

# Excess Liability Trust Fund Cost Guidance



Office of Land Quality  
Petroleum Branch

### **Disclaimer**

This nonrule policy document (NPD) is being established by the Indiana Department of Environmental Management (IDEM) consistent with its authority under IC [13-14-1-11.5](#). It is intended solely to provide guidance and shall be used in conjunction with applicable rules or laws. It does not replace applicable rules and laws, and if it conflicts with these rules or laws, the rules or laws shall control. Pursuant to IC [13-14-1-11.5](#), this policy will be available for public inspection for at least 45 days prior to presentation to the appropriate State Environmental Board and may be put into effect by IDEM 30 days afterward. If the nonrule policy is presented to more than one board, it will be effective 30 days after presentation to the last. IDEM also will submit the policy to the Indiana Register for publication.

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# TASK A: Site Characterization and CAP Development

## TASK A.1: Investigation Work Plans

### TASK A.1.a: Work Plan for Site Investigations

**Scope of Work:** This task consists of all personnel time to produce a Work Plan to perform a site investigation to delineate the extent of petroleum contamination at a site where both soil and groundwater contamination levels exceed risk-based screening levels. This type of site investigation consists of soil assessment (soil boring advancement) and groundwater assessment (installation of groundwater monitoring wells). **A work plan for Initial Site Characterization is not expected or required.**

<b>Personnel</b>	<b>Activities</b>	<b>Total Hrs.</b>
Senior Project Manager	Final review & signature	1
Project Manager	Project management, Work Plan preparation	12
Staff Project Person	Work Plan preparation	3
Drafting Person	Prepare drawings, figures	4
Word Processor/Clerical	Word processing, clerical support	2
<b>Total Hours For Task</b>		<b>22</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$2,293.**

Activities included in total hours for above task:

- Site reconnaissance visit (if necessary)
- Coordination with IDEM PM
- Work Plan preparation
- Preparation of figures including proposed sampling locations
- Revision to submittal if determined to be deficient by IDEM PM

Potential activities or items that may be added to above table, as necessary:

- Vehicle mileage
- Travel time to site

## TASK A.1.b: Work Plan for Vapor Investigations

**Scope of Work:** This task consists of all personnel time to produce a Work Plan to perform a vapor investigation which includes screening and delineation of vapors in exterior soil gas, sub-slab gas, conduit vapor, crawl space air and/or indoor air. Proposed activities may include installation of soil vapor ports and/or sub-slab vapor pins and sample collection.

Personnel	Activities	Total Hrs.
Senior Project Manager	Final review & signature	1
Project Manager	Project management, Work Plan preparation	3
Staff Project Person	Work Plan preparation	4
Drafting Person	Prepare figures	2
Word Processor/Clerical	Word processing, clerical support	1
<b>Total Hours For Task</b>		<b>11</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$1,110.00.**

Activities included in total hours for above task:

- Site reconnaissance visit (if necessary)
- Coordination with IDEM PM
- Work Plan preparation
- Preparation of figures including proposed sampling locations
- Revision to submittal if determined to be deficient by IDEM PM

Potential activities or items that may be added to above table, as necessary:

- Vehicle mileage
- Travel time to site

## TASK A.1.c: Work Plan for High Resolution Site Characterization

**Scope of Work:** This task consists of all personnel time to produce a Work Plan to perform a high-resolution site characterization (HRSC) investigation to determine the extent of petroleum contamination and/or the extent of product released from an aboveground or underground storage tank utilizing high resolution tools. This work plan is used in place of TASK A.1.a Work Plan. **Please note that the use of HRSC tools requires that the consultant and the IDEM PM work together in the planning and field activities in order to obtain the correct and necessary data from the investigation.**

<b>Personnel</b>	<b>Activities</b>	<b>Total Hrs.</b>
Senior Project Manager	Final review & signature	2
Project Manager	Project management, Work Plan preparation	16
Staff Project Person	Work Plan preparation	6
Drafting Person	Prepare figures	4
Word Processor/Clerical	Word processing, clerical support	2
<b>Total Hours For Task</b>		<b>30</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$3,260.00.**

Activities included in total hours for above task:

- Site reconnaissance visit (if necessary)
- Coordination with IDEM PM
- Work Plan preparation
- Preparation of figures including proposed sampling locations
- Discussions with potential bidding companies to obtain feedback on what tools, locations, and other information may be necessary for the investigation
- Revision to submittal if determined to be deficient by the IDEM PM

Potential activities or items that may be added to above table, as necessary:

- Vehicle mileage
- Travel time to site



## TASK A.2 Soil Boring Advancement & Monitoring Well Installation

### TASK A.2.a: Soil Borings

**Scope of Work:** This task consists of all personnel time to coordinate and oversee a subsurface investigation to determine the extent of soil and/or groundwater contamination released from an aboveground/underground storage tank, utilizing soil boring advancement and sampling. **This task assumes that the soil borings will not be converted to groundwater monitoring or remediation wells. Please refer to TASK A.2.b for well construction activities.**

#### Planning and Preparation

Personnel	Activities	Total Hrs.: First or only day of field activities	Total Hrs.: Subsequent day(s) of field activities
Project Manager	Project management, coordinate waste disposal	2	0.5
Staff Project Person	Solicit bids (if necessary), coordinate & prepare for field activities	6	2
<b>Total Hours For Task</b>		<b>8</b>	<b>2.5</b>

**The one day, task-based reimbursement cost as of June 1, 2023 would be \$880 and \$272.50 for each subsequent day.**

Activities included in total hours for above task:

- Solicit bids for contractor services (if necessary)
- Coordinate soil boring advancement
- Project management
- Coordinate disposal of soil cuttings and/or groundwater
- Coordination with regulatory agencies

#### Field Work

Costs for consultant drilling oversight and sampling activities will be based on a unit cost dependent upon drilling technique utilized and total feet drilled, as follows:

Direct Push Technology:

- Typical drilling conditions = \$8/foot

Hollow Stem Auger Techniques:

- Typical drilling conditions = \$14/foot

Additionally, a consultant labor charge of up to one-half hour for drill rig set-up time between borings, and up to one-half hour for every soil sample recovered from each borehole may be proposed for reimbursement (at the appropriate personnel rate).

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

Activities included in total cost/foot:

- Oversee advancement of soil boring(s)
- Collection of soil and/or groundwater samples for analyses
- Drill rig set-up time between boring locations
- Borehole logging and abandonment
- Consultant equipment calibration and decontamination
- Time to prepare and pack samples for delivery or shipping of samples
- Consultant coordination of traffic control vendor, if necessary (traffic plans, barricade placement and rental, etc.)

Potential activities or items that may be added to above unit cost, as necessary:

- Cost for laboratory analyses of the collected soil and/or groundwater samples
- Travel time to the site and laboratory
- Vehicle mileage

Assumes:

- One consultant staff project person on site during field activities

**NOTE:** Refer to Appendix D: Drilling Costs (Borings and Wells).

## TASK A.2.b: Groundwater Monitoring Well Installation

**Scope of Work:** This task consists of all personnel time to coordinate and oversee the installation of groundwater monitoring or remediation wells including soil recovery for sampling purposes and coordinating waste disposal.

### Planning and Preparation

Personnel	Activities	Total Hrs.: First or only day of field activities	Total Hrs.: Subsequent day(s) of field activities
Project Manager	Project management, coordinate waste disposal	2	0.5
Staff Project Person	Solicit bids (if necessary), coordinate & prepare for field activities	8	2
<b>Total Hours For Task</b>		<b>10</b>	<b>2.5</b>

**The one day, task-based reimbursement cost as of June 1, 2023 would be \$1,090 and \$272.50 for each subsequent day.**

Activities included in total hours for above task:

- Solicit and evaluate bids
- Coordinate and prepare for field activities
- Coordinate the preparation and submittal of boring log/well installation form to the Department of Natural Resources (DNR)
- Project management
- Coordinate disposal of soil cuttings and/or groundwater
- Coordination with regulatory agencies

### Field Work

Costs for consultant drilling oversight and sampling activities will be based on a unit cost dependent upon drilling technique utilized and total feet drilled, as follows:

Direct Push Technology:

- Typical drilling conditions = \$10/foot

Hollow Stem Auger Techniques:

- Typical drilling conditions = \$16/foot

Additionally, a consultant labor charge of up to one-half hour for drill rig set-up time between borings, and up to one-half hour for every soil sample and groundwater sample recovered from each borehole may be proposed for reimbursement (at the appropriate personnel rate). **Please note that costs associated with drill rig repairs and/or weather delays are not reimbursable.**

Activities included in total hours for above task:

- Oversee advancement of soil boring(s) to be converted to well(s)
- Collection of soil and/or groundwater samples for analyses
- Drill rig set-up time between boring locations
- Borehole logging
- Coordinate/oversee construction/installation of well(s) – including wellheads
- Consultant equipment calibration and decontamination
- Time to prepare and pack samples for delivery or shipping of samples
- Consultant coordination of traffic control vendor, if necessary (traffic plans, barricade placement and rental, etc.)

