

# MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF LAND PROTECTION AND REVITALIZATION  
OFFICE OF SPILL RESPONSE AND REMEDIATION

Mail Address:  
P.O. Box 1105  
Richmond, VA 23218

Location:  
1111 East Main Street  
Richmond, VA 23219

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**SUBJECT:** LPR-SRR-2022-01 – Virginia Petroleum Storage Tank Fund Reimbursement Manual – Volume VII, 2<sup>nd</sup> Edition

**TO:** Betty Lamp, Petroleum Program Managers

**FROM:** Kathryn Perszyk  
Director, Division of Land Protection and Revitalization 

**DATE:** June 10, 2022

**COPIES:** Regional Directors, Deputy Regional Directors, OSRR Staff

**Summary:**

*The Virginia Petroleum Storage Tank Fund Reimbursement Guidance Manual, Volume VII 2<sup>nd</sup> Edition, updates the Usual and Customary Rate (UCR) Schedule used to claim reimbursement from the Virginia Petroleum Storage Tank Fund for reasonable and necessary cleanup work performed after October 1, 2022. The UCR Schedule provides maximum reasonable reimbursement rates for tasks or items associated with the cleanup of a petroleum storage tank release.*

*This Volume only applies to work performed in corrective action phases begun on or after October 1, 2022. Work performed before this date will be governed by earlier versions of this guidance which remain in effect. Earlier versions of the Reimbursement Guidance Manual can be accessed at <https://www.deq.virginia.gov/permits-regulations/laws-regulations/land-waste> under the heading “Petroleum Tanks”*

**Electronic Copy:**

Once effective, an electronic copy of this guidance will be available on:

- The Virginia Regulatory Town Hall under the Department of Environmental Quality (<http://www.townhall.virginia.gov/L/gdocs.cfm?agencynumber=440>);
- The Department’s website at <https://www.deq.virginia.gov/permits-regulations/laws-regulations/land-waste>

**Contact information:**

Please contact Zach Pauley at (804) 659-1391 or [zachary.pauley@deq.virginia.gov](mailto:zachary.pauley@deq.virginia.gov) with any questions regarding the application of this guidance.

**Certification:**

As required by Subsection B of § 2.2-4002.1 of the Administrative Process Act (APA), the agency certifies that this guidance document conforms to the definition of a guidance document in § 2.2-4101 of the Code of Virginia.

**Disclaimer:**

**This document is provided as guidance and, as such, sets forth standard operating procedures for the agency. However, it does not mandate or prohibit any particular action not otherwise required or prohibited by law or regulation. If alternative proposals are made, such proposals will be reviewed and accepted or denied based on their technical adequacy and compliance with appropriate laws and regulations.**

# Virginia Petroleum Storage Tank Fund Reimbursement Guidance Manual

Volume VII, 2<sup>nd</sup> Edition

For Work Authorized on or after

October 1, 2022

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# 1 2022 UCR SCHEDULE

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## 1.1 SUMMARY OF THE 2022 UCR SCHEDULE

DEQ has developed updated reimbursement rates and procedures for work performed after October 2022. A summary of changes in the 2022 UCR Schedule includes the following:

- Updated pricing for material and task codes established in Volume VII of the *Reimbursement Guidance Manual* (August 2019)
- Addition of the Internal Revenue Service standard mileage rates from 2018 to 2022
- Incorporation of the changes made in the 2020 and 2021 Guidance Addendums, including new and revised material and task codes, and changes to descriptions of UCRs in **Section 3** and **Section 7**.

## 1.2 INTRODUCTION TO VOLUME VII

The first edition of Volume VII (August 2019) introduced a number of changes to the reimbursement guidance that are detailed below. Refer to **Section 3.2** of Volume VI of the *Reimbursement Guidance Manual* for information on the variety of code types introduced in this document. Codes begin with the letter code for the item type, then **2####** with the second number categorizing similar items. Items generally follow in a two-digit series afterwards within the category. For example, laboratory codes are listed under the M22 series. While individual items and descriptions may be similar to Volume IV of the *Reimbursement Guidance Manual*, “007 Guidance”, these codes cannot be compared; please verify the correct 2019 schedule code for items before submitting worksheets. The new UCR schedule for material codes begins in **Section 2** of this document.

Volume VII introduces other changes to reimbursement guidance intended to aid claimants and consultants in better understanding how DEQ understands what is considered “reasonable and necessary” during corrective action, and therefore what costs are eligible for corrective action. **Section 3** of this document provides detailed descriptions for selected material codes listed in **Section 2**.

Schedules and descriptions for commodity codes (those items bought in bulk or at variable rates) are listed in **Section 4** and **Section 5**, respectively. Some items that were listed as material codes in Volume IV of this guidance have been reclassified as commodity codes. Mileage has been reclassified to allow the reimbursable rate to change over time. Schedules and descriptions for task codes are listed in **Section 6** and **Section 7**, respectively.

“D-codes” are introduced in **Section 8** and **Section 9** of this document. These codes set procedures for the use of innovative technologies not covered by UCR schedules or by bidding procedures. Each of **Section 2** through **Section 9** contain supplemental information for using and claiming UCRs.

## 1.3 GENERAL INFORMATION

These points are applicable throughout the document. Some of this information is new to Volume VII, and some is a re-statement or clarification of existing reimbursement guidance.

- Some UCRs are claimed per “event”. An event is defined by a scope of work regardless of the time required to complete it. An event may cover anywhere from a day-long groundwater

sampling event, or multiple weeks during a large excavation, depending on the item and the work performed. Refer to the item description for details, or contact your DEQ case manager with questions about your particular item.

- ♦ **IMPORTANT:** Be sure to claim the appropriate code for turn-around time of laboratory analysis. Failure to do so may result in delayed or denied payment.
- ♦ **EXAMPLE:** 24-hour and 48-hour turn-around times are rarely claimed during the corrective action phase, but they may be claimed often during interim response actions.
- ♦ Laboratory analysis must be claimed independently from sample collection for material and task codes.

**EXAMPLE:** Task codes are used to claim reimbursement for sampling and collection of soil samples collected by hand auger. Appropriate material codes must be used to claim reimbursement for laboratory analysis of the samples.

- ♦ Not-to-exceed (NTE) amounts are listed for certain items that are commonly deployed for extended periods for assessment or remediation purposes. Reimbursement is based on units claimed at the appropriate rate until the cumulative total reaches the NTE amount. The NTE amount is the maximum amount that will be reimbursed per release site for the item. A purchase analysis is not required for items with a listed NTE amount.
  - The NTE amount is not intended to fully cover the purchase price of new equipment to add to inventory. Once the NTE amount is met, the use of that item at that release is no longer reimbursable. When the item is used on a new release, those claims are reimbursable until the NTE is met at that site.
- ♦ Brand names used in this document are not sponsorships or recommendations from DEQ.
- ♦ Most values are rounded to the nearest \$0.10 to aid in calculation.

#### 1.4 DEFINITIONS

- ♦ BTEXMN – benzene, toluene, ethylene, xylenes, methyl *tert*-butyl ether, naphthalene
- ♦ CAP – Corrective Action Plan
- ♦ DEQ – Virginia Department of Environmental Quality
- ♦ DO – dissolved oxygen
- ♦ DOT – United States Department of Transportation
- ♦ DPT – Direct-Push Technology
- ♦ EPA – United States Environmental Protection Agency
- ♦ FPR – Free Product Recovery
- ♦ GPS – Global Positioning System
- ♦ GSA – United States General Services Administration
- ♦ HDPE – high-density polyethylene
- ♦ HSA – hollow stem auger
- ♦ IBC – intermediate bulk container -or- tote
- ♦ IRS – Internal Revenue Service
- ♦ LDPE – low-density polyethylene
- ♦ LEL – lower explosive limit
- ♦ LNAPL – light non-aqueous phase liquid
- ♦ MNA – Monitored Natural Attenuation
- ♦ NIOSH – National Institute for Occupational Safety and Health
- ♦ NSZD – Natural Source Zone Depletion

- ♦ NTE – Not to Exceed
- ♦ O&M – Operation and Maintenance
- ♦ ORC – Oxygen Releasing Compound
- ♦ ORP – Oxidation Reduction Potential
- ♦ PCS – petroleum contaminated solids
- ♦ PVC – polyvinyl chloride
- ♦ SCR – Site Characterization Report
- ♦ SM – Standard Methods
- ♦ SUE – Subsurface Utility Engineering
- ♦ TPH – Total Petroleum Hydrocarbons
- ♦ UCR – Usual and Customary Rates
- ♦ UST – Underground Storage Tank
- ♦ VELAP – Virginia Environmental Laboratory Accreditation Program
- ♦ VOC – Volatile Organic Compounds

### 1.5 UNITS & MEASURES

- ♦ CFM – cubic feet per minute
- ♦ CY – cubic yard – yd<sup>3</sup>
- ♦ °C – degrees Celsius
- ♦ ft – feet – '
- ♦ hp - horsepower
- ♦ ID – inside diameter
- ♦ in – inches –"
- ♦ kW – kilowatt
- ♦ lb – pounds
- ♦ OD – outside diameter
- ♦ PSIG – pounds per square inch gauge (gauge pressure)
- ♦ SF – square feet – ft<sup>2</sup>
- ♦ T – transmissivity

One day = 8 hours

One week = 5 days

### 1.6 UCR CODE TYPES

- ♦ M-codes: Material codes. These UCRs are the reimbursable rate for labor and products.
- ♦ T-codes: Task codes. These UCRs are the reimbursable rates for work performed.
- ♦ A-codes: Minimum Charge Adjustments. These UCRs are reimbursable rates for minimum charges invoiced for hauling and disposal
- ♦ B-codes: Bid-codes. Refer to Volume VI of this guidance for details on bidding procedures.
- ♦ C-codes: Commodity codes. These UCRs are reimbursable rates for bulk products and products with highly variable prices.
- ♦ D-codes: Innovative technology codes. These codes set procedures for the use of innovative technologies not covered by UCR schedules or by bidding procedures.
- ♦ I-code: IRS-code. This code allows the price of mileage to reflect IRS standard mileage rate at the time the work was performed. See Section 5.1.

## 2 MATERIAL CODE UCRS

Code	Description	Unit Type	2022 Unit Rate
<b>PROFESSIONAL LABOR</b>			
M2100	Principal	Hour	\$159.00
M2101	Senior Professional	Hour	\$149.00
M2102	Project Manager	Hour	\$124.00
M2103	Mid-Level Professional	Hour	\$100.00
M2104	Jr. Level Professional	Hour	\$85.00
M2105	Senior Technician	Hour	\$74.00
M2106	Technician	Hour	\$67.00
M2107	CAD Operator	Hour	\$74.00
<b>SUBCONTRACTED LABOR &amp; SERVICES</b>			
M2108	Labor Supervisor/Foreman	Hour	\$85.00
M2109	Electrician	Hour	\$103.00
M2110	Plumber	Hour	\$92.00
M2111	Laborer	Hour	\$66.00
M2112	Equipment Operator	Hour	\$100.00
<b>OVERTIME RATES</b>			
M2113	Labor Supervisor/Foreman	Hour	\$127.50
M2114	Electrician	Hour	\$154.50
M2115	Plumber	Hour	\$138.00
M2116	Laborer	Hour	\$100.00
M2117	Equipment Operator	Hour	\$150.00
<b>SERVICES</b>			
M2118	Hollow Stem Auger (HSA) – 6" Borehole	Foot	\$22.00
M2119	HSA Split Spoon Sampling	5' Interval	\$34.00
M2120	Air Rotary Drilling – 6" Borehole	Foot	\$23.00
M2121	Air Rotary Drilling – 8" Borehole	Foot	\$28.00
M2122	Air Rotary Drilling – 10" Borehole	Foot	\$30.00
M2123	Air Rotary Setup after HSA	Per Event	\$180.00
M2124	Drill Rig Standby	Hour	\$310.00
M2125	Drill Rig Decontamination	Hour	\$225.00
M2126	Site History Information, includes all labor and materials	Lump Sum	\$300.00
<b>PER DIEM &amp; TRAVEL</b>			
M2130	Principal Travel	Hour	\$159.00
M2131	Senior Professional Travel	Hour	\$149.00
M2132	Project Manager Travel	Hour	\$124.00
M2133	Mid-Level Professional Travel	Hour	\$100.00
M2134	Junior Level Professional Travel	Hour	\$85.00

