

US EPA ARCHIVE DOCUMENT

**Vermont Department of Environmental Conservation
Petroleum Cleanup Fund - Pay for Performance Agreement**

Site Name and Number: _____ (the 'Site')
Address (Street, City): _____
Site Owner Name _____ (The 'Owner')
Owner Address: _____

Contractor Name: _____ (the 'Contractor')
Contractor Address: _____

Contractor Representative: _____ (the 'Project Engineer')
DEC Site Manager: _____ (the 'Site Manager')

General Terms of Pay for Performance Agreement:

1. The Contractor agrees to perform the site cleanup activities in accordance with Attachment A. The Contractor also agrees that site characterization is complete within the identified area of concern as defined on Figure 1. Contamination discovered at a later date within the area of concern will not change the terms of this agreement with the exception specified under General Terms, number 7. Additional investigation to optimize a treatment system or to determine the cause of a failed treatment system will be at the cost of the Contractor. This contract is effective for __ years beginning on _____.
2. The Contractor will perform all site cleanup activities in accordance with this agreement, and all applicable federal and state statutes, rules, regulations, procedures, and guidelines (hereafter referred to as the "Regulations"). Although the Contractor's role will be the management of all aspects of site cleanup, in no way does this Agreement supersede the responsibilities and liabilities of the responsible party (RP).
3. Any equipment, products or materials necessary to perform these services or requirements, as further stated herein, will be supplied by the Contractor. All maintenance, service and repair of the remedial equipment and monitoring wells will be the Contractor's responsibility.

[bidding agreements only] If any DEC supplied equipment is to be used by the Contractor at the site, then the negotiated value of the equipment, as agreed to by both the DEC and the Contractor, will be deducted from the next milestone payment (if not accounted for in the bid price of this contract). Any equipment, products or materials that are purchased will not be the property of the DEC. Property ownership will be subject to agreement between the Contractor and the RP.

[negotiated agreements only] If available and appropriate for a site, the DEC can supply

remediation equipment and materials for the project, subject to mutual agreement with the Contractor. Ownership of equipment and/or materials purchased for this agreement is described in Attachment A.

4. The Contractor will hold harmless and indemnify the RP, the DEC and the State of Vermont against any third party liability from damage caused by the Contractor.
5. The State of Vermont's performance and obligation to pay under this Agreement is contingent upon sufficient funds available in the Petroleum Cleanup Fund (PCF). The State of Vermont will encumber the funds necessary to conduct the cleanup at this site as specified in this agreement. If there are not adequate funds in the PCF to support this agreement, then the DEC will notify the Contractor immediately and the Contractor may withdraw from this agreement. If the Contractor does withdraw from this agreement, then the DEC will reimburse the RP from the PCF the time and materials costs for work performed from the period of the previous milestone to the date of contract termination as funds become available in the PCF. Payment in this situation cannot exceed the amount of the next unpaid milestone ~~only~~. Any performance milestones, as defined in Attachment A, that have not been reached as of such termination will not be paid through the PCF.
6. Upon receipt of an acceptable milestone report and invoice, the DEC agrees to authorize payments in accordance with Attachment A. For every reimbursement claim, the "*Request for Reimbursement Form*" Sections 1-4 (taken from the DEC document titled, "*Procedures for Reimbursement from the PCF*") must be completed and submitted along with the associated Contractor invoice. Invoices which have to be returned to a Contractor for correction will result in a delay in the payment. The DEC will inform the Contractor within ten (10) days whether or not the DEC agrees that the milestone has been attained. If the DEC agrees that the milestone has been met, then the DEC will send the invoice for processing within five (5) days after the milestone has been approved. If a dispute about whether a milestone has been reached cannot be resolved between the DEC site manager and the Contractor, then the dispute resolution described under General Terms, "8." will be used.
7. The Agreement will be final and will not be increased, canceled, or renegotiated for any reason (e.g., unanticipated iron fouling of a system, inadequate winterization, wells clogging because of biological activity or sediments, increased subcontractor costs, modification to the system to meet the remediation goals, etc.), with the exception of the following conditions:
 - a. identification of a new release that affects attainment of a milestone;
 - b. migration of off site contamination onto the subject site that affects attainment of a milestone;
 - c. changes in applicable regulatory requirements or policies that affect remedial design, operations or cleanup goals;
 - d. events beyond the control of the parties that make performance or timely performance impossible; and/or
 - e. other conditions that are mutually agreed to by the Contractor and the DEC.