Potential activities or items that may be added to above table, as necessary:

- Cost for laboratory analyses of the collected soil and/or groundwater samples
- Travel time to site and laboratory
- Vehicle mileage

Assumes:

- One consultant staff project person on site during field activities

**NOTE:** Refer to Appendix D: Drilling Costs (Borings and Wells).

## TASK A.2.c: Groundwater Monitoring Well Development

**Scope of Work:** This task consists of all personnel time to develop groundwater monitoring or remediation wells. This assumes that well development will be performed by the consultant as opposed to the driller or other non-consultant contractors. This task may also be used when a monitoring well needs to be redeveloped.

Personnel	Activities	Total Hrs.: First or only well	Total Hrs.: Each subsequent well
Project Manager	Coordinate waste disposal	1	
Field Technician	Prepare equipment & develop well(s)	3	1
<b>Total Hours For Task</b>		<b>4</b>	<b>1</b>

**The one well, task-based reimbursement cost as of June 1, 2023 would be \$341 and \$72 for each subsequent well.**

Activities included in total hours for above task:

- Develop well(s)
- Coordinate disposal of development water
- Consultant coordination of traffic control plan and placement of traffic barriers (if necessary)

Potential activities or items that may be added to above table, as necessary:

- Travel time to site
- Vehicle mileage

## TASK A.2.d: Monitoring Well Network Survey

**Scope of Work:** This task consists of all personnel time to coordinate and conduct the survey of the monitoring well network after the addition of monitoring wells. This activity should be coordinated with quarterly monitoring sampling if the site is at this phase.

<b>Personnel</b>	<b>Activities</b>	<b>Total Hrs.</b>
Project Manager	Planning for survey, project management	1
Staff Project Person	Conduct survey of monitoring well network	4
Staff Project Person	Conduct survey of monitoring well network	4
<b>Total Hours For Task</b>		<b>9</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$965.**

Activities included in total hours for above task:

- Planning of the survey event
- Conducting the survey event

Potential activities or items that may be added to above table, as necessary:

- Travel time to site
- Vehicle mileage

Assumes:

- Two consultant staff project persons on site during field activities

## TASK A.2.e: Installation of Vapor Points/Probes

**Scope of Work:** This task consists of all personnel time to coordinate and oversee the installation of vapor pins/points/probes to perform a vapor investigation for screening and delineating the extent of soil vapors and/or exterior soil gas contamination in preferential pathways. Activities include utilizing direct push technology or another installation method such as hand augering, handheld impact drilling, or concrete coring.

### Planning and Preparation

Personnel	Activities utilizing direct push technology	Total Hrs.
Project Manager	Project management, coordinate waste disposal (if necessary)	3
Staff Project Person	Solicit bids (if necessary), coordinate & prepare for field activities	5
<b>Total Hours For Task</b>		<b>8</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$900.**

Activities included in total hours for above task:

- Solicit and evaluate bids
- Coordinate and prepare for field activities
- Project management
- Coordinate disposal of soil cuttings and/or groundwater

Personnel	Activities utilizing other installation methods such as hand auguring, handheld impact drilling, or concrete coring to 5 feet below ground surface.	Total Hrs.
Project Manager	Project management, coordinate waste disposal (if necessary)	1
Staff Project Person	Coordinate & prepare for field activities	3
<b>Total Hours For Task</b>		<b>4</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$440.**

Activities included in total hours for above task:

- Coordinate and prepare for field activities
- Project management
- Coordinate disposal of soil cuttings and/or groundwater

### **Field Work**

Costs for consultant drilling oversight and sampling activities will be based on a unit cost dependent upon drilling technique utilized and total feet drilled, as follows:

**Costs for consultant boring advancement oversight utilizing direct push technology will be based on a unit cost of \$8/foot.**

Additionally, a consultant labor charge of up to one-half hour for drill rig set-up time between borings may be proposed for reimbursement (at the appropriate personnel rate).

**Costs for the Consultant to conduct advancement by various methods such as hand augering, impact drilling or concrete coring will be based on a unit cost of \$18/foot.** Additionally, a consultant labor charge of up to one-half hour for each boring location may be proposed (at the appropriate personnel rate).

Activities included in total cost/foot:

- Drill rig set-up time between boring locations for installation of vapor points/pins/probes
- Collection of vapor samples for analyses
- Borehole logging and abandonment
- Hand augering up to 5 feet below ground surface
- Drilling with a handheld impact driller or concrete corer to drill holes through concrete for sub-slab locations
- Time to prepare and pack samples for delivery or shipping of samples
- Consultant coordination of traffic control vendor, if necessary (traffic plans, barricade placement and rental, etc.)

Potential activities or items that may be added to above unit cost, as necessary:

- Cost for laboratory analyses of vapor samples collected
- Travel time to the site and laboratory
- Vehicle mileage

Assumes:

- One consultant staff project person on site during field activities

**NOTE:** Refer to Appendix D: Drilling Costs (Borings and Wells).



## TASK A.2.f: High Resolution Site Characterization (HRSC)

**Scope of Work:** This task consists of all personnel time and costs to plan and prepare for a HRSC subsurface investigation to determine the extent of soil and/or groundwater contamination and/or the extent of product released from an aboveground/underground storage tank utilizing high resolution tools. **Please note that the use of HRSC tools requires that the consultant and the IDEM PM work together in the planning and field activities in order to obtain the correct and necessary data from the investigation.**

### Planning and Preparation

Personnel	Activities	Total Hrs.: First or only day of field activities	Total Hrs.: Subsequent day(s) of field activities
Senior Project Manager	Coordination with high resolution tool provider	2	
Project Manager	Project management & coordination with high resolution tool provider, preparation of bids, coordinate waste disposal	12	1
Staff Project Person	Solicit bids, prepare for field activities	4	
<b>Total Hours For Task</b>		<b>18</b>	<b>1</b>

**The one day, task-based reimbursement cost as of June 1, 2023 would be \$2,224 and \$125 for each subsequent day.**

Activities included in total hours for above task:

- Solicit bids for contractor services
- Coordination of driller and high resolution tool provider
- Project management
- Coordinate disposal of soil cuttings
- Coordination with regulatory agencies

### Field Work

Costs for consultant HRSC oversight and sampling activities may be reimbursed at the Project Manager rate. For this task, a project manager (PM) is required to be the site field personnel. The PM preferably should have experience with HRSC.

Activities included in total hours for the above task:

- Oversee advancement of soil boring(s)
- Review of real time data from the high resolution tools
- Coordination with driller, high resolution tool provider and IDEM PM
- Collection of soil samples for analyses
- Borehole logging and abandonment
- Time to prepare and pack samples for delivery or shipping of samples
- Consultant coordination of traffic control vendor, if necessary (traffic plans, barricade placement and rental, etc.)

Potential activities or items that may be added to above table, as necessary:

- Cost for laboratory analyses of the collected soil samples
- Travel time to site and laboratory
- Vehicle mileage

Assumes:

- One consultant project manager on site during field activities

**NOTE:** Refer to Appendix D: Drilling Costs (Borings and Wells).

## TASK A.3: Site Investigation Reports

### TASK A.3.a: Initial Site Characterization Report Preparation

**Scope of Work:** This task consists of all personnel time to summarize initial site conditions and to provide the data and information specified by the IDEM PM in accordance with IC 13-23-13-1(c) and/or 40 CFR 280.63.