Code	Description	Unit Type	2022 Unit Rate
M2135	Senior Technician Travel	Hour	\$74.00
M2136	Technician Travel	Hour	\$67.00
M2140	Per Diem for Locations not listed below	Day	\$155.00
M2141	Abingdon, Washington County	Day	\$155.00
M2142	Blacksburg, Montgomery County	Day	\$182.00
M2143	Charlottesville (City); Albemarle, Greene (County)	Day	\$195.00
M2144	Loudoun County	Day	\$185.00
M2145	Lynchburg, Campbell County	Day	\$168.00
M2146	Richmond (City)	Day	\$209.00
M2147	Roanoke (City)	Day	\$181.00
M2148	Virginia Beach; (September 1 - May 31)	Day	\$170.00
M2149	Virginia Beach; (June 1 – August 31)	Day	\$250.00
M2150	Wallops Island, Accomack County; (September 1 – June 30)	Day	\$176.00
M2151	Wallops Island, Accomack County; (July 1 - August 31)	Day	\$271.00
M2152	Williamsburg, Hampton, Newport News, York County, James City County; (September 1 - December 31)	Day	\$166.00
M2153	Williamsburg, Hampton, Newport News, York County, James City County; (January 1 - August 31)	Day	\$182.00
M2154	Northern Virginia - Cities of Alexandria, Falls Church, Fairfax, and Counties of Arlington and Fairfax; (Sep 1 - Oct 31; Mar 1 - Jun 30)	Day	\$337.00
M2155	Northern Virginia - Cities of Alexandria, Falls Church, Fairfax, and Counties of Arlington and Fairfax; (Nov 1 -Feb 28; Jul 1 - Aug 31)	Day	\$267.00
<b>LABORATORY ANALYSES: SOLID WASTE – WATER - WASTEWATER (STANDARD TURNAROUND)</b>			
M2200	Shipping Laboratory Samples	≤ 50 lb	\$100.00
M2201	Metals Analysis – Method 6010/200.7/SM 3500	Each Metal	\$22.80
M2202	Ethylene Dibromide – Method 8011/504.1	Sample	\$129.00
	Method 8015		
M2203	TPH-GRO in water/wastewater	Sample	\$92.00
M2204	TPH-DRO in water/wastewater	Sample	\$116.30
M2205	TPH-GRO in solid waste/soil	Sample	\$105.60
M2206	TPH-DRO in solid waste/soil	Sample	\$112.30
	Method 8021/8260/624		
M2207	VOCs and oxygenates in water/wastewater	Sample	\$178.40
M2208	VOCs and oxygenates in solid waste/soil	Sample	\$201.20
M2209	BTEXMN & oxygenates in water/wastewater	Sample	\$178.40
M2210	BTEXMN & oxygenates in solid waste/soil	Sample	\$201.20

Code	Description	Unit Type	2022 Unit Rate
M2211	BTEXMN in water/wastewater	Sample	\$118.30
M2212	BTEXMN in solid waste/soil	Sample	\$141.10
M2213	PAHs by Method 8270/625	Sample	\$300.80
M2653	SVOCs (Full-Suite) by Method 8270/625	Sample	\$684.20
M2214	Total Coliform by Method 9131	Sample	\$87.10
M2215A	MNA Parameters	Sample	\$285.60
M2215B	Nitrate/Nitrite by Method 9056/300.1	Sample	\$32.60
M2215C	Iron, Ferrous (II) by SM 3500	Sample	\$23.10
M2215D	Sulfate by Method 9056/300.1	Sample	\$32.60
M2215E	Alkalinity by Method 305.1	Sample	\$27.20
M2215F	Methane by Method RSK-175	Sample	\$170.00
M2656	Water Hardness (as CaCO <sub>3</sub> )	Sample	\$43.50
M2216	HEM Oil & Grease by Method 1664	Sample	\$94.30
M2217	TCLP Fee	Analyte	\$60.00
<b>LABORATORY ANALYSES: AIR ANALYSIS (STANDARD TURNAROUND)</b>			
M2220	BTEX by Method 18	Sample	\$239.40
M2221	TPH C <sub>4</sub> -C <sub>10</sub> by Method 18	Sample	\$263.30
M2222	Hydrocarbons (Boiling Point 36° – 216°C) by NIOSH 1500	Sample	\$277.60
M2223	Aromatic Hydrocarbons (BTEXN) by NIOSH 1501	Sample	\$242.60
M2224	Naphthas (Kerosene & Petroleum Distillates) by NIOSH 1550	Sample	\$122.30
M2225	BTEX & TPH by TO-3	Sample	\$207.90
<b>LABORATORY ANALYSES: SOLID WASTE – WATER - WASTEWATER (48-HR TURNAROUND)</b>			
M2230	Metals Analysis – Method 6010/200.7/SM 3500	Each Metal	\$39.90
M2231	Ethylene Dibromide – Method 8011/504.1	Sample	\$225.75
	Method 8015		
M2232	TPH-GRO in water/wastewater	Sample	\$161.00
M2233	TPH-DRO in water/wastewater	Sample	\$203.50
M2234	TPH-GRO in solid waste/soil	Sample	\$184.80
M2235	TPH-DRO in solid waste/soil	Sample	\$196.53
	Method 8021/8260/624		
M2236	VOCs & oxygenates in water/wastewater	Sample	\$312.20
M2237	VOCs & oxygenates in solid waste/soil	Sample	\$352.10
M2238	BTEXMN & oxygenates in water/wastewater	Sample	\$312.20
M2239	BTEXMN & oxygenates in solid waste/soil	Sample	\$352.10
M2240	BTEXMN in water/wastewater	Sample	\$207.00
M2241	BTEXMN in solid waste/soil	Sample	\$246.90

Code	Description	Unit Type	2022 Unit Rate
M2242	PAHs by Method 8270/625	Sample	\$526.40
M2653	SVOCs (Full-Suite) by Method 8270/625	Sample	\$1,197.30
M2243	Total Coliform by Method 9131	Sample	\$152.40
M2244	TCLP Fee	Analyte	\$100.00
<b>LABORATORY ANALYSES: SOLID WASTE – WATER - WASTEWATER (24-HR TURNAROUND)</b>			
M2250	Metals Analysis – Method 6010/200.7/SM 3500	Each Metal	\$45.60
M2251	Ethylene Dibromide – Method 8011/504.1 Method 8015 Modified	Sample	\$258.00
M2252	TPH-GRO in water/wastewater	Sample	\$184.00
M2253	TPH-DRO in water/wastewater	Sample	\$232.60
M2254	TPH-GRO in solid waste/soil	Sample	\$211.20
M2255	TPH-DRO in solid waste/soil Method 8021/8260/624	Sample	\$224.60
M2256	VOCs & oxygenates in water/wastewater	Sample	\$356.80
M2257	VOCs & oxygenates in solid waste/soil	Sample	\$402.40
M2258	BTEXMN & oxygenates in water/wastewater	Sample	\$356.80
M2259	BTEXMN & oxygenates in solid waste/soil	Sample	\$402.40
M2260	BTEXMN in water/wastewater	Sample	\$236.60
M2261	BTEXMN in solid waste/soil	Sample	\$282.20
M2262	PAHs by Method 8270/625	Sample	\$601.60
M2653	SVOCs (Full-Suite) by Method 8270/625	Sample	\$1,368.50
M2263	Total Coliform by Method 9131	Sample	\$174.20
M2264	TCLP Fee	Sample	\$150.00
<b>ASSESSMENT &amp; SAMPLING</b>			
M2300	Explosimeter	Day	\$75.70
M2301	Explosimeter	Week	\$203.00
M2302	Explosimeter	Month	\$821.30
M2303	PID	Day	\$102.80
M2304	PID	Week	\$319.20
M2305	FID	Day	\$134.10
M2306	FID	Week	\$399.00
M2307	Sampling Kit	Per Well	\$8.00
M2308	Ice	~ 20 lb	\$5.00
M2309	Oil/Water Interface Probe	Day	\$66.00
M2310	Oil/Water Interface Probe	Week	\$198.10
M2311	Hand Auger	Day	\$50.40
M2312	Hand Auger	Week	\$153.70

Code	Description	Unit Type	2022 Unit Rate
M2313	Power Auger	Day	\$92.50
M2314	Power Auger	Week	\$295.80
M2315	Peristaltic Pump	Day	\$131.70
M2316	Peristaltic Pump	Week	\$301.30
	<b>Tubing</b>		
M2317	LDPE ¼" OD	100 Foot	\$40.40
M2318	LDPE ½" OD	100 Foot	\$44.00
M2319	Silicone ⅜" OD	Foot	\$4.30
M2320	Teflon-lined LDPE ¼" OD	100 Foot	\$41.60
M2321	Bladder Pump	Day	\$220.10
M2322	Bladder Pump	Week	\$550.40
M2323	DO Meter	Day	\$73.40
M2324	DO Meter	Week	\$171.20
M2325	pH Meter	Day	\$55.00
M2326	pH Meter	Week	\$128.40
M2327	Multiparameter Meter	Day	\$134.50
M2328	Multiparameter Meter	Week	\$470.90
M2329	Air Velocity Meter	Day	\$36.70
M2330	Air Velocity Meter	Week	\$114.00
M2331	Air Sampling Pump	Day	\$55.00
M2332	Air Sampling Pump	Week	\$159.00
M2333	GPS Unit, Subfoot Grade	Day	\$177.30
M2334	GPS Unit, Subfoot Grade	Week	\$672.60
M2335	Transit Level Kit	Day	\$48.90
M2336	Transit Level Kit	Week	\$122.30
M2337	Utility Wand	Day	\$55.00
M2338	Utility Wand	Week	\$250.70
M2339	Downwell Pump & Controller	Day	\$291.10
M2340	Downwell Pump & Controller	Week	\$682.50
	<i>LONG-TERM USE</i>		
M2341	Datalogger/Pressure Transducer	Day	\$73.40
M2342	Datalogger/Pressure Transducer	Week	\$159.00
—	Datalogger/Pressure Transducer	<i>NTE</i>	\$1,000.00
M2343	Multiparameter Transducer	Day	\$122.30
M2344	Multiparameter Transducer	Week	\$319.20
—	Multiparameter Transducer	<i>NTE</i>	\$3,500.00

Code	Description	Unit Type	2022 Unit Rate
<b>CONSTRUCTION</b>			
<i><b>GENERAL CONSTRUCTION</b></i>			
M2350	Air Compressor – Gasoline/1-phase, 15-25 CFM, 125 PSIG	Day	\$79.50
M2351	Air Compressor – Gasoline/1-phase, 15-25 CFM, 125 PSIG	Week	\$254.40
M2352	Air Compressor – Diesel/3-phase, ≥100 CFM, ≥100 PSIG	Day	\$165.10
M2353	Air Compressor – Diesel/3-phase, ≥100 CFM, ≥100 PSIG	Week	\$519.80
M2354	Generator – Gasoline, portable; 5-19 kW	Day	\$124.70
M2355	Generator – Gasoline, portable; 5-19 kW	Week	\$348.60
M2356	Generator – Diesel, towed; 20-39 kW	Day	\$344.90
M2357	Generator – Diesel, towed; 20-39 kW	Week	\$868.30
—	Generator – Diesel, towed; 20-39 kW	<i>NTE</i>	\$28,800.00
M2358	Generator – Diesel, towed; 40-70 kW	Day	\$477.70
M2359	Generator – Diesel, towed; 40-70 kW	Week	\$1,100.70
—	Generator – Diesel, towed; 40-70 kW	<i>NTE</i>	\$46,000.00
M2360	Fertilizer (10-10-10)	40 lb	\$30.60
M2361	Topsoil (up to 36 units)	40 lb	\$2.80
M2362	Bulk Topsoil	Cubic Yard	\$32.60
M2363	Straw Bale	Each	\$7.60
M2364	Rebar – 4'	Each	\$7.20
M2365	Steel post (T-post, e.g.)	Each	\$7.70
M2366	Lumber (2' x 4' x 12')	Each	\$17.60
M2367	Lumber (4' x 4' x 12')	Each	\$24.50
M2368	Road Safety Cone (each)	Cone/Day	\$2.40
M2369	Road Safety Cone (each)	Cone/Week	\$7.30
M2370	Safety Fence (4' x 100')	Foot	\$0.90
M2371	Type I Barricade	Day	\$6.10
M2372	Type I Barricade	Week	\$14.70
M2373	Type I Barricade	Month	\$45.30
M2374	Concrete Barricade (Jersey Block)	Month	\$218.50
M2375	Flood Light	Day	\$152.30
M2376	Flood Light	Week	\$400.50
M2377	Flood Light	Month	\$980.20
<i><b>EARTHWORK &amp; CONCRETE</b></i>			
M2378	Asphalt Cold Patch	50 lb	\$13.50
M2379	Concrete Saw with 14" blade	Day	\$215.20
M2380	Concrete Saw with 14" blade	Week	\$467.80