If a property owner denies unfettered access to a property at any time during the performance

of this agreement, and this denial affects milestone attainment, then the Contractor will allow the DEC thirty (30) days to attempt to resolve this matter with the property owner. If the matter is not resolved to the satisfaction of the Contractor, then the Contractor may request a renegotiation of this contract to address this issue. If there is a difference of opinion between the DEC and Contractor on whether a renegotiated agreement is warranted, then the dispute resolution described under General Terms, "8." will be used.

8. If a dispute concerning milestone attainment cannot be resolved between the DEC and the Contractor within seventy-five (75) days of the receipt of a milestone report and invoice, then a third party will be retained to resolve this dispute. If a dispute concerning contract renegotiation cannot be resolved between the DEC and the Contractor within thirty (30) days of a renegotiation request from either the DEC or the Contractor, then a third party will be retained to resolve this dispute. The third party will be agreed upon by the DEC and the Contractor. The cost for the third party services will be split evenly between the DEC and Contractor. The Owner, Contractor and the DEC agree to accept the final decision on the dispute determined by the third party.
9. The Contractor agrees to be responsible for the fulfillment of all work elements included in any subcontract and agrees to be responsible for the timely payment of all monies due under any subcontract. It is understood and agreed by the Contractor that the DEC will not be liable to any vendor or subcontractor for any expenses or liabilities incurred under the subcontract and that the Contractor will be solely liable to the subcontractor for all expenses and liabilities incurred under the subcontract.
10. In case there is an audit of the PCF by an external agency, the Contractor will maintain books, records and documents directly pertinent to performance under this Agreement in accordance with generally accepted accounting principles. However, special documentation for Pay for Performance sites is not necessary. The DEC considers Contractor's standard accounting procedures to track labor costs and expenses as acceptable documentation. The DEC, the State, or their authorized representatives will have access to such records for audit purposes during the term of this Agreement and for three years following Agreement completion. In the event any work is sublet, the Contractor will similarly require each subcontractor to maintain and allow access to such records.
11. The Contractor will perform as an independent Contractor and not as an agent, representative, or employee of the DEC.
12. All utility payments related to remediation and site monitoring will be the responsibility of the Contractor, e.g., electricity, water, propane, telephone, sanitary sewer, etc.
13. All dismantling of equipment and site restoration will be the responsibility of the Contractor as defined in Attachment A.
14. The Contractor will be responsible for obtaining all applicable local, state and federal permits.

15. The DEC reserves the right to conduct its own sampling events, to install groundwater monitoring wells, and/or to advance soil borings, at any time and at its sole cost and discretion. Any and all costs incurred by the Contractor for participation in these activities will not increase the amount of this contract. The DEC will have ten (10) days from the receipt of a milestone report to notify the Contractor of one of the following:
 1. The DEC agrees that the milestone has been achieved;
 2. The DEC disagrees that the milestone has been achieved; or
 3. The DEC will require confirmatory sampling, which could involve installing new monitoring wells, and/or soil borings. If DEC chooses to confirm the milestone results, then the DEC will have an additional sixty (60) days to inform the Contractor whether the DEC agrees that the milestone have been achieved.

If the DEC does not believe the milestone has been achieved, then the DEC will provide the Contractor with written justification and supporting data. If the DEC agrees that the milestone has been achieved, then the DEC will send the invoice for processing within five (5) days of that determination. If a dispute about whether a milestone has been reached cannot be resolved between the DEC and the Contractor, then the dispute resolution described under General Terms, "8." will be used.