Personnel	Activities	Total Hrs.
Senior Project Manager	Final review, data evaluation	8
Project Manager	Data evaluation, report preparation	44
Drafting Person	Generate drawings, figures, maps, plans	22
Word Processor/Clerical	Word processing, clerical support	4
<b>Total Hours For Task</b>		<b>78</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$8,211.50.**

Activities included in total hours for above task:

- Preparation of the LUST ISC Report Cover Sheet and Report Format (State Form 55439)
- Preparation of the LUST ISC Checklist (State Form 55440)
- Data on the nature, site-specific location, and estimated quantity of release
- Initial response and abatement information
- Product recovery information, if applicable
- Site background information
- Site investigation information including analytical data collected
- Known or expected extent of the contamination
- Recommendations of additional site characterization activities
- Drafting (site plan, soil boring logs, contaminant plume maps, etc.)
- Coordination with regulatory agencies
- Revision to submittal, if determined to be deficient by IDEM PM
- Development of Sensitive Receptor Survey to determine the existence of sensitive receptors within a given radius from a site with groundwater contamination
  - Activities included in total hours for above task:
    - Database research
    - Records review with Department of Natural Resources (DNR) records, wetlands maps, etc., in context with outer boundary of groundwater contaminant plume

- Report production with scaled map depicting each sensitive receptor
  - Links to information source must be provided in the document
  - Field identification of sensitive receptors, if necessary
- Preparation of two-dimensional geologic cross sections
- Development of a conceptual site model. A conceptual site model is a three-dimensional understanding of site conditions which conveys what is known or suspected about the release sources, release mechanisms, contaminant fate and transport, exposure pathways, potential receptors, and possible risks to humans and ecological receptors (e.g., birds, fish, and wildlife)
  - Activities included in total hours for above task:
    - Database research
    - Review and evaluate historic, site-specific data to be used in the conceptual site model
    - Discussion of data compiled to date, potential data gaps, evaluation of risks due to contamination present, and recommendations for additional characterization, remediation, or closure
    - Drafting (e.g., site plan, potentiometric maps, isocontour maps, soil boring logs, contaminant plume maps, cross-sections, fence diagrams)
    - Report production with all model outputs and visual interpretations

## TASK A.3.b: Further Site Investigation (FSI) Report Preparation

**Scope of Work:** This task consists of all personnel time to summarize additional site conditions and to provide a summary of the data and information specified by the IDEM PM in accordance with 40 CFR 280.65 or similar activities relative to ASTs to determine the full extent of contamination.

In order to assist with reasonable and cost effectiveness requirements, IDEM is requesting one comprehensive FSI Report within 365 days of the request for additional investigation by IDEM.

Most site investigation reports include details regarding the site and the activities that took place. When there are previous reports already submitted for a release, much of the details in the first report can be duplicated and placed into the new report. An example is in the preparation of the FSI Report where information in the ISC Report can be duplicated.

<b>Personnel</b>	<b>Activities</b>	<b>Total Hrs.</b>
Senior Project Manager	Final review, data evaluation	6
Project Manager	Data evaluation, report preparation	26
Drafting Person	Revise drawings, figures, maps, plans	18
Word Processor/Clerical	Word processing, clerical support	4
<b>Total Hours For Task</b>		<b>54</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$5,416.50.**

Activities included in total hours for above task:

- Preparation of the LUST FSI Report Cover Sheet and Report Format (State Form 55441)
- Site investigation information including analytical data collected
- Detailed description of the monitoring well installation procedures
- Data evaluation including hydrogeologic information
- Recommendations for additional site characterization activities
- Updates to the conceptual site model
- Updates to the two-dimensional geologic cross sections
- Preliminary recommendations for remediation of soil and or groundwater
- Drafting (site plan, soil boring logs, contaminant plume maps, etc.)
- Coordination with regulatory agencies
- Revision to submittal, if determined to be deficient by IDEM PM

## TASK A.4: Environmental Restrictive Covenant (ERC)

### TASK A.4.a: Preparation and Recordation of an ERC

**Scope of Work:** This task consists of all personnel time to prepare an ERC for a property. IDEM has ERC Templates that are suggested to be used for this task. Changes to the template language, affected areas or the restriction(s) that is/are required should be discussed with the IDEM PM prior to preparing the ERC to avoid resubmittals. In addition to the draft ERC, a copy of the warranty deed and the legal description for the property must be included. If an affected area is being used in the ERC, it must be clearly described in the ERC text and depicted on an attached site map. A site map must be 8.5"x11", no colors, 10 font or greater and depict only the necessary information to identify the location of the property and affected area. **ERC preparation and recordation costs will not be reimbursed until the ERC is recorded on the property deed.**

<b>Personnel</b>	<b>Activities</b>	<b>Total Hrs.</b>
Senior Project Manager	Project management, final review	3
Project Manager	Complete draft ERC	5
Staff Project Person	Obtaining and recording deed	3
Drafting Person	Drafting of property map	2
Word Processor/Clerical	Word processing, clerical support	1
<b>Total Hours For Task</b>		<b>14</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$1,559.**

Activities included in total hours for above task:

- Preparation of the ERC/Deed Notice Modification or Termination Request (State Form 56082)
- Coordination with regulatory agencies
- Negotiations with off-site property owners
- Revision to submittal if determined to be deficient by IDEM PM
- Completion of draft ERC for review by IDEM prior to recordation
- Drafting of property map

Potential activities or items that may be added to above table, as necessary:

- Fee for obtaining a warranty deed
- ERC recordation fee

- Travel time to recorder's office
- Vehicle mileage

## TASK A.4.b: Affected Area Map Preparation

**Scope of Work:** This task consists of all personnel time to prepare a map of an affected area. Affected area maps are required only when an entire parcel is not being restricted in an ERC that is being utilized for site closure. Designating an affected area for an ERC must be discussed with the IDEM PM prior to inclusion in an ERC.

<b>Personnel</b>	<b>Activities</b>	<b>Total Hrs.</b>
Senior Project Manager	Final review	1
Project Manager	Data evaluation	3
Drafting Person	GIS formatting, drafting map	3
<b>Total Hours for Task</b>		<b>7</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$707.75.**

Activities included in total hours for above task:

- Data evaluation
- GIS formatting
- Coordination with IDEM PM

Potential activities or items that may be added to above table, as necessary:

- Obtain GIS data points, if needed
- Vehicle mileage
- Travel time to the site



## TASK A.5: Correction Action Plan Development

### TASK A.5.a: Corrective Action Plan (CAP) Preparation for a Non-Engineered Remedy

**Scope of Work:** This task consists of all personnel time to produce a comprehensive CAP for the remediation of petroleum product contaminated soil and/or groundwater for sites which do not require the installation of an active remediation system. Examples include contaminated soil excavation, remediation utilizing injection of in-situ chemical oxidation solutions, vacuum truck product removal, etc.

Personnel	Activities	Total Hrs.
Principal	Technical expert	1
Senior Project Manager	Final review of CAP	4
Project Manager	Coordination, project management, permitting, CAP preparation	13
Staff Project Person	Data compilation	10
Drafting Person	Prepare drawings, figures, plans	4
Word Processor/Clerical	Word processing, clerical support	3
<b>Total Hours For Task</b>		<b>35</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$3,815.25.**

Activities included in total hours for above task:

- Discussion of pilot test data (if testing performed)
- Develop and list the reasonable risk-based remediation and closure objectives for the site that are consistent with the requirements of IC 13-25-5-8.5, 329 IAC 9, 328 IAC 1-3-5(b) through 328 IAC 1-3-5(e) and other applicable state and federal laws and regulations
- Updates to the conceptual site model
- Provide rationale for selection of proposed remedial action
- Coordination with regulatory agencies
- Revision to submittal if determined to be deficient by the IDEM PM

## TASK A.5.b: Corrective Action Plan (CAP) Preparation for an Engineered Remedy

**Scope of Work:** This task consists of all personnel time to produce a comprehensive CAP for the remediation of petroleum contaminated soil and/or groundwater in cases where the installation of an active (i.e. non-passive) remediation system is proposed or other complex remediation alternatives.

Personnel	Activities	Total Hrs.
Principal	Technical expert	1
Senior Project Manager	Final review of CAP	7
Project Manager	Coordination, project management, permitting, CAP preparation	20
Staff Project Person	Data compilation	14
Drafting Person	Prepare drawings, figures, plans	6
Word Processor/Clerical	Word processing, clerical support	4
<b>Total Hours For Task</b>		<b>52</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$5,729.25.**

Activities included in total hours for above task:

- Discussion of pilot test data
- Develop and list the reasonable risk-based remediation and closure objectives for the site that are consistent with the requirements of IC 13-25-5-8.5, 329 IAC 9, 328 IAC 1-3-5(b) through 328 IAC 1-3-5(e) and other applicable state and federal laws and regulations
- Updates to the conceptual site model
- Provide rationale for selection of proposed remedial action
- Preliminary design of remediation system, including calculations
- Preparation of detailed construction drawings and specifications
- Coordination with regulatory agencies
- Discussion of required permits for operation of active remediation system
- Revision to submittal if determined to be deficient by the IDEM PM

# TASK B: Corrective Action Plan Implementation

## TASK B.1: CAP Planning/Preparation & Field Work

### TASK B.1.a: Contaminated Soil Excavation

**Scope of Work:** This task consists of all personnel time to coordinate and oversee the excavation and treatment of impacted soils. IDEM understands that all excavation projects vary due to site-specific conditions. The following cost table, therefore, is presented as a general guideline for excavation activities that encompass one field day only. If it is anticipated that excavation activities will exceed one field day, additional hours should be proposed and justified for pre-approval.