<b>Code</b>	<b>Description</b>	<b>Unit Type</b>	<b>2022 Unit Rate</b>
M2381	Concrete Mix	60 lb	\$6.40
M2382	Plate Compactor, ≤ 20" wide	Day	\$109.20
M2383	Plate Compactor, ≤ 20" wide	Week	\$299.60
M2384	Jackhammer, ≤ 90 lb	Day	\$101.50
M2385	Jackhammer, ≤ 90 lb	Week	\$364.80
M2386	Rotary Hammer, 2 in.	Day	\$90.50
M2387	Rotary Hammer, 2 in	Week	\$274.80
M2388	Core Drill	Day	\$139.40
M2389	Core Drill	Week	\$474.50
M2390	Core Drill Bit, 2" Diamond	Day	\$68.80
M2391	Core Drill Bit, 2" Diamond	Week	\$166.90
M2392	Core Drill Bit, 4" Diamond	Day	\$93.60
M2393	Core Drill Bit, 4" Diamond	Week	\$212.80
	<b>REMEDIATION</b>		
M2400	ORC socks, 2"	Each	\$86.50
	Bulk ORC powder, including freight		
M2401	50-999	Pound	\$20.50
M2402	1,000-2,499	Pound	\$20.10
M2403	2,500-4,999	Pound	\$19.40
M2404	5,000-9,999	Pound	\$19.00
M2405	10,000 or more	Pound	\$17.70
	Petroleum-only Sorbents		
M2406	Boom, 5" x 10'	Each	\$43.40
M2407	Boom, 8" x 10'	Each	\$55.00
M2408	Granular litter	50 lb	\$12.50
M2409	Pads, 17" x 19"	Box of 100	\$123.50
M2410	Pillow, 12" x 12" x 1"	Each	\$3.40
M2411	Pillow, 24" x 18" x 2"	Each	\$11.50
M2412	Wick, 2"	Dozen	\$159.00
M2413	Wick, 4"	Dozen	\$159.00
M2414	Air Scrubber, 200-1000 CFM	Day	\$147.60
M2415	Air Scrubber, 200-1000 CFM	Week	\$364.00
—	Air Scrubber, 200-1000 CFM	<i>NTE</i>	\$2,000.00
M2416	Ventilation/Exhaust Blower, ~1500 CFM	Day	\$161.40
M2417	Ventilation/Exhaust Blower, ~1500 CFM	Week	\$341.20
—	Ventilation/Exhaust Blower, ~1500 CFM	<i>NTE</i>	\$3,000.00
X-	Bioremediation Solvents	Unit	Invoice +14.5%
	<b>PLUMBING</b>		
M2418	Discharge Hose – 2" ID x 50'	Day	\$11.00
M2419	Discharge Hose – 2" ID x 50'	Week	\$30.60

Code	Description	Unit Type	2022 Unit Rate
—	Discharge Hose – 2" ID x 50'	<i>NTE</i>	\$61.20
M2420	Suction Hose & Couplings – 2" ID x 20'	Day	\$12.20
M2421	Suction Hose & Couplings – 2" ID x 20'	Week	\$32.40
—	Suction Hose & Couplings – 2" ID x 20'	<i>NTE</i>	\$250.00
	Pipe		
M2423	1" ID SCH 40 PVC	10 ft	\$11.30
M2424	2" ID SCH 40 PVC	10 ft	\$20.70
M2425	4" ID SCH 40 PVC	10 ft	\$112.80
M2426	2" ID SCH 80 PVC	20 ft	\$38.50
M2427	1" LDPE (flexible drain pipe)	100 ft	\$126.00
M2428	Trash Pump – 2"	Day	\$87.60
M2429	Trash Pump – 2"	Week	\$276.40
—	Trash Pump – 2"	<i>NTE</i>	\$800.00
M2430	Trash Pump – 3"	Day	\$95.40
M2431	Trash Pump – 3"	Week	\$342.40
—	Trash Pump – 3"	<i>NTE</i>	\$1,200.00
	<b>WELL MATERIALS</b>		
	Bentonite		
M2432	Chips, Medium	50 lb	\$30.00
M2433	Grout	50 lb	\$44.00
M2434	Pellets	50 lb	\$58.50
	Casing – Flush Threaded		
M2435	SCH 40 PVC, 1" ID	10 ft	\$21.40
M2436	SCH 40 PVC, 2" ID	10 ft	\$42.00
M2437	SCH 40 PVC, 4" ID	10 ft	\$89.90
M2438	SCH 80 PVC, 2" ID	10 ft	\$72.20
M2439	SCH 80 PVC, 4" ID	10 ft	\$120.50
	Screen – Flush Threaded		
M2440	SCH 40 PVC, 1" ID	10 ft	\$32.50
M2441	SCH 40 PVC, 2" ID	10 ft	\$52.90
M2442	SCH 40 PVC, 4" ID	10 ft	\$111.90
M2443	SCH 80 PVC, 2" ID	10 ft	\$126.10
M2444	SCH 80 PVC, 4" ID	10 ft	\$146.80
M2445	Graded Sand	50 lb	\$14.60
M2446	Padlock	Each	\$15.80
M2447	Manhole, 8"	Each	\$61.30
M2448	Manhole, 12"	Each	\$127.70
M2449	Well Cap, Locking – 1"	Each	\$9.30
M2450	Well Cap, Locking – 2"	Each	\$9.00
M2451	Well Cap, Locking – 4"	Each	\$11.80

Code	Description	Unit Type	2022 Unit Rate
M2452	Well Cap, Locking – 6"	Each	\$42.80
M2453	Well Bottom Plug – 1"	Each	\$8.50
M2454	Well Bottom Plug – 2"	Each	\$8.30
M2455	Well Bottom Plug – 4"	Each	\$19.70
M2456	Well Bottom Plug – 6"	Each	\$58.10
M2457	Well Vault, 12"	Each	\$354.70
M2458	Well Vault, 24"	Each	\$528.90
<b>DISPOSAL &amp; WASTE MANAGEMENT</b>			
<i><b>BULK DISPOSAL</b></i>			
M2460	Disposal of Petroleum Contaminated Fluids	Gallon	\$0.73
M2461	Disposal of Petroleum Contaminated Solids at a Landfill (Use T245 for bioremediation or similar processes.)	Ton	\$73.50
M2462	Disposal of Petroleum Contaminated Fluids	Drum	\$172.00
M2463	Disposal of Petroleum Contaminated Solids	Drum	\$185.00
<i><b>CONTAINMENT &amp; DECON</b></i>			
M2464	Drum – 55 gallon	Each	\$91.70
M2465	Overpack for 55-gallon drum	Each	\$289.90
M2466	IBC Tote – 275 gallon	Each	\$349.30
M2467	HDPE Tank 500-999 gallon	Day	\$36.70
—	HDPE Tank 500-999 gallon	<i>NTE</i>	\$1,500.00
M2468	HDPE Tank 1,000-2,499 gallon	Day	\$48.90
—	HDPE Tank 1,000-2,499 gallon	<i>NTE</i>	\$2,500.00
M2658	HDPE Tank 2,500 – 4,000 gallon	Day	\$141.20
—	HDPE Tank 2,500 – 4,000 gallon	<i>NTE</i>	\$3,670.00
M2469	Garbage bags, contractor style (~30-40 gallon)	100 bags	\$31.80
M2470	Plastic Sheeting (100' x 10') – 6-mil	Each	\$82.70
M2471	Plastic Sheeting (100' x 20') – 6-mil	Each	\$175.40
M2472	Decon Kit	Event	\$12.00
M2473	Pressure Washer ≤ 3500 psi	Day	\$101.80
M2474	Tyvek Suit	Each	\$13.80
<b>ROLLING STOCK</b>			
M2480	Dump Truck – 5 CY capacity	Day	\$1,345.30
M2481	Dump Truck – single or tandem, 12 ton capacity	Day	\$1,461.50
M2482	Dump Truck – tri-axle, 16 ton capacity	Day	\$1,623.50
M2483	Dump Truck – quad-axle, 22 ton capacity	Day	\$1,794.80
M2484	Stake Bed Truck	Day	\$382.80

Code	Description	Unit Type	2022 Unit Rate
M2485	Box Trailer	Day	\$110.10
M2486	Box Trailer	Week	\$336.30
M2487	Flatbed Trailer	Day	\$171.20
M2488	Flatbed Trailer	Week	\$440.30
M2489	Dump Trailer, 20 CY	Day	\$367.00
M2490	Dump Trailer, 20 CY	Week	\$691.40
M2491	Vacuum Truck	Hour	\$220.00
M2492	Industrial Vacuum Truck	Hour	\$280.40
M2493	Frac Tank/Tanker Trailer Mob/Demob	Event	\$1,100.00
M2494	Frac Tank/Tanker Trailer Rent	Day	\$125.80
M2495	Frac Tank/Tanker Trailer Rent	Week	\$593.30
M2496	Frac Tank/Tanker Trailer Rent	Month	\$1,773.30
M2497	Backhoe Loader (75-85 hp)	Day	\$530.60
M2498	Backhoe Loader (75-85 hp)	Week	\$1,375.50
—	Backhoe Loader (75-85 hp)	<i>NTE</i>	\$50,000.00
M2499	Mini Excavator (5000-9999 lb)	Day	\$505.50
M2500	Mini Excavator (5000-9999 lb)	Week	\$1,229.90
—	Mini Excavator (5000-9999 lb)	<i>NTE</i>	\$45,300.00
M2501	Mini Excavator (10000-14999 lb)	Day	\$638.40
M2502	Mini Excavator (10000-14999 lb)	Week	\$1,675.50
—	Mini Excavator (10000-14999 lb)	<i>NTE</i>	\$45,300.00
M2503	Small Excavator (15000-21999 lb)	Day	\$766.40
M2504	Small Excavator (15000-21999 lb)	Week	\$1,937.20
—	Small Excavator (15000-21999 lb)	<i>NTE</i>	\$51,000.00
M2505	Excavator (22000-49999 lb)	Day	\$1,251.50
M2506	Excavator (22000-49999 lb)	Week	\$3,171.60
—	Excavator (22000-49999 lb)	<i>NTE</i>	\$75,000.00
M2507	Excavator (50000-74999 lb)	Day	\$1,724.40
M2508	Excavator (50000-74999 lb)	Week	\$4,125.60
—	Excavator (50000-74999 lb)	<i>NTE</i>	\$70,000.00
M2509	Skid Steer Loader & Bucket ( $\leq$ 50 hp)	Day	\$580.90
M2510	Skid Steer Loader & Bucket ( $\leq$ 50 hp)	Week	\$1,724.40
—	Skid Steer Loader & Bucket ( $\leq$ 50 hp)	<i>NTE</i>	\$41,000.00
M2511	Skid Steer Loader & Bucket (50-80 hp)	Day	\$355.90
M2512	Skid Steer Loader & Bucket (50-80 hp)	Week	\$517.30
—	Skid Steer Loader & Bucket (50-80 hp)	<i>NTE</i>	\$60,000.00
M2513	Skid Steer Breaker Attachment	Day	\$480.00
M2514	Skid Steer Breaker Attachment	Week	\$1,305.60
<b>SYSTEMS &amp; COMPONENTS</b>			