16. The Contractor must immediately notify the DEC (within 72 hours) upon discovery of a significant change in site conditions. This notification must be followed up in writing within 15 days upon discovery of a significant change. The following are examples of significant changes in site conditions:
 - an emergency or imminent hazard which would require the contractor to make changes to the remedial system to mitigate the hazard;
 - an increase in total contaminants of concern or free phase product thickness at a monitoring point by over 50 percent from the last monitoring event, or measurable free-product is found at a monitoring point for the first time;
 - the system has shut down for more than a week; and
 - a sensitive receptor has been impacted, such as elevated VOCs in indoor air, utility lines, and water supply wells.
17. The contractor must notify the DEC, in writing, at least ten (10) days before making any modification to the remedial system or its operation that is subject to the Regulations or results in a modification in air or water treatment. For example, changing air treatment from a thermal oxidizer to carbon drums would require notice, so would removing an air stripper from the groundwater treatment system. Changing to another remedial technology may require the Contractor to prepare a formal Corrective Action Plan and to go through the public review process.
18. Reimbursement under this Agreement may be terminated by the DEC at any time for failure

of the Contractor to perform in accordance with the terms and conditions contained herein. The DEC will provide written notice to the Contractor describing the violated term and/or condition. The Contractor will be provided thirty (30) days to correct all identified deficiencies. In the event of an imminent hazard the DEC will notify the Contractor as soon as practical, but may act immediately to abate the hazard. If the Contractor created the hazard and the DEC must act to abate, then the Contractor agrees to indemnify (see General Terms "4.") and reimburse the costs incurred by the DEC. If there is a difference of opinion between the DEC and the Contractor on the reimbursement amount, then the dispute resolution described under General Terms, "8." will be used.

- 19. If the Contractor abandons the project prior to completion of remediation as defined in Attachment A, or does not correct deficiencies (see General Terms "18."), then the DEC considers that the Contractor has breached the terms of this agreement and will be prohibited from doing future PCF reimbursement work for a period of three (3) years. This includes both new PCF work and work that is already ongoing and includes PCF work that is not under a Pay for Performance Agreement.

This agreement will be effective the day of signing by all parties and may only be canceled with written notice to all parties under the terms written in this agreement.

Responsible Party	Date
Contractor	Date

The DEC has reviewed and approves the terms of this agreement between the above two signed parties and agrees to provide reimbursements from the PCF based on these terms.

Department of Environmental Conservation	Date
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Attachment A

[Note: Any site specific information are included herein only as an example.]

- 1. **Scope of Work:** The Contractor’s scope of work for this Agreement consists of the tasks listed below.
 - a.) Completion, submission, and DEC approval of a draft and final corrective action plan (CAP) to the DEC that is prepared in accordance with the DEC document,

“*Corrective Action Guidance*,” dated November 1997. [Note: costs will not need to be included.]

- b.) Response to public and DEC comments, both written and verbal (this may include attending public meetings on the CAP) and , if requested by the DEC, redrafting the final CAP to take into account substantive comments.
- c.) Installation of the remediation system as described in the CAP. Modifications to the approved remedial system may be made in the field as site conditions warrant by the Project Engineer subject to General Terms, “17.”
- d.) Preparation of “*Remediation System Startup*” and “*As-built*” report(s), and submission of same to the DEC within ninety (90) days of system startup. If the as-built report is late, then \$3,500 will be subtracted from the first milestone.
- e.) Operation and Maintenance (O&M) of the remediation system must be consistent with requirements in the DEC’s “*Corrective Action Guidance*” dated November 1997.
- f.) If soil vapor extraction, air sparging, dual phase extraction, or some other vapor treatment system is used at the site, then the Contractor must obtain baseline and semi-annual (twice per year) compound specific influent air soil vapor extraction system samples for the compounds identified in Table 1. These sampling requirements can be eliminated once two successive rounds of sampling results show that air discharge standards from untreated air will not be exceeded. [Note: this clause is a site specific option]
- g.) Sampling of “*key*” and “*perimeter*” monitoring wells, as well as “*affected*,” “*threatened*,” and “*potential receptors*” (e.g., surface waters, water supply wells, etc.) as noted below.
- **Key monitoring wells and affected and threatened receptors:** quarterly sampling will be required.
 - **Perimeter monitoring wells and potential receptors:** quarterly sampling will be required until concentrations of all target compounds are below applicable regulatory standards, defined in Table 1, for four (4) consecutive monitoring rounds. Once these criteria have been met, monitoring frequency may be reduced to twice a year (spring and fall). However, quarterly sampling must occur after active remediation is completed.
- h.) Reporting of O&M and Monitoring
- A data report should be submitted within 45 days of each quarterly sampling event. Each data report should include copies of the laboratory reports, a groundwater contour map, a contaminant distribution map, and a time-series graph with associated tabulated data for all sampled monitoring