<b>Personnel</b>	<b>Activities</b>	<b>Total Hrs.</b>
Project Manager	Project management, coordinate waste disposal	2
Staff Project Person	Prepare bids (if necessary), coordinate and oversee field activities	12
<b>Total Hours For Task</b>		<b>14</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$1,510.**

Activities included in total hours for above task:

- Soliciting/evaluating bids for soil excavation, loading, hauling, and/or disposal costs
- Coordinating field activities
- Onsite observations
- Collection of soil samples
- Time to prepare and pack samples for delivery or shipping of samples
- Coordinate disposal/treatment of contaminated soils
- Coordination/oversight of backfill operations
- Coordination/oversight of site restoration activities
- Coordination with regulatory agencies

Potential activities or items that may be added to above table, as necessary:

- Travel time to the site and laboratory
- Vehicle mileage

- Additional time if excavation activities exceed one day

Assumes:

- One consultant staff project person on site during field activities

## TASK B.1.b: Injection of In-Situ Chemical Oxidation Solutions

**Scope of Work:** This task consists of all personnel time to procure, prepare, and deploy in-situ chemical oxidation solutions into the subsurface utilizing direct push technologies for deployment in new or existing injection wells, and/or trenches to enhance contaminant degradation. If it is anticipated that activities will exceed the task-based reimbursement cost, additional hours should be proposed and justified for pre-approval.

### Planning and Preparation

Personnel	Activities	Total Hrs.
Project Manager	Project management	1 hour per injection event
Staff Project Person	Injection event preparation: solution procurement and mixing, make ready for field activities, mobilize to site	4 hours per injection event
<b>Total Hours of Set-Up Time per Injection Event</b>		<b>5</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$545.**

Activities included in total hours for above task:

- Solution procurement
- Solution dilution & mixing, if necessary
- Preparation for field activities

### Field Work

Personnel	Activities	Total Hrs.
Staff Project Person	Deployment of solution into all injection wells and/or trenches at the site	8 hours per injection event
<b>Total Hours per Injection Event</b>		<b>8</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$840.**

Activities included in total hours for above task:

- Deployment of solution

Potential activities or items that may be added to above table, as necessary:

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- Vehicle mileage
- Travel time to the site

## TASK B.1.c: Vacuum Truck Event

**Scope of Work:** This task consists of all personnel time to coordinate and oversee the vacuum truck event(s) to remove product and contaminated groundwater. IDEM understands that all projects may vary due to site-specific conditions. The following cost table, therefore, is presented as a general guideline for vacuum event activities that encompass one field day only. If it is anticipated that the activities will exceed one field day, additional hours should be proposed and justified for pre-approval.

Personnel	Activities	Total Hrs.
Project Manager	Project management, coordinate waste disposal	2
Staff Project Person	Oversee field activities	12
<b>Total Hours For Task</b>		<b>14</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$1,510.**

Activities included in total hours for above task:

- Soliciting/evaluating bids (if necessary)
- Coordinating field activities
- Onsite observations
- Collection of data for depth to product throughout event
- Coordinate waste disposal
- Coordination with regulatory agencies

Potential activities or items that may be added to above table, as necessary:

- Installation of recovery well(s)
- Travel time to the site
- Vehicle mileage
- Additional time if vacuum event activities exceed one day

## TASK B.2: Corrective Action Plan Implementation (CAPI) Report

### TASK B.2.a: CAPI Report Preparation for a Non-Engineered Remedy

**Scope of Work:** This task consists of all personnel time to produce a CAPI report for corrective actions such as excavation, enhanced bioremediation and vacuum events. The report must provide a description of how all samples were collected, data tables, and the activities conducted during the CAP implementation.

<b>Personnel</b>	<b>Activities</b>	<b>Total Hrs.</b>
Principal	Technical expert	1
Senior Project Manager	Final review	2
Project Manager	Data evaluation, report preparation	8
Staff Project Person	Data compilation	5
Drafting Person	Prepare drawings, figures, maps, plans	6
Word Processor/Clerical	Word processing, data input, clerical support	2
<b>Total Hours For Task</b>		<b>24</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$2,439.25.**

Activities included in total hours for above task:

- Description of work completed
- Data evaluation
- Updates to the conceptual site model, as needed
- Drafting (site plan, injection locations, excavation extent maps, etc.)
- Coordination with regulatory agencies
- Revision to submittal if determined to be deficient by IDEM PM



## TASK B.2.b: CAPI Report Preparation - Remediation System (As-Built and Start-Up)

**Scope of Work:** This task consists of all personnel time to produce an “As-Built & Start-Up Report” for submittal to the IDEM PM when a permanent remediation system has been installed. The CAPI As-Built & Start-Up Report is to reflect the “As-Built” configuration of the remediation system(s) and document baseline and start-up conditions. Baseline conditions (e.g., groundwater quality) and start-up conditions (e.g., influent & effluent vapor concentrations, influent & effluent mass removed/destroyed, and influent & effluent water quality, air flow rates, etc.) are to be monitored and documented to enable comparison to future monitoring data and evaluation of overall remediation system performance. The submitted drawings, plans, and specifications are to be an updated version of those used to solicit bids and construct the system if “As-Built” conditions vary from “As-Planned.” The report must provide a description of how samples were collected, data tables, and the activities conducted during the implementation. A Quarterly Monitoring Report should NOT be submitted that includes the sampling results for the quarter that the system is started as it will consist of duplicative information and will not be necessary.

Personnel	Activities	Total Hrs.
Principal	Technical expert	2
Senior Project Manager	Project oversight, final review	5
Project Manager	Project management, supervise revision of construction drawings and specifications*	8
Staff Project Person	*Revision of construction drawings and specifications	8
Drafting Person	*Revise/prepare drawings, figures, schematics	8
Word Processor/Clerical	Word processing, data input, clerical support	4
<b>Total Hours For Task</b>		<b>35</b>

\* Revise construction (“As-Planned”) drawings to “As-Built” drawings

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$3,579.50.**

Activities included in total hours for above task:

- Discussion of Remediation System installation and any deviation from “As-Planned” design
- Discussion of Remediation System(s) start-up
- Inclusion of scaled drawings, figures, and/or schematics that represent the “As-Built” configuration for the remediation system (updated as needed from construction CAP design or design drawings)

- Provide listing of remediation/closure objectives, performance measures, and remediation system metrics along with any calculations (equations) to be used to demonstrate remediation system performance
- Data assimilation and maintenance
- Coordination with regulatory agencies
- Revision to submittal if determined to be deficient by the IDEM PM

# TASK C: Groundwater Monitoring / System Maintenance / Vapor Intrusion Sampling

## TASK C.1: Groundwater Sampling

### TASK C.1.a: Groundwater Sampling Planning/Preparation & Field Work

**Scope of Work:** This task consists of all personnel time to prepare for and conduct a groundwater sampling event. The field work conducted at the site is assumed to include purging and sampling of one or more monitoring wells for analyses of dissolved petroleum hydrocarbon constituents and in-situ oxidation and bioremediation parameters. This task also includes removal of light non-aqueous phase liquid (LNAPL) from wells (e.g. hand bailing, change out of passive product absorbent socks/skimers, etc.).