Code	Description	Unit Type	2022 Unit Rate
M2600	DPE Treatment Assembly ( $\leq 12$ GPM)	Hour	\$5.90
M2601	DPE Treatment Assembly ( $\leq 12$ GPM)	Day	\$141.90
M2602	DPE Treatment Assembly ( $\leq 12$ GPM)	Week	\$993.40
—	DPE Treatment Assembly ( $\leq 12$ GPM)	<i>NTE</i>	\$35,000.00
M2603	DPE Treatment Assembly ( $\leq 22$ GPM)	Hour	\$6.40
M2604	DPE Treatment Assembly ( $\leq 22$ GPM)	Day	\$153.20
M2605	DPE Treatment Assembly ( $\leq 22$ GPM)	Week	\$1,072.50
—	DPE Treatment Assembly ( $\leq 22$ GPM)	<i>NTE</i>	\$39,000.00
M2606	Oil-Sealed DPE System ( $\leq 500$ CFM)	Hour	\$6.90
M2607	Oil-Sealed DPE System ( $\leq 500$ CFM)	Day	\$165.50
M2608	Oil-Sealed DPE System ( $\leq 500$ CFM)	Week	\$1,159.10
—	Oil-Sealed DPE System ( $\leq 500$ CFM)	<i>NTE</i>	\$41,000.00
M2609	Oil-Sealed DPE System ( $\leq 850$ CFM)	Hour	\$14.90
M2610	Oil-Sealed DPE System ( $\leq 850$ CFM)	Day	\$358.60
M2611	Oil-Sealed DPE System ( $\leq 850$ CFM)	Week	\$2,510.00
—	Oil-Sealed DPE System ( $\leq 850$ CFM)	<i>NTE</i>	\$88,000.00
M2612	Rotary Claw DPE System ( $\leq 250$ CFM)	Hour	\$23.20
M2613	Rotary Claw DPE System ( $\leq 250$ CFM)	Day	\$558.00
M2614	Rotary Claw DPE System ( $\leq 250$ CFM)	Week	\$3,906.20
—	Rotary Claw DPE System ( $\leq 250$ CFM)	<i>NTE</i>	\$135,000.00
M2615	Rotary Claw DPE System ( $\leq 500$ CFM)	Hour	\$28.80
M2616	Rotary Claw DPE System ( $\leq 500$ CFM)	Day	\$690.50
M2617	Rotary Claw DPE System ( $\leq 500$ CFM)	Week	\$4,833.90
—	Rotary Claw DPE System ( $\leq 500$ CFM)	<i>NTE</i>	\$168,000.00
M2618	Rotary Claw DPE System ( $\leq 850$ CFM)	Hour	\$34.70
M2619	Rotary Claw DPE System ( $\leq 850$ CFM)	Day	\$833.50
M2620	Rotary Claw DPE System ( $\leq 850$ CFM)	Week	\$5,834.90
—	Rotary Claw DPE System ( $\leq 850$ CFM)	<i>NTE</i>	\$202,000.00
M2621	Free Product Recovery System	Hour	\$1.30
M2622	Free Product Recovery System	Day	\$32.30
M2623	Free Product Recovery System	Week	\$225.80
—	Free Product Recovery System	<i>NTE</i>	\$9,500.00
M2624	Bag Filters	Each	\$16.40
M2625	Liquid Activated Carbon (200 lb)	Week	\$47.00
M2626	Liquid Activated Carbon (200 lb)	Hour	\$0.40
M2627	Total Fluids Pump (1 hp, $\leq 25$ GPM)	Hour	\$0.80
M2628	Total Fluids Pump (1 hp, $\leq 25$ GPM)	Day	\$18.80
M2629	Total Fluids Pump (1 hp, $\leq 25$ GPM)	Week	\$131.70
—	Total Fluids Pump (1 hp, $\leq 25$ GPM)	<i>NTE</i>	\$5,152.00

Code	Description	Unit Type	2022 Unit Rate
M2630	Low-Profile Air Stripper – 15 GPM	Hour	\$2.30
M2631	Low Profile Air Stripper – 25 GPM	Hour	\$3.00
M2632	Low Profile Air Stripper – 50 GPM	Hour	\$3.80
	Regenerative Vapor Extraction Blowers		
M2633	≤ 127 SCFM	Hour	\$1.50
M2634	≤ 127 SCFM	Day	\$34.20
M2635	≤ 127 SCFM	Week	\$239.00
—	≤ 127 SCFM	<i>NTE</i>	\$8,000.00
M2636	≤ 160 SCFM	Hour	\$1.90
M2637	≤ 160 SCFM	Day	\$45.70
M2638	≤ 160 SCFM	Week	\$319.90
—	≤ 160 SCFM	<i>NTE</i>	\$11,000.00
M2639	≤ 280 SCFM	Hour	\$2.40
M2640	≤ 280 SCFM	Day	\$56.90
M2641	≤ 280 SCFM	Week	\$397.90
—	≤ 280 SCFM	<i>NTE</i>	\$13,000.00
M2642	≤ 345 SCFM	Hour	\$2.80
M2643	≤ 345 SCFM	Day	\$68.00
M2644	≤ 345 SCFM	Week	\$476.00
—	≤ 345 SCFM	<i>NTE</i>	\$165,000.00
M2645	Rotary Phase Converter	Hour	\$0.50
M2646	Rotary Phase Converter	Week	\$80.00
—	Rotary Phase Converter	<i>NTE</i>	\$10,000.00
M2647	Continuous Belt Free Product Skimmer	Hour	\$1.60
M2648	Continuous Belt Free Product Skimmer	Week	\$267.20
—	Continuous Belt Free Product Skimmer	<i>NTE</i>	\$9,000.00
M2649	Free Product Skimmer Belt	Foot	\$42.70
M2650	Hydrogen Peroxide	500 lb	\$477.70
M2651	Telemetry System with Auto-dialer	Each	\$4,000.00
M2652	Biological Treatment (≤ 12 GPM)	Hour	\$2.30

### 3 MATERIAL CODE DESCRIPTIONS

The subsections in **Section 3** provide supplemental information and better descriptions to assist in the claim process. Descriptions for items in **Section 2** are not provided when there is no useful supplemental information or when the short description provided is sufficient.

Wear and tear is factored into calculations of material codes. Replacement wear items such as common drill bits and saw blades for owned equipment are not reimbursable.

#### 3.1 LABOR & SERVICES

<b>Code</b>	<b>Description</b>
M2119	<b>HSA Split Spoon Sampling:</b> This item includes the use of split-spoon samplers, liners, and expendables necessary to collect a soil sample.
M2123	<b>Air Rotary Setup after HSA:</b> Claim this code when drilling via hollow stem auger and conditions require switching to air rotary drilling. The Air Rotary Setup is to be performed once per event after all hollow stem drilling has been completed.
M2124	<b>Drill Rig Standby:</b> Standby may be charged when a drill rig and crew are staged and ready to work, but are not in operation. This does not include delays that are intrinsic to the drilling, such as logging, sampling, and well development.

#### 3.2 LABORATORY ANALYSES

Rates include cost of sample containers unless otherwise specified. This includes single-use field samplers used for Method 5035 preservation such as TerraCore® samplers.

Analytical test revisions (8015B, C, etc.) are not specified in this document to allow for future revisions to test methods and EPA guidance. EPA-recognized tests and VELAP-approved tests performed by VELAP-accredited laboratories are generally considered reimbursable. **Do not claim new revisions of an existing test as an X-code.**

Refer to **Section 3.2.3.6** of Volume VI of the *Reimbursement Guidance Manual* to determine the correct reimbursable amount for laboratory analyses. DEQ provides a Lab-Soil Cost Aid worksheet on the Petroleum Program webpage to assist in the calculation.

Certain 007 Schedule laboratory codes such as M1682 have been rewritten from BTEX to BTEXMN, and to include fuel oxygenates. This rewrite was necessary to account for the wide range of fuels and fuel additives, and the improvement in test methods since the release of Volume IV of the *Reimbursement Guidance Manual*. Work with your regional case manager and your laboratory project manager to claim the correct code and analytical suite based on site history and project needs.

M2215 “MNA Parameters” is a suite of analyses commonly claimed together as part of Corrective Action Plans involving MNA or NSZD. The UCR is based on the listed analyses. Specific methods may differ depending on project needs, but the maximum reimbursable amount remains the same.

### 3.3 ASSESSMENT & SAMPLING

<b>Code</b>	<b>Description</b>
M2300 – M2302	<b>Explosimeter:</b> This code consists of a hand-held gas monitor needed for measuring LEL, O <sub>2</sub> and toxic gases. Cost of calibration gases not included. Claim M2303 & M2304 for a full-function PID.
M2303 & M2304	<b>PID:</b> This code refers to a handheld photoionization detector. Claim “Explosimeter” if only LEL, O <sub>2</sub> and toxic gas measurement are necessary. Cost includes filters, battery, and other basic accessories. Cost of calibration gases not included. Compare to a Rae Systems MiniRae 2000 or similar.
M2305 & M2306	<b>FID:</b> This code refers to a handheld flame ionization detector. Cost includes battery and other accessories. Cost of hydrogen gas not included. Compare to a Photovac MicroFID or similar.
M2307	<b>Sampling Kit:</b> This code is based on the cost of a disposable HDPE bailer and string. This code can be claimed per well sampled, regardless of well diameter or depth.
M2309 & M2310	<b>Oil/Water Interface Probe:</b> This code is based on an interface probe 100 feet long, and capable of measuring depth to free product and depth to water within 0.01 foot.
M2311 & M2312	<b>Hand Auger:</b> This item includes the cost of bucket, extensions, and handle.
M2313 & M2314	<b>Power Auger:</b> This item is based on the cost of a gasoline powered auger capable of digging an approximately 8" diameter hole.
M2315 & M2316	<b>Peristaltic Pump:</b> This code includes the pump and parts needed for sampling with a peristaltic pump.
M2317- M2320	<b>Tubing:</b> These codes include types of tubing commonly used in environmental sampling pumps. Special purpose tubing (reinforced PVC, Tygon®) may be claimed as X-codes when the situation requires.
M2321 & M2322	<b>Bladder Pump:</b> This code includes the pump and parts needed for sampling with a bladder pump.
M2323 & M2324	<b>DO Meter:</b> This code includes the probe, controller, cables, and other accessories needed to measure dissolved oxygen. Compare to the YSI 55, Hanna 9142, or similar meter.
M2325 & M2326	<b>pH Meter:</b> This code includes the probe, controller, and other accessories. Compare to the YSI 60, Hanna 9125, or similar meter.
M2327 & M2338	<b>Multiparameter Meter:</b> This code includes the sonde, flow-thru cell, controller, cables, calibration solutions, and other accessories necessary for collecting groundwater parameters during low-flow sampling. Claim this UCR when collecting multiple groundwater parameters, including but not limited to: pH, DO, conductivity, temperature, and ORP. Compare to the Horiba U-52, YSI 556, or similar meter.
M2329 & M2330	<b>Air Velocity Meter:</b> This code refers to a vane or probe style air velocity meter (anemometer) needed for measuring air speed and temperature.
M2331 & M2332	<b>Air Sampling Pump:</b> This code refers to a pump and parts needed for collecting a personal air sample.
M2333 & M2334	<b>GPS Unit (Subfoot Grade):</b> This code is based on a GPS unit capable of measuring with subfoot accuracy. This item is suitable for determining position on the site, but a supplementary method must be used to determine elevation if necessary. The use of a less accurate device (such as a trail GPS) is a tool of the trade and is not eligible for reimbursement.
M2335 & M2336	<b>Transit Level Kit:</b> This code includes a transit level, tripod, leveling rod, and standard accessories.

