remediation equipment or well damage caused by weather unless concurred with by Fund staff.
15. Storage tank system release source identification.
16. The additional costs associated with goods or services provided by out-of-state suppliers when similar goods or services are available locally, including non-local CEM costs (claimant's convenience).
17. Activities, equipment, and materials necessary to maintain compliance with UST operating regulations such as precision tightness testing, the purchase and maintenance of leak detection equipment, etc.
18. Well vault replacement for reasons other than normal wear and tear.
19. Costs attributable to a non-justifiable delay in clean-up.
20. Activities that pre-date the discharge discovery date.
21. Deposits or payments subject to a refund (e.g., drums used to contain hydrogen peroxide)
22. Insurance (equipment insurance, etc.).
23. Refundable fees, including those to carry bonds.
24. Laboratory analyses that are not required by the case officer (TPH analysis of groundwater samples, etc.).
25. Petroleum Fund Board meeting attendance, unless directed by the Board or the case officer.
26. Excavation/transportation of material that is not associated with assessment and remediation activities.
27. Rush laboratory turnaround fees, which have not been authorized by the case officer or specified within a Task Table.

Non-Reimbursable Expenditures:

1. Absence of 3 bids or usage of a vendor who was not the lowest bidder in a situation where bidding was required pursuant to NAC 445C.270(4)(e), unless good cause is provided and concurred with by the case officer.
2. Additional costs associated with contracting a vendor who was not the lowest bidder with no justification provided.
3. Costs (including associated CEM oversight) associated with repeating a previously contracted service where the original service was done incorrectly, e.g., remediation system pilot test not performed in accordance with the case officer approved work plan, replacement of a groundwater monitoring well initially installed with the screened interval above the water table, etc.

4. CEM equipment usage and travel rates which exceed those listed in Appendices A & B. Because these rates are commonly adjusted, it is important to check the Fund web page for updates at https://ndep.nv.gov/environmental-cleanup/petroleum-fund/cost-guidelines-rates on a regular basis.
5. Alcoholic beverage purchases.
6. Costs for which the claimant was not actually charged.
7. Duplication or overlap of CEM efforts, including getting new CEM "up to speed"
8. Rental of land or storage space unless approved by Fund staff.
9. Recurring charges not justified (remediation equipment that is repeatedly serviced for the same problem and charged, but not corrected, etc.).
10. Rental of remediation system and associated equipment, if the system is not running, unless concurred with by the case officer.
11. Operations and monitoring of a non-operating remediation system.
12. Operating costs of a remediation system not installed as per the approved work plan unless concurred with by the case officer.
13. Assessment and remediation of contamination due to product delivery overfill or spill events.
14. Document shipping.
15. Activities, equipment, or materials necessary to repair or replace remediation equipment or wells which have failed or become damaged due to faulty installation or construction, faulty operation, vandalism, theft, auto wrecks, etc.
16. Repair or replacement of equipment that is covered by a warranty.
17. Costs for the purchase or rental of remediation equipment that has been previously paid for under another Petroleum Fund case. (NDEP will not pay for equipment more than once).
18. Monthly utility costs and fees other than that used for remediation system operation or system downtime unless concurred with by the case officer.
19. Costs for removing imported backfill material which is determined to be contaminated.
20. Costs for the replacement or retrofitting of a water supply well due to contamination caused by the release or due to remediation activities, unless concurred with by NDEP.

Reimbursement Claim Deficiencies to Avoid:

1. Documentation (invoices, receipts, usage logs, etc.) that does not substantiate the requested reimbursement amount.
2. Duplicate charges.
3. Unclear or unreadable backup documentation (invoices, receipts, usage logs, etc.).

Non-Fund Eligible Travel Costs:

1. Usage of a rental vehicle, unless justification is provided.
2. CEM per-diem expenses for travel of less than 50 miles from their office.
3. Use of personal or company vehicle charged on a basis other than mileage. CEM costs for vehicle usage on an hourly or daily basis are not reimbursable.
4. Fuel for CEM vehicles.

Non-Fund Eligible Petroleum Tank Release Sources:

Costs to assess and clean up petroleum storage tank system releases pursuant to the following are not qualified for Fund coverage, and therefore are not reimbursable:

1. Releases resulting from a lack of spill prevention equipment.

2. Releases resulting from the known operation of a petroleum storage tank system with faulty spill prevention equipment if not repaired or replaced pursuant to regulatory agency directives.
3. Releases resulting from a lack of overfill prevention equipment.
4. Releases resulting from the known operation of a petroleum storage tank system with faulty overfill protection equipment, if not repaired or replaced pursuant to regulatory agency directives.
5. Product dispenser releases which emanate from above the shear valve (NAC 445C.210(1)(g)).
6. Releases which emanate from petroleum storage tank systems which are not enrolled in the Fund at the time of release discovery (NAC 445C.240(4)).
7. Petroleum storage tank system releases which were discovered prior to the establishment of the Fund.
8. Releases caused from petroleum storage tank operator or vendor neglect.
9. Releases caused by vandalism.
10. Releases from failed petroleum storage tank components which are covered under a manufacturer or vendor warranty.
11. Releases from heating oil tanks in which the release was discovered after the tank was filled with slurry or grout.
12. Releases from subsidiary “day tanks” attached to a regulated storage tank system, unless the “day tanks” are enrolled separately.
13. Releases in which the source has not been repaired, replaced, or permanently removed from service.
14. Releases in which the storage tank system was enrolled at the time when the site was under investigation or was required to be investigated.
15. Releases in which noncompliance was the proximate cause of the release. (Board Resolution No. 94-023).