#### Planning and Preparation

Personnel	Activities	Total Hrs.
Senior Project Manager	Final review and signature	1
Project Manager	Project management, work plan preparation	4
Technician	Prepare field notes, loading of equipment, sampling preparation, drum disposal	4
Word Processor/Clerical	Word processing, data input, clerical support	1
<b>Total Hours For Task</b>		<b>10</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$982.50.**

Activities included in total hours for above task:

- Coordinating with the client and IDEM
- Coordinating with the laboratory
- Preparation of field notes package
- Organization of field supplies, including loading and unloading equipment from company vehicles

#### Field Work

<b>Personnel</b>	<b>Activities</b>	<b>Total Hrs. For First or Only Well</b>	<b>Total Hrs. For Each Additional Well</b>
Field Technician	Purge & sample well(s), perform LNAPL recovery	3	1
<b>Total Hours For Task</b>		<b>3 for first or only well</b>	<b>1 for each additional well</b>

**The one well, task-based reimbursement cost as of June 1, 2023 would be \$216 and \$72 for each additional well.**

Activities included in total hours for above task:

- Prepare and decontaminate equipment
- Purge groundwater monitoring well(s) and/or removal of free product
- Recovery of groundwater stabilization data during well purging
- Recovery of groundwater samples for chemical analyses
- Recovery of groundwater oxidation and bioremediation parameter data using equipment and meters in the field (if requested by IDEM PM)
- Recovery of groundwater samples for oxidation and bioremediation parameter analyses to be performed by an analytical laboratory (if requested by IDEM PM)
- Assist with purge water/free product drum disposal including drum labeling/disposal
- Time to prepare and pack samples for delivery or shipping of samples
- Consultant coordination of traffic control vendor, if necessary (traffic plans, barricade placement and rental, etc.)

Potential activities or items that may be added to above table, as necessary:

- Travel time to the site and laboratory
- Vehicle mileage
- Additional time for specialized sampling methodologies, as necessary

## TASK C.1.b: Quarterly Monitoring / Remediation Status Report Preparation

**Scope of Work:** This task consists of all personnel time to produce a status report summarizing all groundwater monitoring and sampling results and remediation activities as required by an approved CAP, if applicable. Such reports are to be prepared on a quarterly basis unless the IDEM PM requests a different schedule. The cost table below assumes a site has up to 12 monitoring wells.

Personnel	Activities	Total Hrs.
Senior Project Manager	Project oversight, final review	2
Project Manager	Report preparation	6
Staff Project Person	Data compilation	4
Drafting Person	Prepare/update drawings, figures, maps	5
Word Processor/Clerical	Word processing, clerical support	2
<b>Total Hours For Task</b>		<b>19</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$1,860.25.**

Activities included in total hours for above task:

- Preparation of the LUST QMR Cover Sheet & Report Format (State Form 56087)
- Summary of all site activities during reporting period
- Data assimilation
- Coordination with regulatory agencies
- Preparation and updating of contaminant plume maps and other figures as required by the IDEM PM
- Discussion of remediation system performance, if applicable
- Provide conclusions and recommendations
- Revision to submittal if determined to be deficient by the IDEM PM

**NOTE:** If the same data is submitted in another requested report such as a Further Site Investigation Report, Vapor Intrusion Report, or No Further Action Report, a Quarterly Monitoring Report (QMR) should NOT be submitted. QMR Report preparation costs for duplicative information will NOT be reimbursed.

**NOTE:** IDEM also realizes that a large amount of the details usually contained in a QMR are duplicated from prior reports. The location, geology, hydrogeology, and sampling protocols should not change significantly. The tables and maps need to be updated if they include new data, but no major changes are normally needed. The appendices of the document may be from other sources (e.g., sample results from the

laboratory) or duplicates (e.g., standard sampling protocol followed). Once the first QMR is prepared for a site, the subsequent reports should take less time, effort, and cost to prepare.

## TASK C.2: Operation and Maintenance of Remedial Systems

### TASK C.2.a: Remediation System Operation and Maintenance

**Scope of Work:** This task consists of all personnel time for the operation and maintenance of a soil and/or groundwater remediation system. This task is limited to one site visit per month for an incident.

<b>Personnel</b>	<b>Activities</b>	<b>Total Hrs.</b>
Project Manager	Project management	1
Staff Project Person	Monitor system operations, evaluate system, make adjustments to system	4
Field Technician	Monitor system operations, record operating parameters, inspect system, collect influent/effluent water samples and vapor samples	10
<b>Total Hours per Month</b>		<b>15</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$1,265.**

Activities included in total hours for above task:

- Site visits
- Inspect remediation system
- Monitor remediation system operations
- Make adjustments to remediation system to optimize performance
- Maintain onsite log for operating parameters (flow rates, pressures, vacuum, etc.)
- Checking extraction wells, depth to water and/or adjusting stinger well depths to maximize free product/contaminant recovery
- Cleaning the stripper and oil/water separator, etc.
- Checking all transfer pumps for signs of mineral deposits and cleaning, if needed
- Checking/changing filters, hoses, and oil
- Backwashing granular activated carbon (GAC) vessels to remove sludge/fouling/mineral build-up
- Coordinate activated carbon change-outs
- Change out oxygen release compounds
- Troubleshoot system to correct any problems
- Collecting samples of remediation system influent/effluent vapor and groundwater

Potential activities or items that may be added to above table, as necessary:

- Travel time to the site and laboratory
- Vehicle mileage



## TASK C.2.b: Non-Scheduled Remediation System Maintenance

**Scope of Work:** This task consists of all personnel time for a non-scheduled site visit as a result of a system shutdown or failure.

<b>Personnel</b>	<b>Activities</b>	<b>Total Hrs.</b>
Project Manager	Project management	1
Staff Project Person	Perform onsite remediation system maintenance/repairs, coordinate with repair vendor (if necessary)	10
<b>Total Hours For Task</b>		<b>11</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$1,175.**

Activities included in total hours for above task:

- Site visits
- Coordination with regulatory agencies
- Remediation system maintenance, modifications, and repair procedures as necessary
- Coordinate equipment repairs with sub-contractor (if necessary)

Potential activities or items that may be added to above table, as necessary:

- Necessary supplies, components, and/or equipment replacement
- Vehicle mileage
- Travel time to the site

## TASK C.2.c: Review of Telemetry Reports

**Scope of Work:** This task includes all personnel time necessary to review and interpret all telemetry alarms, data, and reports associated with an approved corrective action system. The time proposed is allowed on a monthly basis.

<b>Personnel</b>	<b>Activities</b>	<b>Total Hrs.</b>
Senior Project Manager	Project oversight, final review	1
Project Manager	Review of all data obtained from the required telemetry installed in an approved corrective action system	2
<b>Total Hours per Month</b>		<b>3</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$402.00.**

Activities included in total hours for above task:

- Review of telemetry reports
- Interpretation of the telemetry data

## TASK C.2.d: Remediation System Permit Report Preparation

**Scope of Work:** This task consists of all personnel time to produce a permit report as stipulated in applicable permits (Air Quality, NPDES, etc.). The time proposed assumes one permit report is being prepared and submitted. **This Task should not be proposed if copies of Quarterly Monitoring Reports are being submitted to permitting agencies to provide this information.**

<b>Personnel</b>	<b>Activities</b>	<b>Total Hrs.</b>
Project Manager	Review report, project management	1
Staff Project Person	Prepare remediation system permit-related reports and documentation	3
Word Processor/Clerical	Proofreading, editing, clerical support	1
<b>Total Hours per Report</b>		<b>5</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$482.50.**

Activities included in total hours for above task:

- Data assimilation
- Coordination with regulatory agencies

## TASK C.3: Vapor Sampling Planning/Preparation & Field Work

**Scope of Work:** This task consists of all personnel time to coordinate and conduct vapor sampling for one or more of the following types: exterior soil gas, sub-slab gas, conduit vapor, crawl space air and indoor air. This task should be combined with other field tasks such as additional site investigations and/or groundwater sampling.

<b>Personnel</b>	<b>Activities</b>	<b>Total Hrs. For First or Only Vapor Sampling Type</b>	<b>Total Hrs. For Each Additional Sample Point</b>
Project Manager	Project set-up, supervision, coordinate waste disposal	1	0.5
Field Technician	Complete indoor air checklist, collect temperature, weather, canister, and sampling information, begin collection of sample(s)	3.5	2
<b>Total Hours For Task</b>		<b>4.5 for first or only point</b>	<b>2.5 for each additional point</b>

**The first or only sample port, task-based reimbursement cost as of June 1, 2023 would be \$377 and \$206.50 for each additional sample port.**

Activities included in total hours for above task:

- Plan the field event
- Prepare and decontaminate equipment
- Collection of vapor samples for analyses
- Time to prepare and pack samples for delivery or shipping of samples
- Coordination of traffic plan and placement of traffic barriers

Potential activities or items that may be added to above table, as necessary:

- Travel time to the site and laboratory
- Vehicle mileage
- Additional time for specialized sampling methodologies, as necessary

## TASK D: Site Closure Activities

### TASK D.1: No Further Action (NFA) Reports

#### TASK D.1.a: NFA Request with Unconditional Closure

**Scope of Work:** This task consists of all personnel time to produce a stand-alone report requesting a regulatory determination of no further action (NFA) when there is no known soil and/or groundwater contamination that will be left in place that exceeds screening levels.