<b>Code</b>	<b>Description</b>
M2337 & M2338	<b>Utility Wand:</b> This code refers to any handheld EM or GPR device used to detect buried pipes or cables. A fiberglass utility probe used to check for obstructions or buried objects is a tool of the trade and is not eligible for reimbursement.
M2339 & M2340	<b>Downwell Pump and Controller:</b> This code is based on a 2-inch pump, controller, and parts for a submersible pump. Compare to a Grundfos Redi-Flo, QED Hammerhead or similar.
M2341 & M2342	<b>Datalogger/Pressure Transducer:</b> This code includes the transducer, controller, and cables needed for collecting groundwater level or barometric pressure during aquifer tests and pump tests. Compare to the Solinst Levellogger or similar. Use M2343 and M2344 for multiparameter transducers.
M2343 & M2344	<b>Multiparameter Transducer:</b> This code includes the transducer, controller, and cables needed for collecting water quality parameters from the aquifer. Claim this UCR when using a transducer to collect multiple groundwater parameters, including but not limited to: pressure, pH, DO, conductivity, temperature, and ORP. Compare to the Aqua Troll 200 or similar. Use M2341 and M2342 for pressure transducers.

### 3.4 CONSTRUCTION

<b>Code</b>	<b>Description</b>
M2350 – M2353	<b>Air Compressors:</b> These codes include all hoses and connections needed to connect to pneumatic equipment.
M2354 & M2355	<b>Generator – Portable:</b> These codes refer to the range of gasoline-powered generators easily carried or wheeled around a site to provide power for tools or equipment.
M2356 – M2359	<b>Generator – Towed:</b> These codes refer to the range of larger diesel-powered generators commonly used for emergency response work and backup power generation.
M2361	<b>Topsoil (40 lb):</b> This item may be claimed up to 36 units. Use M2362 to claim bulk topsoil in amounts greater than 36 bags.
M2362	<b>Topsoil (Bulk):</b> This item refers to bulk soil purchased by volume
M2368 & M2369	<b>Road Safety Cones:</b> These codes refer to cones rented for use in long-term traffic control such as when working by a roadside. Cones used during common work activities, such as to delineate the work area while groundwater sampling or excavating, are considering tools of the trade and are not reimbursable.
M2375 – M2377	<b>Flood Light:</b> These codes are based on a light tower with four 1,000 watt lights and ≤ 20 kW generator.
M2384 & M2385	<b>Jackhammer:</b> This item includes the tool, bits and attachments for an electric or pneumatic jackhammer weighing 90 pounds or less.
M2386 & M2387	<b>Rotary Hammer:</b> These items include the tool and accessories for an electric rotary hammer with a 2 inch or smaller chuck.
M2414 & M2415	<b>Air Scrubber, (200-1000 CFM):</b> This item refers to a 3-stage filtration portable air scrubber.
M2416 & M2417	<b>Ventilation/Exhaust Blower (~1500 CFM):</b> This item refers to an explosion-proof blower fan suitable for use in hazardous environments. The cost includes use of a flexible duct.
X-	<b>Bioremediation Solvent:</b> These items are applied in different formulations and strengths depending on manufacturer’s recommendation. Claim these items using an X-code.

<b>Code</b>	<b>Description</b>
M2418 & M2419	<b>Discharge Hose:</b> This item includes any necessary couplings or converters.
M2420 & M2421	<b>Suction Hose:</b> This item includes any necessary couplings or converters.
M2428 – M2431	<b>Trash Pump:</b> This item refers to any heavy-duty pump capable of handling water with solids. This includes conventional trash pumps, diaphragm pumps, and sewage-grade sump pumps.
M2432	<b>Bentonite Chips:</b> This item refers to bentonite chips screened from ¼ inch to ¾ inch in size.
M2434	<b>Bentonite Pellets:</b> This item refers to bentonite pellets screened at ¾ inch in size.
M2447 & M2448	<b>Manhole:</b> These items include bolt-down watertight lids.
M2457 & M2458	<b>Vault:</b> These codes refer to locking watertight vaults.

### 3.5 DISPOSAL & WASTE MANAGEMENT

Disposal codes are based on disposal of non-hazardous waste. Disposal rates do not include transport or any required waste characterization analyses.

<b>Code</b>	<b>Description</b>
M2461	<b>Disposal of Petroleum Contaminated Solids – Ton:</b> Petroleum contaminated solids refers to soils, absorbents, and other contaminated materials that are disposed of at a traditional <b>landfill</b> rather than treated through bioremediation or similar processes.
M2462 – M2463	<b>Disposal of Petroleum Contaminated Material – Drum:</b> These codes do not include the cost of the drum, drum transport or pick-up, or hazardous material disposal.
M2464	<b>Drum – 55 gallon:</b> This item is based on the cost of a DOT approved, 55-gallon steel drum.
M2466	<b>Intermediate Bulk Container / Tote:</b> This item is based on the cost of a 275-gallon IBC/tote with fittings, secured with steel cage and steel pallet. Cost does not include any secondary containment.
M2467 – M2468	<b>HDPE Tank:</b> These items are based on the cost of a HDPE tank of listed gallonage with necessary fittings.
M2472	<b>Decon Kit:</b> This code is based on the cost of distilled water and biodegradable detergent (e.g. Alconox) for use during decontamination of sampling equipment. Other items (e.g. brushes, buckets) are tools of the trade and are not reimbursable. Expendables and equipment for decontamination of construction equipment and drill rigs are included in the calculation of those UCRs. This code can be claimed per sampling day.

### 3.6 ROLLING STOCK

<b>Code</b>	<b>Description</b>
M2480 – M2483	<b>Dump Trucks:</b> All codes include personnel costs for Operator and costs for equipment operation.
M2484	<b>Stake Bed Truck:</b> The cost is based on operating costs for a truck with a 5-ton payload, removable sides, and hydraulic lift-gate.

<b>Code</b>	<b>Description</b>
M2485 & M2486	<b>Box Trailer:</b> Costs are based on a single-axle cargo trailer measuring approximately 7' x 12' with approximate payload 3,000 pounds.
M2487 & M2488	<b>Flatbed Trailer:</b> Costs are based on a dual-axle trailer with approximate payload of 10,000 pounds.
M2489 & M2490	<b>Dump Trailer:</b> Costs are based on a hydraulic powered dump trailer with a 20 CY capacity.
M2491	<b>Vacuum Truck:</b> Costs are based on portal-to-portal time for a vacuum truck, operator, and operating costs. Costs are based on a truck with maximum vacuum 18 in Hg and 15 CY payload capacity. Claim disposal separately using appropriate codes.
M2492	<b>Industrial Vacuum Loader:</b> Compare to a Super Vac or Guzzler truck with maximum vacuum 27 in Hg and 18 CY payload capacity. Costs are based on portal-to-portal time for a vacuum truck, operator, and operating costs. Claim disposal separately using appropriate codes.
M2493	<b>Frac Tank/Tanker Trailer:</b> Costs include mob, demob, decon, and all associated charges (labor, loading, etc.) for use of a frac tank, tanker trailer, or similar. Select the appropriate codes M2494 – M2496 for rental period. <b>Use Dump Truck Code M2481 for waste transport during the rental period.</b> Claim disposal separately using appropriate codes.
M2497 & M2498	<b>Backhoe Loader:</b> This item is based on a 75-85 hp unit with 4WD, weighing about 15,000 pounds, with 14.5 feet reach and 1.25 CY bucket. Operating costs are included.
M2499 – M2508	<b>Excavator:</b> All classes of this item include operating costs. <b>Provide model number or rental invoice as documentation of weight class.</b>
M2509 & M2510	<b>Skid Steer Loader &amp; Bucket:</b> This item is based on a unit up to 50 hp. Bucket and operating costs are included.
M2511 & M2512	<b>Skid Steer Loader &amp; Bucket:</b> This item is based on a 50-80 hp unit. Bucket and operating costs are included.
M2513 & M2514	<b>Skid Steer Breaker Attachment:</b> This item refers to a hydraulic breaker for use with a skid steer.

### 3.7 SYSTEMS & COMPONENTS

Costs for Dual-Phase Extraction Systems (M2600 – M2620) do not include the costs of subsurface recovery components or electrical power.

<b>Code</b>	<b>Description</b>
M2600 – M2605	<b>Dual-Phase Extraction Treatment Assembly:</b> These codes refer to a DPE system consisting of the following items: oil-water separator, air stripper with blower, activated carbon vessels, transfer pumps, all necessary switches, controls, gauges, monitoring points and connecting fittings. Use M2600 – M2602 for systems with a maximum capacity of up to 12 GPM; use M2603 – M2605 for systems with a maximum capacity between 12 GPM and 22 GPM.
M2606 – M2611	<b>Oil-Sealed Dual Phase Extraction System:</b> These codes refer to a dual-phase extraction system consisting of the following items: oil-sealed liquid ring pump and motor, inlet manifold, inlet moisture separator and transfer pump, air/oil separator tank, heat exchanger, controls, gauges, alarms, switches, and all connecting fittings. Use M2606 – M2608 for systems with a maximum flow rate of up to 500 CFM; use M2609 – M2611 for systems with a maximum flow rate between 500 CFM and 850 CFM.

<b>Code</b>	<b>Description</b>
M2612 – M2620	<b>Rotary Claw Dual Phase Extraction System:</b> These codes refer to a dual-phase extraction system consisting of the following items: rotary claw vacuum pump and prime mover operating at a vacuum of 25 in Hg, inlet manifold, drop out tank, seal water reservoir, controls, gauges, switches and all connecting fittings. Use M2612 – M2614 for systems with a maximum flow rate of up to 250 CFM; use M2615 – M2617 for systems with a maximum flow rate between 250 CFM and 500 CFM, and use M2618 – M2620 for systems with a maximum flow rate between 500 CFM and 850 CFM.
M2621 – M2623	<b>Free Product Recovery System:</b> These codes are based on a system composed of one product only recovery pump and controller, compressor, high water shut-off device, well-head assembly, and recovery drum. These codes do not include labor and materials for system installation, O&M, electrical power, or waste disposal.
M2624	<b>Bag Filters:</b> Costs are based on a 10 micron polyester filter with 32 liter capacity.
M2625 & M2626	<b>Liquid Activated Carbon:</b> Costs are based on a 200 pound unit.
M2627 – M2629	<b>Total Fluids Pump:</b> Costs are based on a 4" total fluids pump with flowrate of up to 25 GPM and rating of up to 1 hp.
M2630 – M2632	<b>Low-Profile Air Stripper:</b> These codes refer to a low-profile air stripper capable of 95% BTEX removal with blower & motor, control panel, and sump pump.
M2633 – M2644	<b>Regenerative Vapor Extraction Blower:</b> These codes refer to explosion-proof regenerative vapor extraction blowers. Select the correct code based on use period and flow rate.
M2645 & M2646	<b>Rotary Phase Converter:</b> This item refers to a rotary phase converter capable for use with an electric motor up to 50 hp.
M2647 & M2648	<b>Continuous Belt Free Product Skimmer:</b> This item include an explosion-proof mechanical belt skimmer system, drive motor, control panel, wellhead adapter, high level shut-off, and necessary pulleys and weights. Use M2649 to claim oleophilic belt.
M2651	<b>Telemetry System with Autodialer:</b> This item refers to a telemetry system with programmable logic controllers, such as a Sensaphone model monitoring system. It does not include the cost of telephone or Internet service. Purchase of telemetry systems will be authorized only for long-term lease or purchase of remediation system.
M2652	<b>Biological Treatment:</b> This code refers to a biological treatment system capable of achieving 95% BTEX removal with hydraulic capacity of up to 12 gpm. Costs include piping, manifold, blower, transfer pumps, switches, media, bioculture, and required nutrients.
M2653 – M2655	<b>SVOCs (Full Suite) by Method 8270/625:</b> This code refers to laboratory analysis of the full suite of semivolatile compounds. <b>PAHs (M2213/M2242/M2262) should be claimed in most situations since that code is limited to petroleum compounds</b>
M2656	<b>Water Hardness:</b> This code applies to sampling of water hardness as required for discharge permits and potable well replacements.
M2657	<b>Total Suspended Solids:</b> This code applies to sampling of water for total suspended solids as required for discharge permits.
M2658	<b>HDPE Tank 2,500-4,000 gallon:</b> This item is based on the cost of a HDPE tank of listed gallonage with necessary fittings.