APPENDIX F

REMEDIATION PURSUANT TO EMERGENCY/INITIAL ABATEMENT

REMEDIATION PURSUANT TO EMERGENCY/INITIAL ABATEMENT:

Emergency actions and initial abatement may or may not coincide with one another. An emergency action is defined by NAC 445C.210(1)(c) and includes any action that:

- Stops an active release of petroleum;
- Identifies or mitigates existing or potential hazards from fire, explosion, vapor, or other hazards associated with a release; or
- Prevents the migration of petroleum which poses a substantial imminent threat to the environment.

In many cases initial abatement does not follow an emergency action. Instead, it may be conducted immediately following release discovery (i.e., tank system removal) when assessment and remediation of contamination associated with a leaking storage tank system is accessible. If a CEM can make the determination that a release to the environment has occurred from the removed tank system, as evidenced by laboratory analytical results (i.e., TPH greater than 100 mg/Kg) and greater than 3 cubic yards of soil is impacted, the CEM should request authorization from the NDEP to excavate and dispose of the contaminated soil in accordance with Task Tables J.1 and J.2 using equipment already located onsite for tank removal. The CEM must also report the release to NDEP within 24 hours by calling the spill/complaint hotline at 1-888-331-6337 or using the following website: https://nevadaenvironmentalactivities.ndep.nv.gov/ (click the "Report a Spill or Release" link in the center of the page).

Following excavation of soils with "apparent petroleum impacts" (see explanation in Tasks J.1 and J.2), soil confirmation samples must be recovered from the excavation. Samples must be analyzed for TPH and other constituents appropriate for the substance(s) stored in the leaking tank system (BTEX, naphthalene, etc.). Rapid laboratory turnaround results may be reimbursed to facilitate backfill of the excavation when safety concerns are evident. Pursuant to site specific constraints and analytical results of the confirmation samples, the above activities may allow the CEM to request a no further action determination.

If emergency/initial abatement activities need to occur after normal business hours or when NDEP offices are closed (weekends, holidays, etc.), the CEM must call the NDEP Spill Hotline to request support to expedite mitigation/corrective action activities and minimize project costs. The emergency/initial abatement period ends once equipment is demobilized from the site and/or the excavation is backfilled.

If additional assessment and/or remediation work is required for the site by the case officer, those activities must be requested through cost proposals as outlined in Sections 1.7.1 through 1.7.6 of these guidelines.

APPENDIX G

REIMBURSABLE CEM MARKUP

REIMBURSABLE CEM MARKUP

NDEP will recommend Fund reimbursement for up to 10% CEM administrative markup on non-CEM services and items, which must be reflected on the CEM's invoice and billed to the claimant. Markup may be claimed for each subcontractor invoice up to $15,000.

Services and Items Not Qualified for Reimbursement of CEM Markup

- Services and items greater than $15,000; however, the value up to $15,000 is eligible for markup
- Subcontractor invoices that have been split into multiple invoices (i.e., progress billing) that have a cumulative total greater than $15,000 for the same service or item.
- Shipping costs.
- Rental costs associated with vehicles, equipment, etc.
- Any non-CEM invoices not recommended for reimbursement.
- Utilities that are not billed to the CEM
- Fuel costs.
- Subcontracted work typically conducted as CEM activities (e.g., groundwater sampling).
- Permit fees.
- Lodging, per diem, and mileage expenses.
- Equipment usage or consumable materials established under Appendices A or C.

Note: Services and items provided on an invoice by a company subcontracted by the CEM or by a CEM's vendor cannot contain administrative markup. The CEM invoice submitted for reimbursement can apply an administrative markup up to 10% for the subcontractor or vendor invoice. No other markup is allowed. A copy of the subcontractor and/or vendor invoice is required as backup in order to document that markup meets the requirements of these guidelines.

APPENDIX H

ACRONYMS/DEFINITIONS

ACRONYMS/DEFINITIONS

AS	Air Sparge
Bid Threshold	Bid value established in accordance with NAC 445C.270(4)(e) and Board Policy Resolution No. 2015-01
BS	Bachelor of Science
Board	Board to Review Claims (Petroleum Board)
CADD	Computer Aided Design and Drafting
CAP	Corrective Action Plan
Case Officer	To mean NDEP leaking UST or remediation regulatory case officer, unless otherwise specified
CEM	Certified Environmental Manager
CFR	Code of Federal Regulations
COPC	Contaminant of Potential Concern
Fund	Fund for Cleaning Up Discharges of Petroleum
HHRA	Human Health Risk Assessment
LNAPL	Light Non-Aqueous Phase Liquid
MS	Master of Science
NAC	Nevada Administrative Code
NDEP	Nevada Division of Environmental Protection
NEA	Nevada Environmental Activities
NFA	No Further Action
NPDES	National Pollutant Discharge Elimination System
NRS	Nevada Revised Statute
NTEP	Not-to-Exceed Proposal
OSHA	Occupational Safety and Health Administration
OVM	Organic Vapor Meter
PE	Professional Engineer
PID	Photo Ionization Detector
RAO	Remedial Action Objectives
RAS	Remedial Alternative Study
RBCA	Risk-Based Corrective Action
ROI	Radius of Influence
RSO	Remediation System Optimization
SNHD	Southern Nevada Health District
SVE	Soil Vapor Extraction
UIC	Underground Injection Control
UST	Underground Storage Tank