Personnel	Activities	Total Hrs.
Senior Project Manager	Data compilation, report preparation, final review	1
Project Manager	Report preparation	4
Staff Project Person	Data compilation	4
Drafting Person	Prepare/update drawings, figures, maps	2
Word Processor/Clerical	Word processing, clerical support	1
<b>Total Hours For Task</b>		<b>12</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$1,235.**

Activities included in total hours for above task:

- Preparation of NFA Request Cover Sheet (State Form 56088)
- Provide a brief site history
- Compiled data supporting NFA request
- Revision to submittal if determined to be deficient by IDEM PM

## TASK D.1.b: NFA Request using Lines of Evidence

**Scope of Work:** This task consists of all personnel time to produce a stand-alone report requesting a regulatory determination of no further action (NFA) when there is known soil and/or groundwater contamination exceeding risk-based screening levels that will be left in place. The report must discuss potential exposure risks utilizing lines of evidence. If needed, present data pursuant to calculations and modeling that verify the groundwater contaminant plume will be remediated by natural attenuation before it migrates offsite or impacts sensitive receptors. Present data demonstrating that known soil contamination will not impact groundwater.

Personnel	Activities	Total Hrs.
Senior Project Manager	Performing calculations, final review	5
Project Manager	Performing calculations, report preparation & review	9
Staff Project Person	Data compilation	6
Drafting Person	Prepare/update drawings, figures, maps	2
Word Processor/Clerical	Word processing, clerical support	2
<b>Total Hours for Task</b>		<b>24</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$2,720.50.**

Activities included in total hours for above task:

- Preparation of NFA Request Cover Sheet (State Form 56088)
- Summary of all site activities during life of the project to include:
  - Site history
  - Corrective action and remediation history
  - Current concentrations and extent of contamination
  - Hydrogeologic setting and conditions
  - Groundwater contaminant plume stability
  - Amount of contaminant mass and concentration reduction
  - Potential receptors in the site vicinity and possible contaminant pathways
- Provide lines of evidence for unrestricted site closure
- Calculations and modeling results (if necessary)
- Revision to submittal if determined to be deficient by the IDEM PM

**TASK D.1.c: NFA Request Report with Environmental Restrictive Covenant**

**Scope of Work:** This task consists of all personnel time to produce a stand-alone report requesting a regulatory determination of no further action (NFA) with an ERC(s). The report should summarize all historic assessment, remediation, and sampling activities into a report that requests closure using risk-based closure objectives per IC 13-25-5-8.5. The report may be requested by IDEM following submittal and review of other site closure related documents. **This task cannot be claimed in conjunction with TASK A.4 or if TASK A.4 has already been claimed.**

<b>Personnel</b>	<b>Activities</b>	<b>Total Hrs.</b>
Principal	Final Review	1
Senior Project Manager	Project oversight, report preparation, final review	6
Project Manager	Data assimilation, report preparation	34
Staff Project Person	ERC(s) preparation, obtain property(ies) deed(s)	8
Drafting Person	Prepare/update drawings, figures, maps	6
Word Processor/Clerical	Word processing, clerical support	2
<b>Total Hours For Task</b>		<b>57</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$6,612.25.**

Activities included in total hours for above task:

- Preparation of NFA Request Cover Sheet (State Form 56088)
- Coordination with regulatory agencies
- Preparation and updating of contaminant plume maps and other figures
- Summary of all site activities during life of the project to include:
  - Site history
  - Corrective action and remediation history
  - Magnitude and extent of contamination
  - Hydrogeologic setting and conditions
  - Groundwater contaminant plume stability
  - Amount of contaminant mass and concentration reduction
  - Current contaminant concentrations and distribution
  - Potential receptors in the site vicinity and possible contaminant pathways
- Obtain property deed(s), prepare ERC(s)
- Record IDEM approved ERC(s)
- Revision to submittal if determined to be deficient by IDEM PM

Potential activities or items that may be added to above table, as necessary:

- Travel time and mileage if deed cannot be obtained from owner, online, or by mail
- Travel time and mileage to record IDEM approved ERC



## TASK D.2: Site Restoration Activities

### TASK D.2.a: Remediation System Decommissioning & Site Restoration Planning/Preparation

**Scope of Work:** This task consists of all personnel time for planning and preparation for the decommissioning/removal of remediation system(s) and all associated equipment and site restoration activities.

<b>Personnel</b>	<b>Activities</b>	<b>Total Hrs.</b>
Project Manager	Project management, coordinate equipment & waste disposal	3
Staff Project Person	Prepare, submit, and evaluate bid packages	6
<b>Total Hours For Task</b>		<b>9</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$1,005.**

Activities included in total hours for above task:

- Soliciting and evaluating bids
- Coordinating field activities
- Coordination with regulatory agencies
- Coordination of equipment and waste disposal

## TASK D.2.b: Permanent Well Closure Planning/Preparation and Field Oversight

**Scope of Work:** This task consists of all personnel time to coordinate and oversee the permanent closure of groundwater monitoring and/or remediation wells following a NFA determination from IDEM.

### Planning and Preparation

Personnel	Activities	Total Hrs.
Project Manager	Project management, coordinate sub-contractors & waste disposal	2
Staff Project Person	Coordinate field activities, submit & evaluate bids (if necessary), and submit well abandonment logs to the Department of Natural Resources (DNR)	8
<b>Total Hour for Task</b>		<b>10</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$1,090.**

Activities included in total hours for above task:

- Soliciting and evaluating bids
- Coordinating field activities
- Coordinating site restoration (as result of well abandonment only - if necessary)
- Coordination with regulatory agencies
- Submittal of well abandonment logs to DNR
- Coordination of waste disposal

### Field Work

Personnel	Activities	Total Hrs.
Staff Project Person	Oversight of well abandonment activities	8
<b>Total Hours For Task</b>		<b>8</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$840.**

Potential activities or items that may be added to above table, as necessary:

- Vehicle mileage
- Travel time to the site

Assumes:

- Wells abandoned in accordance with DNR Statutes and Rules

# TASK E: Tank Closure and Replacement

## TASK E.1: Tank Closure

### TASK E.1.a: UST Decommissioning & Removal – Planning/Preparation

**Scope of Work:** This task consists of all personnel time to coordinate the decommissioning of underground storage tank system(s) and all associated field activities. This task assumes that field work will be performed by a sub-contractor with oversight by the consulting company.

#### Planning and Preparation

Personnel	Activities	Total Hrs.
Project Manager	Project management, coordinate waste disposal	4
Staff Project Person	Preparation of notification form, prepare and coordinate field activities, submit & evaluate bids (if necessary)	7
<b>Total Hours For Task</b>		<b>11</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$1,235.**

Activities included in total hours for above task:

- Preparation and submittal of the Thirty (30) Day Notification of Intent to Close (State Form 56553)
- Evaluate bids (if necessary)
- Coordinate and prepare for field activities
- Coordination with regulatory agencies
- Coordination of waste disposal
- Revision to submittal if determined to be deficient by IDEM staff

**NOTE:** All costs related to the UST Decommissioning and Replacement program, including the specified costs in this NPD, will be reimbursed at 50% of the approved amount pursuant to IC 13-23-9-1.7.

## TASK E.1.b: UST Closure Report Preparation

**Scope of Work:** This task consists of all personnel time to produce a stand-alone underground storage tank (UST) closure report for any location that has closed regulated tanks. The Underground Storage Tank Systems Closure Report (State Form 56554) should be completed and submitted with an UST Closure Report (which should include lab data, site maps, disposal documentation, etc.) in accordance with 329 IAC 9-6. Instructions and State Form 56554 can be found online at IDEM Forms: [https://www.in.gov/idem/5157.htm#olq\\_ust](https://www.in.gov/idem/5157.htm#olq_ust). If any required portions of this form are not completed, a Notice of Deficiency indicating deficient regulatory obligations will be sent.

Personnel	Activities	Total Hrs.
Senior Project Manager	Final review, data evaluation	1
Project Manager	Data evaluation, report preparation	9
Staff Project Person	Data compilation	6
Drafting Person	Prepare/update drawings, figures, maps	4
Word Processor/Clerical	Word processing, clerical support	2
<b>Total Hours For Task</b>		<b>22</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$2,233.**

Activities included in total hours for above task:

- Preparation of UST Closure Report (State Form 56554)
- Data evaluation
- Drafting (site plan, extent of excavation with sample locations)
- Coordination with regulatory agencies
- Revision to submittal if determined to be deficient by IDEM staff

**NOTE:** All costs related to the UST Decommissioning and Replacement program, including the specified costs in this NPD, will be reimbursed at 50% of the approved amount pursuant to IC 13-23-9-1.7.