## 4 COMMODITY CODE UCRS

Code	Item	Unit Type	Unit Rate
<b>COMMODITY CODES</b>			
I2019	Vehicle Mileage (2019)	Mile	\$0.58
I2020	Vehicle Mileage (2020)	Mile	\$0.575
I2021	Vehicle Mileage (2021)	Mile	\$0.56
I2022	Vehicle Mileage (2022)	Mile	\$0.585
	Remediation System Power	See Below	Cost +6.0%
C2001	Electric	Month	
C2002	LP Gas	Gallon	
C2003	Natural Gas	Month	
C2004	Gasoline	Gallon	
C2005	Diesel	Gallon	
C2006	Municipal Water Service Connection	Fee	
C2007	Municipal Sewer Service/Pre-treatment	Month	
C2008	Permit Fee	Permit	
C2009	Telemetry Service	Month	
C2010	Electrical Power Connection	Lump Sum	
C2011	Fuel Surcharge	Lump Sum	
C2012	Posting of Public Notice	Lump Sum	
C2013	Bulk Fill Material	Lump Sum	
<b>MINIMUM CHARGE ADJUSTMENTS</b>			
A2001	Minimum Hauling Charge	Surcharge	Cost + 6.0%
A2021	Minimum Disposal Charge, when the facility sets a minimum charge for small quantities.	Surcharge	Cost + 6.0%

## 5 COMMODITY CODE DESCRIPTIONS

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Commodity codes (C-codes) will be reimbursed at cost plus 6.0% markup unless otherwise noted. A bill or invoice must be submitted to support the cost for each claimed commodity item. See **Section 3.2.7** of Volume VI of the *Reimbursement Guidance Manual* for requirements on claiming markup.

### 5.1 VEHICLE MILEAGE (I-CODES)

Vehicle mileage rates (I-codes) are based on annually adjusted IRS standard mileage rates on the date of travel. All standard passenger vehicles (i.e., cars, trucks, vans) claim standard IRS mileage rates. Current mileage rate information can be found at [www.irs.gov](http://www.irs.gov).

Claimed mileage is not eligible for markup.

*Example:* A technician travels to the site during the Initial Abatement Phase in June 2020. Mileage can be claimed at the IRS standard mileage rate for June 2020 by using the code I-2020. The technician returns to the site in June 2022 during the Corrective Action Plan Implementation Phase. Mileage during this phase can be claimed at the IRS standard mileage rate on the date the miles were driven (using the code I-2022).

### 5.2 REMEDIATION SYSTEM

Electrical service claimed for remediation system must be independently metered.

Electrical power connection may only be claimed if the power supplier provides labor and materials for the connection.

Other listed fuels must be used for remediation system power supply only. They may not be claimed for vehicle use.

### 5.3 PERMIT FEE

Federal, state, and local permit fees required to implement and complete approved remediation activities are reimbursable expenses. Potable well permit fees are not reimbursable as C2008; these fees are refunded when the well is abandoned and it is the responsibility of the RP and/or their remediation consultant to abandon the well(s) in a timely manner.

### 5.4 TELEMETRY SERVICE

Claim this item for remediation system telemetry only. Internet or phone service for telemetry must be claimed separately.

### 5.5 FUEL SURCHARGE

The basis for calculating the surcharge must be provided with the claim and the surcharge must be clearly identified on the invoice. This code cannot be used to claim a surcharge charged by the primary consultant's company.

## **5.6 BULK FILL MATERIAL**

Use C2013 to claim reimbursement for bulk fill materials used during remediation. Examples include but are not limited to sand, gravel, crushed stone, and recycled concrete. Provide weigh tickets and invoice from the supplier for documentation. Claim by the amount charged on the invoice.

## **5.7 MINIMUM CHARGE ADJUSTMENTS**

A-codes are used to claim services where minimum quantities or rates apply. All costs claimed using an A-code must be supported by an invoice that identifies the charge.

## 6 TASK CODE UCRS

Code	Description	Unit Type	2022 Unit Rate
T200	Monitor for Vapor Hazards	Hour	\$107.00
T201	Emergency Mitigation of Vapor Hazards – O&M	Day/Blower	\$236.00
T202	FPR from a Well – Manual	Hour	\$95.00
T203	Install Boom in Surface Water	Foot	\$38.00
T204	Boom Inspection	Hour	\$131.00
T205	Boom Replacement	Foot	\$26.30
T206	Site Reconnaissance & Initial Site Map: Standard	Total	\$318.00
T207	Site Reconnaissance & Initial Site Map: Complex	Total	\$710.00
T208	UST System Tightness Testing	UST System	\$770.00
T209	Light Equipment Mob/Demob	Per Event	\$700.00
T210	Heavy Equipment Mob/Demob	Per Event	\$900.00
T211	DPT Rig Mob/Demob	Per Event	\$900.00
T212	Drill Rig Mob/Demob	Per Event	\$900.00
T213	Remediation System Mob/Demob	Per Event	\$900.00
T214	Soil Boring	Foot	\$23.00
T215	Monitoring Well Conversion, Temporary – One-Inch	Foot	\$13.00
T216	Monitoring Well Installation, Permanent – Two-Inch	Foot	\$70.00
T217	Monitoring Well Installation, Permanent – Four-Inch	Foot	\$83.00
T218	Log Soil Borings (Well Installation or Borings)	Hour	\$100.00
T219	Hand Auger Soil Sampling	Sample	\$100.00
T220	Grab Soil Sampling	Sample	\$23.00
T221	Bulking	Cubic Yard	\$68.50
T222	Soil Gas Sample Point Installation	Point	\$165.00
T223	Site Survey – Monitoring/Recovery Wells	Hour	\$155.00
T224	Property Survey	Hour	\$180.00
T226	General Project Management	Percentage	5%
T227	Reseeding < 1 acre	Square Foot	\$0.20
T228	Reseeding ≥ 1 acre	Square Foot	\$0.10
T230	Direct Push Survey, Track/Truck Rig	Day	\$3,000.00
T231	GPR Survey, 4 hour minimum	Hour	\$430.00
T232	Slug Test	Hour	\$170.00
T233	LNAPL Transmissivity Testing	Hour	\$178.00

Code	Description	Unit Type	2022 Unit Rate
	Well Abandonment		
T234	One-Inch	Foot	\$13.80
T235	Two-Inch	Foot	\$15.00
T236	Four-Inch	Foot	\$17.50
T237	Six-Inch	Foot	\$20.00
T238	Aquifer Pumping Test	Hour	\$244.00
T239	Domestic Well Sampling	Sample	\$105.25
T240	Surface Water Sampling	Sample	\$40.00
T241	Soil Hauling (< 75 Tons, ≤ 100 Miles)	Ton/Mile	\$0.60
T242	Soil Hauling (< 75 Tons, > 100 Miles)	Ton/Mile	\$0.53
T243	Soil Hauling (≥ 75 Tons, ≤ 100 Miles)	Ton/Mile	\$0.46
T244	Soil Hauling (≥ 75 Tons, > 100 Miles)	Ton/Mile	\$0.41
T245	Treatment of Petroleum Contaminated Soil	Ton	\$58.00
T246	Report Preparation	Hour	\$132.00
T247	Small UST Pumpout	Hour	\$115.00
T248	Site History Research	Hour	\$125.00
	Monitoring Well Sampling		
T249	One-Inch, Bail and Purge	Well	\$120.00
T250	Two-Inch, Bail and Purge	Well	\$120.00
T251	Four-Inch, Bail and Purge	Well	\$185.00
T252	Low-Flow Sampling	Well	\$155.00
T253	No-Purge Sampling	Well	\$107.00
T254	Site Access Agreement	Hour	\$105.00
T255	Asphalt Pavement Removal 6" thick, ≤ 1,000 SF	Square Feet	\$1.50
T256	Asphalt Pavement Removal 6" thick, > 1,000 SF	Square Feet	\$1.35
T257	Reinforced Concrete Pavement Removal 6" thick, <1,000 SF	Square Feet	\$3.40
T258	Removal of Walkway Materials	Square Feet	\$6.40
T259	Restore Asphalt Paving, >1,000 SF	Square Feet	\$3.00
T260	Restore Concrete Paving	Square Feet	\$7.75
T261	Restore Sidewalks, Driveways, and Patios	Square Feet	\$12.00
T262	Trenching	Feet	\$8.60
T263	Silt Fence Installation	Feet	\$3.00
T264	Vacuum Excavation (SUE Quality Level A)	Hour	\$325.00
T265	Subsurface Line Location, Site (SUE Quality Level B)	Hour	\$250.00
T266	Subsurface Line Location, Excavation	Hour	\$110.00
T267	Terrain Conductivity/Electromagnetic Survey	Hour	\$350.00
T268	Spent Carbon Replacement	Pound	\$4.20

<b>Code</b>	<b>Description</b>	<b>Unit Type</b>	<b>2022 Unit Rate</b>
T269	Air Rotary Drilling and 2" Well Install	Foot	\$80.00
T270	Air Rotary Drilling and 4" Well Install	Foot	\$92.00

## 7 TASK CODE DESCRIPTIONS

<b>Code</b>	<b>Task</b>
T200	<b>Monitor for Vapor Hazards:</b> This task consists of the personnel time for a Junior Level Professional and the use of equipment to monitor vapors or free product that have migrated from the point of release into subsurface structures and other transport pathways. The cost for this task is based on personnel time and the use of an explosimeter and PID.
T201	<b>Emergency Mitigation of Vapor Hazards – O&amp;M:</b> This task consists of the personnel time for a Senior Technician and the use of equipment to monitor vapor hazards and reduce the immediate danger without creating a new hazard. The cost for this task is based on the use of an explosimeter and a vapor extraction blower, and assumes electrical power is available.
T202	<b>FPR from a Well – Manual:</b> This task consists of personnel time for a Senior Technician and the use of equipment to gauge a well to determine depths to water and product and recover any product by hand-bailing. The cost for this task is based on the use of a sampling kit, oil-water interface probe, and a 55-gallon steel drum. The task also includes recording the total amount of free product removed, if any.
T203	<b>Install Boom in Surface Waters:</b> This task consists of personnel time for a Junior-Level Professional and two Laborers and the use of equipment to install sorbent materials across portions of a stream or other surface water body impacted by a petroleum product. The cost for this task is based on the use of four 10-foot sorbent booms, a box of sorbent pads, polypropylene rope, and steel fence posts. This task also includes time for downstream inspection of possible health risks or environmental impacts from the petroleum release.
T204	<b>Boom Inspection:</b> This task consists of personnel time for a Junior Level Professional and a Laborer to inspect booms placed in surface water for petroleum contaminant. The cost for this task also includes the time for downstream inspection of potential health risks or environmental impacts from the petroleum release.
T205	<b>Boom Replacement:</b> This task consists of personnel time consists of personnel time for a Senior Technician and Laborer and the use of equipment to replace and/or repair sorbent booms and pads placed in surface water for petroleum containment. The cost for this task also includes the cost for the use of consumables (sorbents, rope) and a steel drum for disposal.
T206	<b>Site Reconnaissance &amp; Initial Site Map, Standard:</b> This code is intended to be used when limited professional hours are needed to prepare a basic site map of the immediate release area. This task consists of personnel time for a Junior Level Professional to conduct a site inspection and a CAD Operator to generate a site map. Examples of sites where this task usually is appropriate include oil discharges on vacant lots, heating oil releases at residential properties, releases from farm or residential motor fuel tanks of 1100 gallons or less. The site map must reasonably note the location of tanks, dispensers, on-site drinking water wells, borings/monitoring wells, sample locations, and other site features in relation to the nearest building (if applicable). Site map must show North and direction of slope.