points. If a report is late, then \$1,000.00 will be subtracted from the next milestone.

- The Contractor will submit an annual O&M and monitoring report to the DEC within ninety (90) days of the spring monitoring event or any other mutually agreed upon time between the Contractor and DEC. This report will summarize the last year of quarterly sampling. For every delinquent report, \$2,500.00 will be subtracted from the next milestone.
- Each O&M and monitoring report will include the elements described in the DEC's "*Corrective Action Guidance*," dated November, 1997.
- All submitted reporting documentation will be double-sided to minimize paper waste.

2. **Target Levels:** The cleanup goal at this site is to protect receptors and reduce risk to human health and the environment by reducing the contamination mass within the area of concern (as shown in Figure 1). The attainment of this goal is achieved at this site by focusing the remediation within the source area (as shown in Figure 1), and using key and perimeter monitoring wells as the primary indicators of the level of contamination within the area of concern. However, the groundwater target levels are for the entire area of concern, not just the key and perimeter wells. Therefore, the DEC may consider the installation of confirmatory monitoring wells to ensure the target levels, as defined below, have been met throughout the entire area of concern. The cleanup target levels for this agreement are listed below.

- a.) **Key monitoring wells (see, #3 below for a list of these wells):** CoCs (see Table 1) will be reduced from the average baseline concentration by at least 95 percent; the comparative value is obtained by averaging the total contaminant level for each well (see Table 2 for baseline data). In addition, at each individual well the contaminants of concern will be reduced from that specific well's baseline concentrations by at least 90 percent. If the Vermont Groundwater Enforcement Standard (VGES) is a value higher than the required 90% reduction at a well, then the enforcement standard will be the target level.
- b.) **Perimeter monitoring wells (see #4 below for a list of these wells):** CoCs will be reduced to concentrations below their VGES (see Table 1). [NOTE: This clause is a site specific option]
- c.) **DEC Confirmatory Monitoring Wells (If installed as specified under Paragraph #15, General Terms):** The DEC may install, at its sole discretion and cost, additional monitoring wells and borings to confirm the attainment of any milestone. If three or more confirmatory monitoring wells are installed, then the milestone to be confirmed will be considered met when the following occurs:
 - the average groundwater concentration of the total CoC among the confirmatory monitoring wells is below the average CoC concentration

specified for a given milestone; and

- no confirmatory monitoring well has a total CoC that exceeds the maximum allowable concentration for attaining that milestone.

If one or two confirmatory monitoring wells are installed, then the milestone to be confirmed will be considered met when the following occurs:

- no confirmatory monitoring well has a total CoC that exceeds the maximum allowable concentration for attaining that milestone.