## TASK E.2: Tank Installation – Planning/Preparation

**Scope of Work:** This task consists of all personnel time to coordinate tank installation and preparation of the notification form.

Personnel	Activities	Total Hrs.
Project Manager	Project management, coordinate waste disposal (if necessary)	3
Staff Project Person	Plan and coordinate field activities, submit & evaluate bids (if necessary)	8
Field Technician	Preparation of the notification form	2
<b>Total Hour for Task</b>		<b>13</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$1,359.**

Activities included in total hours for above task:

- Preparation of the Notification for UST systems (State form 45223)
- Evaluating bids (if necessary)
- Coordinate and prepare for field activities
- Coordination with regulatory agencies
- Coordination of waste disposal (if necessary)
- Submittal of notification form to register the new tanks
- Revision to submittal if determined to be deficient by IDEM

Potential activities or items that may be added to above table, as necessary:

- Travel time to the site
- Vehicle mileage

Assumes:

- Notification form completed following the IDEM 45223 Form Instructions

**NOTE:** All costs related to the UST Decommissioning and Replacement program, including the specified costs in this NPD, will be reimbursed at 50% of the approved amount pursuant to IC 13-23-9-1.7.

## TASK F: ELTF Claim Preparation

**Scope of Work:** This task consists of all personnel time for the preparation and submittal of a reimbursement claim to the Excess Liability Trust Fund (ELTF). This task is limited to one submittal per quarter for an incident and assumes three pay requests within the claim.

<b>Personnel</b>	<b>Activities</b>	<b>Total Hrs.</b>
ELTF Claims Technician	Prepare Reimbursement Claim	7.5
<b>Total Hours For Task</b>		<b>7.5</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$540.**

Activities included in total hours for above task:

- Completion and submittal of all necessary forms
- Submittal of additional information if requested by ELTF
- Submittal of all backup documentation to support reimbursement of the costs

## TASK G: Miscellaneous Tasks

### TASK G.1: Field Work Notification

**Scope of Work:** This task consists of providing a Field Work Notification to advise the IDEM PM and other IDEM staff that the consultant will be conducting field work at an ELTF eligible site. The consultant must provide the notification by email at least 14 days prior to the event. IDEM staff may conduct a site visit to observe and/or split sample. If the date or start time that was provided are changed, the consultant must provide the new date and time to IDEM as soon as the change is made.

<b>Personnel</b>	<b>Activities</b>	<b>Total Hrs.</b>
Project Manager	Preparation of notification	0.5
<b>Total Hours For Task</b>		<b>0.5</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$62.50.**

Activities included in total hours for above task:

- Submittal of notification by email at least 14 days prior to the event
- Notice of any change to date and start time of field work as soon as change is made by consultant



## TASK G.2: Health and Safety Plan Preparation

**Scope of Work:** This task consists of all personnel time necessary to produce the initial site-specific Health and Safety Plan for a site.

<b>Personnel</b>	<b>Activities</b>	<b>Total Hrs.</b>
Project Manager	Project management, review of document	1
Staff Project Person	Prepare Health and Safety Plan	4
Word Processor/Clerical	Word processing, clerical support	1
<b>Total Hours For Task</b>		<b>6</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$587.50.**

Activities included in total hours for above task:

- Preparation and review of a site-specific Health and Safety Plan

## TASK G.3: Utility Clearance Coordination

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

<b>Personnel</b>	<b>Activities</b>	<b>Total Hrs.</b>
Project Manager	Project management	1
Staff Project Person	Demarcate areas for clearance, coordinate utility clearances	3
<b>Total Hours For Task</b>		<b>4</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$440.**

Activities included in total hours for above task:

- Site reconnaissance visit to demarcate area for public and/or private utility clearances

Potential activities or items that may be added to above table, as necessary:

- Travel time to site
- Vehicle mileage

**NOTE:** Refer to Appendix F: Utility Locate.

## TASK G.4: Access Agreements

**Scope of Work:** The following task consists of all personnel time to prepare and negotiate an access agreement for third party property access, which may be required to perform assessment and remediation activities. **Waste-0065-NPD for gaining access is available at [https://www.in.gov/idem/files/nrpd\\_waste-0065.pdf](https://www.in.gov/idem/files/nrpd_waste-0065.pdf).**

Personnel	Activities	Total Hrs.
Principal	Coordinate legal matters	1
Project Manager	Document preparation, obtain access agreement(s)	3
Word Processor/Clerical	Word processing, clerical support	1
<b>Total Hours For Task</b>		<b>5</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$581.50.**

Activities included in total hours for above task:

- Document preparation

Potential activities or items that may be added to above table, as necessary:

- Vehicle mileage
- Travel time
- Attorney costs may be reimbursed for fees charged that do not exceed one thousand dollars (\$1,000) for access negotiation

**NOTE:** Failure to follow Waste-0065-NPD when attempting to obtain access to properties can lead to denial of all associated costs. If access was NOT obtained, provide properly documented attempts and denials for access per Nonrule Policy Waste-0065-NPD which must be submitted to both the IDEM PM and in the ELTF Claims submittal.

**NOTE:** ELTF does not reimburse for access to the property on which the tank(s) are/were installed.

## TASK G.5: Meetings with Regulatory Agency Staff

**Scope of Work:** This task consists of all personnel time to prepare for an IDEM requested meeting. Meetings may include project status meetings, remediation system optimization meetings, or other meetings requested by the IDEM PM and deemed appropriate to help move the project towards closure. Meetings for these purposes may occur from project inception until a “No Further Action” is issued by IDEM. **This task is not for use when meetings are not requested/required by IDEM staff or are required due to facility operator noncompliance or recalcitrance.**

Personnel	Activities	Total Hrs.
Senior Project Manager	Final review, project planning and coordination	1
Project Manager	Project review, presentation development, IDEM communication	3
Word Processor/Clerical	Word processing, data input, clerical support	1
<b>Total Hours For Task</b>		<b>5</b>

**The task-based reimbursement cost as of June 1, 2023 for this task would be \$569.50.**

Activities included in total hours for above task:

- Planning and coordination
- Data assimilation
- Coordination with other affected parties
- Presentation of electronic data (e.g., PowerPoint or other)
- Copies for handouts during meeting

Potential activities or items that may be added to above table, as necessary:

- Vehicle mileage
- Travel time and meeting attendance time

## Appendix A: Personnel and Labor Rates

Shown below are the professional labor rates for consultant personnel at the time this document was released. These labor rates are adjusted annually on June 1 of each year, in accordance with the product price index (PPI) percentage listed for December of the previous year. The North American Industry Classification System (NAICS) Code for Environmental Consulting Services is 541620 and is described at <http://www.naics.com/naics-code-description/?code=541620>. The PPI Industry data tables are available through the Bureau of Labor and Statistics (BLS) at: <http://www.bls.gov/ppi/home.htm>

Claims for labor must use the rate in effect on the date the work was completed. Individual companies may use different titles and descriptions for employees; however, the Personnel Classification and activity descriptions as listed in 328 IAC 1-3-5(f) show the definitions and tasks for personnel as required by the claim application.

Reimbursement will be limited to the actual value and level of the work performed, irrespective of the title of the employee. When submitting a claim for reimbursement, the applicant is required to give the personnel classification, task being performed, and the name of the individual(s) performing the task. Rates are paid based on the task performed by an employee rather than the qualifications of the employee.

<b>Personnel Labor Rates (rates as of 6/1/23)</b>	
<b>Personnel Classification</b>	<b>Labor Rate (\$/hr.)</b>
Principal	\$163.75
Senior Project Manager	\$152.00
Project Manager	\$125.00
Staff Project Person	\$105.00
Field/ELTF Claims Technician	\$72.00
Drafting Person	\$60.25
Word Processor/Clerical Person	\$42.50
Toxicologist	\$187.50

## Appendix B: Laboratory Analytical Costs

The following is a list of common analytical tests performed on soil, water, and air samples to test for the presence and concentration of contaminants. The invoice from the laboratory detailing what samples were analyzed, the date analyzed, and actual cost is required with payment requests. The typical laboratory costs presented below are inclusive of all containers and packaging. Please note per 328 IAC 1-3-5(b)(3), the eligible parties may seek payment from the ELTF for soil, water, and vapor sampling for petroleum and petroleum constituents only as necessary to achieve the applicable remediation objectives determined under IC 13-12-3-2.