<b>Code</b>	<b>Task</b>
T207	<b>Site Reconnaissance &amp; Initial Site Map, Complex:</b> This code is intended to be used for more complex sites where potential receptors have been or need to be identified due to contaminant levels; drawings to scale with a North arrow are required to support detailed risk and remediation assessments and/or remediation system design. This task consists of personnel time for a Junior Level Professional to conduct a site inspection and a CAD Operator to generate a scale site map displaying features of the immediate site, adjacent parcels, and nearby properties. The site map must note the location of tanks, dispensers, monitoring wells, borings, sample locations, and other pertinent site features. The location of potential migration pathways such as utility lines, storm and sanitary sewers, catch basins, and drainage features must also be noted. The map should suffice for the development of a Health and Safety Plan and for locating assessment and remediation activities. Use this code when a detailed site map is necessary to support release response and corrective action activities. Examples of sites often needing this level of detail include active retail petroleum stations, bulk oil terminals, commercial and industrial properties, and other properties with multiple utilities or migration pathways.
T208	<b>UST System Tightness Testing for Leak Confirmation:</b> This task consists of testing the UST system tightness (tank and lines) above and below the product level using a method meeting requirements outlined in the UST technical regulations. The cost for this task includes all labor and equipment necessary to complete the testing, and the preparation of a tank tightness test report. The number of systems to be testing must be specified. The purchase of product for testing is not a reimbursable expense.
—	<b>Mob/Demob:</b> Codes below are for Mob/Demob are the maximum costs allowable for mob and demob per item per event. A single piece of equipment mobilized to the site multiple times during the same work event may only claim this code once. <i>Mob/demob task codes cannot be claimed when rental equipment is delivered. Instead, claim delivery charges as an X-code.</i>
T209	<b>Light Equipment Mob/Demob:</b> This task consists of round-trip transportation of operator and equipment that can be towed on a 5-ton payload trailer or hauled in a truck. Examples include mini excavators, skid steers, and compactors. This task may be claimed once per mobilization.
T210	<b>Heavy Equipment Mob/Demob:</b> This task consists of round-trip transportation of operator and equipment that can be towed on a 25-ton payload trailer. Examples include standard excavators and backhoes. This task may be claimed once per mobilization.
T211	<b>DPT Rig Mob/Demob:</b> This task consists of transportation of a track or truck-mounted drill rig and crew to and from the site. This task may only be claimed once per drilling event.
T212	<b>Drill Rig Mob/Demob:</b> This task consists of transportation of a drill rig and drill crew to and from the site. This task may only be claimed once per drilling event.
T213	<b>Remediation System Mob/Demob:</b> This task is for mobilization to and from the site and includes personnel time and use of a tow vehicle and trailer or suitable truck for transport of extraction and treatment components.
T214	<b>Soil Boring:</b> This task includes one rig and crew to advance soil borings using HSA/SS or DPT and perform soil sampling at 5-foot intervals. Also included in this task is all field equipment necessary to complete the borings (decontamination fluids, 2" sleeves, expendables) and time to decontaminate equipment and relocate the rig between borings. This task does not include analytical or mobilization costs.

<b>Code</b>	<b>Task</b>
T215	<b>Monitoring Well Conversion, Temporary – One-inch:</b> This task consists of the conversion of soil borings to one-inch temporary monitoring wells. The cost includes all well completion materials, decontamination equipment and supplies, and the personnel time and equipment to develop the well. This task does not include costs to log the boring and well, or screen and collect soil samples.
T216	<b>Monitoring Well Installation, Permanent – Two-inch:</b> This task consists of the installation of two-inch permanent monitoring wells. The cost for the task is based on the cost for using hollow stem auger and soil sampling every five feet using two-inch split spoons. It includes well completion materials, watertight locking manhole covers, concrete pad, decontamination equipment and supplies, and personnel time and equipment to develop the well. This task does not include costs to log the boring and well, or screen and collect soil samples.
T217	<b>Monitoring Well Installation, Permanent – Four-inch:</b> This task consists of the installation of four-inch permanent monitoring wells. The cost for the task is based on the cost for using hollow stem auger and soil sampling every five feet using four-inch split spoons. It includes well completion materials, watertight locking manhole covers, concrete pad, decontamination equipment and supplies, and personnel time and equipment to develop the well. This task does not include costs to log the boring and well, or screen and collect soil samples.
T218	<b>Log Soil Borings:</b> This task includes personnel time and equipment costs for a Junior Level Professional to describe soil, to use a PID to field screen and collect samples, and to log the well or boring.
T219	<b>Hand Auger Soil Sampling:</b> This task is for soil samples collected by hand auger. The cost for this task is based on personnel time for a Technician, and the use of a PID, a hand auger with extensions, decontamination kit, and express shipment of samples packed in a cooler with ice.
T220	<b>Grab Soil Sampling:</b> This task is for collecting a grab soil sample. The task includes but is not limited to collecting grab samples from surface soil, waste piles, pits, or equipment buckets. The cost for this task is based on personnel time for a Technician, the use of a PID, and express shipment of samples packed in a cooler with ice.
T221	<b>Backfilling:</b> This task consists of backfilling an excavation with rock fill dumped from trucks, placed with a skid-steer. The cost includes all backfill materials, labor, and delivery within 25 miles. The volume of backfill may not exceed the volume of material eligible for reimbursement.
T222	<b>Soil Gas Sample Point Installation:</b> This task consists of personnel time for a Mid-Level Professional and a Senior Technician, and the use of equipment and materials to install a soil gas point. The cost for this task is based on the use of a soil probe and accessories, rotary hammer drill, tubing, Tedlar bags and pump. Costs include shipment of samples to a lab for analysis, and equipment preparation and decontamination.
T223	<b>Site Survey - Monitoring/Recovery Wells:</b> This task consists of personnel time for a Senior Technician and a Junior Level Professional, and the use of a survey level and tripod to survey site wells for relative location and top of casing elevation based on a site datum. A measuring wheel or tape is considered standard equipment and is not factored into the price. This task includes set-up and relocation time between measuring points.

<b>Code</b>	<b>Task</b>
T224	<b>Property Survey:</b> This task consists of costs for a Licensed Virginia Land Surveyor and survey rodman to perform a property survey and prepare a legal map and written description of the property suitable for recording in municipal deed books. The survey should also include horizontal and vertical locations of wells, remediation equipment, structures, and other relevant site features
T226	<b>General Project Management:</b> This task consists of personnel time associated with general project management. Project management tasks include: project planning, scheduling staff and subcontractors, contracting with subcontractors and vendors, routine meetings with RPs, and general correspondence with DEQ case manager. The following activities are NOT included under this task: attendance at public meetings, site meetings required by state or local officials, and site visits other than with the RP.
T227	<b>Reseeding (&lt;1 acre):</b> This task consists of personnel time for a Laborer to re-seed any area totaling less than one acre. The cost is based on the use of 5.5 pounds of fescue seed per 1,000 square feet and a broadcast spreader. The task also includes cost for time and material to mulch the area with straw by hand.
T228	<b>Reseeding (≥ 1 acre):</b> This task consists of the personnel time for a Laborer and materials needed to reseed any area one acre or greater. The cost for this task is based on the use of 5.5 pounds of fescue seed per 1,000 square feet and a tractor spreader. This task also includes personnel time to apply mulch to the reseeded areas with a power mulcher.
T230	<b>Direct Push Survey:</b> These tasks consist of the personnel time for a two-person crew using a direct-push rig and necessary equipment, materials, and services to conduct a soil probe survey. The survey will consist of the insertion of up to 30 probe points throughout the site and the collection of soil and/or groundwater samples.  Collection of samples, equipment preparation and decontamination, mob and demob are included in this task. Equipment costs for a direct-push rig, probe extensions, tip, screens, and buckets are included. Materials and costs for proper abandonment with bentonite are included. Costs for laboratory analysis of samples are not included.
T231	<b>GPR Survey:</b> This task consists of all personnel time and equipment needed to perform a GPR survey for subsurface features. The task includes time for report review, clerical support, and all other direct costs.
T232	<b>Slug Test:</b> This task consists of all personnel time for a Junior Level Professional and a Technician and equipment needed to conduct slug tests. The cost of this task is based on the use of a barometric transducer, a sampling kit for the rising-head test, a slug for the falling-head test, and a decon kit. The task does not include time for data interpretation or reporting.
T233	<b>LNAPL Transmissivity Test:</b> Claim this code when collecting data to measure $T_{LNAPL}$ using either baildown testing or manual skimming methods. This task consists of personnel time for a Junior Level Professional and a Senior Level Technician to perform transmissivity testing. The cost of this task is based on the use of a sampling kit, an oil-water interface probe, a decon kit, and a steel drum for disposal. The task does not include time for data interpretation or reporting.

<b>Code</b>	<b>Task</b>
T234 – T237	<b>Well Abandonment:</b> This task includes personnel time for a Senior Technician and Laborer to abandon a permanent monitoring well: removing the riser, vault, manhole and protective cover. The cost of this task includes the use of a 30' tremie pipe, funnel, bentonite, cement slurry, and water level indicator. The task does not include removal of subsurface screen or casing or the equipment, time, and labor needed to remove vaults or manholes set in concrete or pavement. Refer to list of <b>Task Code UCRs</b> for specific codes by well diameter.
T238	<b>Aquifer Pumping Test:</b> This task is for conducting a pumping test to determine aquifer characteristics. The cost for this task is based on personnel time for a Mid-Level Professional and a Technician to conduct a pumping test and the equipment cost for an oil/water interface probe, a downwell pump, a portable generator, three pressure transducers (one control, one test, and one atmospheric), and decontamination supplies. Additional transducers are reimbursable as needed using the appropriate Mcode. This task does not include any costs for water collection or disposal, or the time for data analysis or reporting.
T239	<b>Domestic Well Sampling:</b> This task is for sampling of domestic water supplies. The cost for this task is based on the personnel time for a Technician to collect samples from the tap of a drinking water source, and express shipment of samples in a cooler on ice.
T240	<b>Surface Water Sampling:</b> This task is for sampling surface waters. The cost for this task is based on the personnel time for a Technician to collect samples from surface water, and express shipment of samples in a cooler on ice.
T241	<b>Soil Hauling &lt; 75 Tons the First 100 Miles:</b> This task is for hauling less than 75 tons (50 cubic yards of soil) for distances up to 100 miles one-way. <b>For &lt; 75 tons, additional miles above the first 100 miles must be claimed using T242.</b> When requesting authorization for this Task, units for both tons and miles must be entered on the AAF. The cost for this task is based on the use of a dump truck with driver, including operating costs. The Soil Hauling Calculation Tool is available to assist in how to enter the hauling tons/miles into the AAF.
T242	<b>Soil Hauling &lt; 75 Tons Over 100 Miles:</b> This task is for hauling less than 75 tons (50 cubic yards of soil) for distances beyond the first 100 miles one-way. When requesting authorization for this Task, units for both tons and miles must be entered on the AAF. The cost for this task is based on the use of a dump truck with driver, including operating costs. The Soil Hauling Calculation Tool is available to assist in how to enter the hauling tons/miles into the AAF.
T243	<b>Soil Hauling ≥75 Tons the First 100 Miles:</b> This task is for hauling 75 tons (50 cubic yards of soil) or more for distances up to 100 miles one-way. <b>For ≥ 75 tons, additional miles above the first 100 miles must be claimed using T244.</b> When requesting authorization for this Task, units for both tons and miles must be entered on the AAF. The cost for this task is based on the use of a dump truck with driver, including operating costs. The Soil Hauling Calculation Tool is available to assist in how to enter the hauling tons/miles into the AAF.
T244	<b>Soil Hauling ≥ 75 Tons Over 100 Miles:</b> This task is for hauling less than 75 tons (50 cubic yards of soil) for distances beyond the first 100 miles one-way. When requesting authorization for this Task, units for both tons and miles must be entered on the AAF. The cost for this task is based on the use of a dump truck with driver, including operating costs. The Soil Hauling Calculation Tool is available to assist in how to enter the hauling tons/miles into the AAF.