- d.) **Surface water:** CoCs will be reduced to concentrations below their Water Quality Standard (see Table 1). [NOTE: This clause is a site specific option]
- e.) **Water supplies:** CoCs will be reduced to concentrations below their Vermont Drinking Water Guidelines (see Table 1). [NOTE: This clause is a site specific option]
- f.) **Soil Vapor Levels (as measured in any vapor phase recovery system):** Levels in the soil vapor extraction system air stream will be reduced to less than 5 percent of the baseline level and mass removal rates shall be less than 0.1 pounds per day as averaged over two consecutive sampling events. Air samples must be taken with air flow rates within 50 percent of the average air flow rate over the operation life of the soil vapor extraction system. No fresh air make-up air may be used in this calculation. One air sample per sampling event will be collected. The sample will be collected with all SVE points fully open, with all sparge points operating at equal flow using injected air flow rates consistent with (within 80%) of the air flow rates used during the operational life of the sparging system. Air samples shall be analyzed according to EPA Method 8021B (air) for non-halogenated volatile organic compounds and shall be delivered to the laboratory within 8 hours of collection. Additionally, for this milestone to be considered achieved, the graph of the system VOC recovery rates must be near asymptotic for at least one year. The near asymptotic line will be defined as the following: The tangent of the recovery rate curve during the final one year time interval shall consistently be at a value of less than 0.002, excluding anomalous or outlying points. [NOTE: This clause is a site specific option]
3. **Key Monitoring Wells, Affected and Threatened Receptors:** Key monitoring wells to assess the progress of the reduction of contamination levels will consist of (list monitoring wells) _____. The average baseline concentrations for the key monitoring wells are identified in Table 2. Affected and threatened receptors will consist of (list receptors) _____. All samples will be analyzed for the target compounds in Table 1 using an approved laboratory method. The above monitoring points are subject to change by mutual written agreement between the Contractor and the DEC.
4. **Perimeter Monitoring Wells and Potential Receptors:** Perimeter monitoring points will consist of (list monitoring wells) _____. Potential receptors will

consist of (list receptors) _____. All samples will be analyzed for the target compounds in Table 1 using an approved laboratory method. These monitoring points are subject to change by mutual written agreement between the Contractor and the DEC.

5. **Sampling:** All sampling and sample handling shall be in accordance with standard industry practices of quality assurances (QA) and quality control (QC) and the Contractor’s standard operating procedures (SOPs) at the time the agreement is signed. This shall include trip and duplicate samples. Contractor must maintain proof that these procedures are followed for up to three years after the final payment for this work.

For milestone sampling events, the sample collection must be consistent with procedures employed to collect the baseline data, and the samples must be analyzed for the CoCs in a laboratory using EPA Method 8021b. For non-milestone events, field methods, such as a field gas chromatograph, are acceptable as long as standard industry practices of QA/QC and the Contractor’s SOPs are followed. If a field gas chromatograph or other approved method is used for non-milestone sampling events, then a minimum of ten percent of the field samples must be confirmed by laboratory analysis using EPA Method 8021b.

All water supply well samples must be analyzed in a laboratory.

During the post remedial monitoring, the sample collection must be consistent with procedures employed to collect the baseline data, and the samples must be analyzed for the contaminants of concern in a laboratory using EPA Method 8021b.

6. **Milestone Measurement:** The specific criteria for meeting a given milestone are listed below. Milestone reports will include tables and graphs showing contaminant concentrations in key monitoring wells, percent contaminant reduction from baseline data for each key well, and average reduction for all key wells. Milestone reports will also provide the raw data, and the methods of data calculation. Any of the O&M and monitoring reports can also serve as a milestone report if identified as such.
7. **Terms:** The Contractor hereby agrees to perform the corrective action as set out in this Agreement for the total amount of \$ _____. It is agreed that this will be the full and exclusive compensation paid to the Contractor for the performance of the work plan.
8. **Payment:** Payments will be made when the DEC determines that performance criteria are achieved and will be paid at the following cleanup milestones:

Milestone #1 ____% (\$ _____) of the total contract amount will be payable when all work outlined in Attachment A, “1.” (a-d) has been completed.

Milestone #2 ____% (\$ _____) of the total contract amount will be payable when there is an average reduction of contaminants of concern by 50% from site-wide baseline levels in the key monitoring wells, and by at least 25% at each key well. This will be documented in the 50% milestone report. Key wells actively utilized for

remediation will not be used to determine milestone attainment and site-wide baseline levels.

Milestone #3 ____% (\$_____) of the total contract amount will be payable when there is an average reduction of the contaminants of concern by 75% from site-wide baseline levels in the key monitoring wells, and by at least 50% at each key well. This will be documented in the 75% milestone report. Key wells actively utilized for remediation will not be used to determine milestone attainment and site-wide baseline levels.