Lab Analysis for Soil	
EPA Method	\$/sample
TPH-8015 GRO, TPH-8015 DRO, TPH-8015 ERO	\$50.00
TPH-418.1	\$95.00
TRPH-HEM-1664/9071B	\$60.00
VOC-8260	\$130.00
SVOC-8270	\$225.00
PAH-8270SIM	\$130.00
PAH-8310	\$150.00
PCB-8082	\$110.00
Metals – 7 barium, cadmium, lead, mercury, nickel, zinc	\$100.00
Individual metals	\$15.00
BTEX/MTBE-8021	\$60.00
BTEX/MTBE-8260	\$80.00
Ignitability	\$30.00
Fraction of organic carbon	\$70.00

Various landfills and regulatory agencies may require tests, such as: PCBs, ignitability, corrosivity, reactivity, bioassay, and others. These tests will be considered when soils from an eligible source are destined for disposal at a permitted facility. Any additional costs incurred due to the presence of ineligible substances detected as a result of these tests are not eligible for reimbursement. These analytical results **MUST** be submitted to the IDEM PM. Reimbursement for unusual tests that may be required by a landfill will be evaluated based upon the contaminating substance, requirements of the landfill, and requirements of the regulating agency. Copies of landfill requirements must be included with the reimbursement request.

<b>Lab Analysis for Water</b>	
<b>EPA Method</b>	<b>\$/sample</b>
TPH-8015 GRO, TPH-8015 DRO, TPH-8015 ERO	\$50.00
TPH-8015 Methane	\$80.00
TRPH-HEM-1664	\$50.00
VOC-8260	\$135.00
SVOC-8270	\$225.00
PAH-8270SIM	\$135.00
PAH-8310	\$150.00
Metals – 7 barium, cadmium, lead, mercury, nickel, zinc	\$100.00
Individual metals	\$15.00
BTEX/MTBE-8021	\$50.00
BTEX/MTBE-8260	\$80.00
Metal-soluble iron	\$25.00
Nitrates	\$25.00
Sulfate	\$25.00
Sulfide	\$25.00
COD	\$20.00
BOD <sub>5</sub>	\$40.00
Total Suspended Solids	\$20.00

<b>Lab Analysis for Air</b>	
<b>EPA Method</b>	<b>\$/sample</b>
VOC-TO-15	\$400.00

At the IDEM PM's request, all quality assurance/quality control (QA/QC), including raw data and internal chain of custody necessary to validate analytical results, a 20% markup is allowed per sample. The IDEM PM must request the full QA/QC for this cost to be eligible for reimbursement.

When QA/QC samples are collected, a matrix spike/matrix spike duplicate (MS/MSD) must also be collected at the rate of one (1) MS/MSD sample for every 20 samples collected per matrix. A duplicate water sample should also be provided at the rate of one (1) per every 20 water samples. A duplicate is not needed for soil samples.

## Appendix C: Equipment Rental

The costs to rent small equipment can be reimbursed by the ELTF. The costs listed below are based on a daily rental rate and is NOT an inclusive list. If the equipment will be used for multiple days, the applicant should determine if a weekly or monthly rate is more cost-effective. Please note that per 328 IAC 1-3-5(e), "Lease or rental on equipment will not be reimbursed above the purchase price."

Equipment	\$/Day
<b>Field Instruments</b>	
Photoionization detector	\$90.00
Flame ionization detector	\$135.00
LED/O2 meter	\$60.00
pH and conductivity meter	\$24.00
Dissolved oxygen meter	\$36.00
Oxidation/reduction meter (REDOX)	\$50.00
Multiparameter water quality meter including pH, dissolved oxygen, temperature, and conductivity	\$60.00
Water level indicator	\$15.00
Oil/Water interface probe	\$70.00
Laser survey equipment	\$90.00
Metal detector	\$20.00
Geographic positioning systems (GPS) unit for site mapping to 1 foot accuracy	\$120.00
Anemometer	\$42.00
Carbon dioxide meter	\$30.00
<b>Field Sampling Equipment</b>	
Hand auger sampling kit (hand auger/brass sleeves)	\$42.00
Slide hammer core sampler	\$42.00
Peristaltic pump	\$35.00
Vacuum air sampling pump	\$60.00
Bailer rental	\$20.00
<b>Generators</b>	
Portable generator, generator ≤ 5kW	\$60.00
Portable generator, generator ≤ 10kW	\$120.00
Portable generator, generator >10kW	\$150.00
<b>Pumps</b>	
2" submersible pump	\$140.00
4" submersible pump	\$115.00
Peristaltic pump	\$35.00
<b>Miscellaneous Equipment</b>	
Drum vacuum	\$50.00



Hammer drill	\$20.00
Decontamination equipment (bucket, brushes, and detergent)	\$15.00
Pressure washer	\$90.00
Power auger	\$60.00

## Appendix D: Drilling Costs (Borings and Wells)

The investigation of potential or existing groundwater contamination is usually performed by the installation of wells or obtaining grab samples of the groundwater. Groundwater wells are the most common method used to determine aquifer characteristics and contamination. Normally, if contamination is discovered, at least three wells will be required to establish the groundwater gradient. Additional wells may be required to adequately delineate the extent of the contamination.

Direct push technology must be used when it is most appropriate to the site and cost effective. Borehole logs must include blow counts in order to be paid at the Hollow Stem Auger (HSA) rate.

Geological and drilling conditions vary throughout the state. Extra costs, due to difficult drilling conditions and/or limited site access, will be considered on a case-by-case basis. Larger, more expensive drill rigs, such as air or mud rotary, may be needed on occasion because of geologic conditions. Requests must be made to both the IDEM PM for technical approval and to the ELTF SOW Coordinator for preapproval for costs above the cost table below.

<b>Drilling Costs</b>	
<b>Mobilization/Demobilization</b>	<b>\$/mobilization</b>
Includes moving contractor equipment, setup, removing equipment, per diem, hotel, mileage, material, and personnel time.	\$1,200.00
<b>Direct Push Technology:</b>	<b>\$/day</b>
Other costs pertaining to direct push technology are included in the per foot allowance specified below	\$1,800.00
<b>Hollow Stem Auger (HSA):</b>	<b>\$/day</b>
Other costs pertaining to HSA technology are included in the per foot allowance specified below	\$2,000.00
<b>Soil Boring Advancement</b>	<b>\$/foot</b>
Includes all personnel, equipment, and material costs associated with the soil boring advancement for collection of soil, gas and/or groundwater samples, and the proper abandonment of the boring. Any soil boring converted to a permanent monitoring well will be compensated at the monitoring well installation rate.	\$20.00
<b>Monitoring Well Installation</b>	<b>\$/foot</b>
Includes all personnel, equipment, and material costs associated with the installation of permanent monitoring wells, including well covers, hole cutting, and decontamination. The wells must be properly developed, all generated drill cuttings and development/purge waters must be containerized. If bedrock is expected or encountered during	\$50.00 (2 inch) \$60.00 (4 inch)

the installation of monitoring wells, the consultant is recommended to discuss steps to move forward with the IDEM PM.	
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## Appendix E: Well Abandonment

Well abandonment can be completed without the use of a drilling rig at many sites. Requests must be made to both the IDEM PM for technical approval and to the ELTF SOW coordinator for preapproval for costs above the cost table below.

<b>Well Abandonment Costs</b>	
<b>Well Size: 2" or less diameter</b>	<b>\$/foot</b>
Includes all personnel, equipment, and material costs associated with the abandonment of well. Additionally, the wells must be properly abandoned in accordance with DNR statues and rule.	\$21.00
<b>Well Size: &gt; 2" to 6" diameter</b>	<b>\$/foot</b>
Includes all personnel, equipment, and material costs associated with the abandonment of well. Additionally, the wells must be properly abandoned in accordance with DNR statues and rule.	\$27.00

## Appendix F: Utility Locate

The cost is for a qualified professional to demarcate the area for public and private utility clearance which includes the labor, materials, and equipment (magnetometer, utility line locator, etc.). The cost listed below is based on locating underground private utilities, structures, and anomalies using electromagnetic locating equipment prior to soil boring advancement, well installation, trenching activities, etc.

<b>Utility Locate Cost</b>	<b>\$/event</b>
Includes locating underground utilities, structure, and anomalies.	\$800.00