<b>Code</b>	<b>Task</b>
T245	<b>Treatment of Petroleum Contaminated Soil:</b> This task consists of off-site thermal desorption or bio-remediation of less than 250 tons petroleum-contaminated soil. Quantities greater than 250 tons require bidding soil transport and treatment. This task does not include the cost for required pre-treatment laboratory analyses. Claim minimum charges using A2021.
T246	<b>Report Preparation:</b> This task is for preparation of all written reports, such as Initial Abatement Reports, Site Characterization Reports, Closure Reports, report Addenda, etc. The cost for this task includes all personnel time for writing report text; data analysis time; preparing sketched maps and figures as prepared by a CAD operator; translating field notes into tables/figures/boring logs/well construction diagrams; analyzing slug test data; simple ground water flow modeling and fate and transport modeling, e.g. Bioscreen, Bioplume 3, Solute, etc.; simple hydrologic calculations; sketching iso-concentration maps to be prepared later by a CAD operator; integrating field data with background site data. The cost also includes support activities such as peer review and all copying and binding costs. Authorize hours for this Task based only upon the estimated time necessary for a project manager, senior, mid, and junior level professionals to draft, edit, and review a report. For each hour of report writing authorized, the Task includes additional time and cost for preparation of maps, graphics, tables, copying, binding, etc. This Task does not cover field work; complex modeling requiring significant hours, e.g. Modflow; exceptional geologic research; the preparation of engineering plans and specs, or work specifically covered under another T-Code.
T247	<b>Small UST Pump-Out:</b> This task consists of equipment and personnel to remove product and sludge from small underground tanks. This task does not include the cost of a vac truck.
T248	<b>Site History Research:</b> This task consists of the personnel time for a Mid-Level Professional to research past activities that have occurred at or near the site related to petroleum storage and releases. This task includes interviews, deed research, location of tank system(s), tank history, and tank/property ownership history. This task is for research only; information derived from this research should be submitted to DEQ in reports and authorized under T100. The cost for this task also includes charges for government fees and documents. If more data are required, use M2127 "Site History Information" to authorize the cost of environmental database research, radius maps, Sanborn Maps®, or aerial photographs.
T249	<b>Monitoring Well Sampling – One-Inch Diameter:</b> This task consists of personnel time for a Technician and equipment to sample a one-inch monitoring well using bail and purge methods. Labor cost includes time for preparation, well purging, sample packing, decontamination, and travel between wells. Equipment includes a sampling kit, a decon kit, water level meter, and express shipping of samples in a cooler on ice.
T250	<b>Monitoring Well Sampling – Two-Inch Diameter:</b> This task consists of personnel time for a Technician and equipment to sample a two-inch monitoring well using bail and purge methods. Labor cost includes time for preparation, well purging, sample packing, decontamination, and travel between wells. Equipment includes a sampling kit, a decon kit, water level meter, and express shipping of samples in a cooler on ice.

<b>Code</b>	<b>Task</b>
T251	<b>Monitoring Well Sampling – Four-Inch Diameter:</b> This task consists of personnel time for a Technician and equipment to sample a four-inch monitoring well using bail and purge methods. Labor cost includes time for preparation, well purging, sample packing, decontamination, and travel between wells. Equipment includes a sampling kit, a decon kit, water level meter, and express shipping of samples in a cooler on ice.
T252	<b>Low-Flow Sampling:</b> This task consists of personnel time for a Technician and equipment to sample a well using low-flow methods. Labor cost includes time for preparation, well purging, sample packing, decontamination, and travel between wells. Equipment includes a pump capable of low-flow sampling, tubing, a multiparameter meter, water level meter, a decon kit, and express shipping of samples in a cooler on ice.
T253	<b>No Purge Well Sampling:</b> This task consists of personnel time for a Technician and equipment to collect samples using no purge methods. Labor cost includes time for preparation, sampler deployment, sampler collection, and travel between wells. Equipment includes the cost of passive diffusion samplers or grab samples, cables and expendables, water level meter, a decon kit, and express shipping of samples in a cooler on ice. This code may be claimed only when samples are successfully collected.
T254	<b>Site Access Agreement:</b> This task covers all costs for preparation and execution of an agreement to access a property owned by a third party. This task is based on personnel time for a Project Manager and Senior Level Professional to review a Site Access Agreement and make at least two attempts to present it to a property owner or landlord. The task also includes personnel time to prepare the document. The Regional DEQ Office must be notified immediately upon failure to obtain a signed Access Agreement.
T255	<b>Asphalt Pavement Removal (6" thick, ≤ 1,000 SF):</b> This task consists of personnel time for a Foreman and Laborers using pneumatic breakers and hand tools to break up and remove pavement up to 6" thick and 1,000 square feet or less. The task does not include hauling and disposal of removed pavement.
T256	<b>Asphalt Pavement Removal (6" thick, &gt; 1,000 SF):</b> This task consists of personnel time for a Foreman and Laborers using pneumatic breakers and hand tools to break up and remove pavement up to 6" thick and greater than 1,000 square feet. The task does not include hauling and disposal of removed pavement.
T257	<b>Reinforced Concrete Pavement Removal (6" thick, ≤ 1,000 SF):</b> This task consists of personnel time for a Foreman and Laborers using pneumatic breakers and hand tools to break up and remove pavement up to 6" thick and greater than 1,000 square feet. The task does not include hauling and disposal of removed pavement.
T258	<b>Removal of Walkway Materials:</b> This task consists of personnel time for two Laborers using hand tools to break up and remove walkway materials when necessary for remedial action. Materials include such as brick, slate, tile, and other materials commonly used for walkways.
T259	<b>Restore Asphalt Paving:</b> This task includes personnel time for a Foreman and Laborers to put down a base layer, subgrade, and wearing course. The task also includes equipment cost for an asphalt paver and plate compactor to grade and compact the paved areas. The task does not include hauling.

<b>Code</b>	<b>Task</b>
T260	<b>Restore Concrete Paving:</b> This task includes personnel time for a Foreman and Laborers to replace concrete pavement. The task also includes cost for up to 6" thick of concrete, installed with wire mesh, broom finishing, and a gravel base compacted with a plate compactor. The task does not include hauling.
T261	<b>Restore Sidewalks, Driveways, and Patios:</b> This task consists of personnel time for a Foreman and Laborer and equipment cost for a plate compactor to restore sidewalks, driveways, and patios with asphalt pavement. In most cases, regardless of the type of pavement, the cost of replacement will be reimbursed at the asphalt rate. The task does not include hauling.
T262	<b>Trenching:</b> This task consists of personnel time for an Equipment Operator and Laborer and equipment to dig trenches and excavating soils around foundations and subsurface obstructions. Equipment costs is based on the use of a mini excavator (5000-9999 lb) and operating costs
T263	<b>Silt Fence Installation:</b> This task consists of personnel time for two Laborers to install silt fence. Equipment costs are based on woven silt fence, rebar or wooden stakes, and necessary installation equipment.
T264	<b>Vacuum Excavation of Test Holes:</b> This task consists of personnel time and equipment for a professional crew to locate subsurface utilities and obstructions using non-destructive digging equipment to determine the precise horizontal and vertical position of underground features. This task is based on SUE Quality Level A requirements. Cost includes crew and mobilization to site. The cost includes locating utilities on existing maps, but does not include generating an original map. Hourly minimums may apply.
T265	<b>Subsurface Line Location (Site):</b> This task consists of personnel time and equipment for a professional crew to review plans and mark the location of all underground utilities at the site. Example utilities include product, electric, gas, water, and sewer as well as subsurface tanks and structures. The task includes the cost to locate utilities on existing site maps and notes to support subsequent investigative and remedial activities. The task is based on SUE Quality Level B requirements. This task cannot be claimed when using free services such as Virginia 811. Hourly minimums may apply.
T266	<b>Subsurface Line Location (Excavation):</b> This task consists of personnel time and equipment to locate any buried lines within or adjacent to the proposed dig area which are not located by the local one-call utility locating center. The professional locator will use industry standards to mark in the field any buried conductors detected within or adjacent to the dig area. The cost does not include production of a map. If a map is required, additional hours will be approved as appropriate. The task code does not include time for the consultant to meet with the Locator. Hourly minimums may apply.
T267	<b>Terrain Conductivity/Electromagnetic Survey:</b> This task consists of personnel time and equipment needed to conduct a terrain conductivity or electromagnetic survey and produce a report describing the results. This includes time for report review, clerical support, and all other direct costs.
T268	<b>Spent Carbon Replacement:</b> This task consists of the following items: removal of spent non-hazardous carbon from an adsorber, refilling the adsorber with carbon, transport of the spent carbon to a licensed reactivation facility, and reactivation of the spent carbon. This task includes the cost for all necessary labor, equipment, and materials.

<b>Code</b>	<b>Task</b>
T269	<b>Air Rotary Drilling and 2" Well Install:</b> This task consists of the installation of two-inch permanent monitoring wells. The cost for the task is based on the cost for using air rotary drilling and soil sampling every five feet using two-inch split spoons. It includes well completion materials, watertight locking manhole covers, concrete pad, decontamination equipment and supplies, and personnel time and equipment to develop the well. This task does not include costs to log the boring and well, or screen and collect soil samples.
T270	<b>Air Rotary Drilling and 4" Well Install:</b> This task consists of the installation of four-inch permanent monitoring wells. The cost for the task is based on the cost for using air rotary drilling and soil sampling every five feet using four-inch split spoons. It includes well completion materials, watertight locking manhole covers, concrete pad, decontamination equipment and supplies, and personnel time and equipment to develop the well. This task does not include costs to log the boring and well, or screen and collect soil samples.

## 8 D-CODE UCRS

<b>Code</b>	<b>Description</b>	<b>Unit Type</b>	<b>Unit Rate</b>
D2001	Site Characterization	Section 9.1	Cost + 14.5%
D2002	Remediation	Section 9.2	Cost + 14.5%
D2003	Proprietary Materials	Section 9.3	Cost + 14.5%

## 9 D-CODE DESCRIPTIONS

D-codes are limited to new or emerging site investigation and remediation technologies that do not currently lend themselves to bidding. Proprietary and innovative materials are also eligible for reimbursement using D-codes. Refer to **Section 3.2.6.4** of Volume VI of the *Reimbursement Guidance Manual* for full information on claiming D-codes.

The RP/Claimant or their environmental consultant should always try to bid a technology or activity before pursuing the use of a D-code, simply because as more contractors adopt newer technologies they may become biddable in the future.

### 9.1 SITE CHARACTERIZATION

Use this code when claiming costs associated with emerging or innovative technologies and proprietary services related to site characterization. The claimant or their environmental consultant must work with the regional office case manager to determine the suitability of the proposed technology for characterizing the site, and to develop a detailed scope of work and budget.

Prior approval of the budget by central office staff is required for reimbursement. The budget must be detailed and identify all required equipment, materials, and labor associated with the scope of work.

Reimbursement will be limited to cost incurred plus 14.5%, less any discounts received; reimbursement will not exceed the budget approved by OSRR.

## **9.2 REMEDIATION**

Use this code when claiming costs associated with emerging or innovative technologies and proprietary services related to remediation. The claimant or their environmental consultant must work with the regional office case manager to determine the suitability of the proposed technology for meeting remediation goals, and to develop a detailed scope of work and budget.

The scope of work must include a schedule for monitoring and/or O&M to evaluate the efficiency of the technology. The scope of work must also include a Remediation Optimization Plan to pursue alternative corrective actions or modifications to the scope of work should the corrective action not succeed as planned. **Section 5.7.3.4** of the *VPSTF Technical Manual, 4<sup>th</sup> Edition* describes the minimum requirements for a Remediation Optimization Plan.

Prior approval of the budget by OSRR is required for reimbursement. The budget must be detailed and identify all required equipment, materials, and labor associated with the scope of work. Reimbursement will be limited to cost incurred plus 14.5%, less any discounts received; reimbursement will not exceed the budget approved by OSRR.

## **9.3 PROPRIETARY MATERIALS**

Use this code when claiming costs associated with proprietary materials or services that cannot be better claimed by existing codes. Examples include unique sampling devices and field screening devices.