Milestone #4 ____% (\$_____) of the total contract amount will be payable when there is an average reduction of the contaminants of concern by 95% from site-wide baseline levels in the key monitoring wells, and by at least 90% at each key well. This will be documented in the 95% milestone report. Key wells actively utilized for remediation will not be used to determine milestone attainment and site-wide baseline levels.

Milestone #5 ____% (\$_____) of the total contract amount will be payable when all specified soil vapor target cleanup levels have been reached. The soil vapor target levels are defined in Attachment A, “2f.” This will be documented in the soil vapor milestone report. **[NOTE: This clause is a site specific option]**

Milestone #6 ____% (\$_____) of the total amount will be payable when all specified cleanup target levels have been reached, and those levels have been maintained for a period of four (4) consecutive quarterly sampling rounds after the remedial system has been shut down. Target levels are defined in Attachment A, “2.” This will be documented in the final post remedial monitoring report.

If the target levels are not met for two (2) consecutive quarterly sampling rounds, then active remediation will be reinitiated until reaching these levels. Once the target levels have again been achieved, active remediation may be discontinued to assess whether target levels are maintained for a period of four (4) consecutive quarterly sampling rounds.

The DEC may install, at its sole discretion and cost, additional monitoring wells and borings to confirm the cleanup of the site. If the DEC decides to perform such work, then General Terms, “15.” will be followed.

Milestone #7 ____% (\$_____) of the total amount will be payable when the system has been properly dismantled and removed from the site subject to any agreements under General Terms, “3.”, the monitoring wells have been properly abandoned, and the site has been properly restored, e.g., paving, patching, lawn restoration, etc. (see General Terms, “13.”).

9. **Performance Product and Commitment:** The Contractor’s performance product includes the following responsibilities: the implementation of all remedial and reporting activities

specified in this agreement; all reports required by Regulations; all reports necessary to obtain payment; and a commitment of meeting the cleanup target levels within _____ years of signing this agreement. If at the end of the _____-year cleanup period target levels have not been reached, the Contractor will continue the site cleanup and monitoring for an additional one (1) year at no additional cost to the DEC. If, at the end of the additional performance period, cleanup levels have still not been achieved, the Contractor will be released from any further obligation under this agreement and will not be considered in breach of this Agreement or subject to the three-year prohibition from doing PCF reimbursement work as set forth in Paragraph 20 of this Agreement. However, payment for any unachieved milestones will not be due the Contractor.

10. [*negotiated agreements only*] **Ownership of Equipment and Materials:** Ownership of all remedial equipment and materials that are purchased for the site will be property of the RP for the duration of the remedial operation at the site. Upon completion of remedial operations ownership will be as follows: the remedial equipment (e.g., blowers, catalytic oxidizers, fans, mufflers, the shed and its associated explosion proof lighting, explosion proof heater, insulation, etc.) will remain the RP's property, but the Contractor will deliver it to the DEC offices in Waterbury for use at other sites; the subsurface materials, that are abandoned in place, will remain the property of the RP; and all other materials (e.g., carbon drums, piping and associated valves and fittings, heat tape, road boxes, etc.) will be the property of the Contractor.

All remediation equipment that is purchased after the first milestone payment has been made will be the property of the Contractor.

Table 1 Contaminants of Concern

Contaminant of Concern based on Site Characterization Data	Vermont Groundwater Enforcement Standards (Fg/L)	Vermont Water Quality Standards (Fg/L)	Vermont Drinking Water Guidelines (Fg/L)
Benzene	5	1.2	1
Toluene	1,000	6,800	1,000
Ethylbenzene	700	3,100	700
Total Xylenes	10,000	----	10,000
1,3,5 Trimethylbenzene	4	----	4
1,2,4 Trimethylbenzene	5	----	5
Naphthalene	20	----	20
Methyl Tertiary Butyl Ether (MTBE)	40	----	40

Vermont Groundwater Enforcement Standards apply to samples from monitoring wells and seeps
 Vermont Water Quality Standards apply to surface water samples
 Vermont Drinking Water Guidelines apply to drinking water supply wells