

Proposed Adams Mill Road Residential Redevelopment Project
1827 Adams Mill Road NW
Washington, D.C. 20009

IMPACTED SOIL MANAGEMENT PLAN

PART 1 INTRODUCTION

The proposed Adams Mill Road Residential Redevelopment Project, 1827 Adams Mill Road, N.W., (also known as 1794 Lanier Place, N.W.,) Washington, D.C. 20009 ("site") is subject to District of Columbia (DC) Department of the Environment (DOE) regulations and requirements. The planned redevelopment activities include demolition of the existing buildings followed by the construction of a mid-rise apartment building with one level of below-grade parking. The site is currently developed with a gasoline station and automobile repair facility that dispenses Exxon-refined gasoline and diesel fuel from six fuel dispensers. The diesel fuel is stored in one 10,000-gallon underground storage tank (UST) and the gasoline is stored in three 10,000-gallon USTs, all of which are located near the northwestern portion of the site. The automobile facility operates four repair bays equipped with three below-ground hydraulic lifts. Prior Phase I Environmental Site Assessments (ESAs) reported that the site has operated as a gasoline station since at least 1926 and the current site improvements were constructed in approximately 1963. The prior ESAs reported that multiple older USTs are located at the site; however, the number and specific locations are unknown.

Previous environmental investigations have identified petroleum impacted soils and groundwater from on-site activities and VOC-impacted groundwater from suspected offsite sources (dry cleaners). Historical research indicates that following installation of monitoring wells in 1993, liquid phase hydrocarbons (LPH, i.e., free petroleum product) were identified on the groundwater. A leaking UST (LUST) case was opened in February 1993 (Case No. 93048). A groundwater remediation system was installed in 1995 and was operated until at least 2003, when LPH was no longer reported to be present in the monitoring wells. On- and off-site monitoring activities, including vapor monitoring and indoor air quality (IAQ) monitoring at nearby residential properties, has been conducted since then.

Based on the prior environmental investigation, it appears that no active remediation has been conducted since 2003, and the treatment system was observed to be non-operational.

In late 2008 three monitoring wells were installed and the soils recovered during the well installation activities were field screened with a photoionization detector (PID). The reported PID readings ranged from zero to approximately 50 parts per million volume (ppmv) between zero and approximately 20 to 22 feet below the ground surface (bgs) and PID readings that ranged from 130 ppmv to approximately 2,200 ppmv between approximately 22 feet bgs and 32 feet bgs. Groundwater sampling indicated that in addition to petroleum constituents, low levels of a chlorinated compound were present in two of the three wells installed as part of the investigation. Groundwater flow at the site was determined to be toward the west-northwest. Based on the direction of groundwater flow, the low levels of chlorinated compounds were attributed to off-site dry cleaners, but the specific location of the dry cleaners was not reported.

The most recent quarterly groundwater sampling report available for review indicated that LPH was identified in several monitoring wells in June and September of 2009, but was not identified in several subsequent rounds of sampling. Quarterly groundwater sampling of five wells, semi-annual groundwater sampling of six wells, and semi-annual sampling of three vapor monitoring wells is reportedly ongoing and varying concentrations of petroleum constituents remained in groundwater and soil vapor as of April 2010.

A Phase II conducted in June 2012 included the collection of soil samples in the vicinity of the three below-ground hydraulic lifts and groundwater samples from the three monitoring wells installed in 2008. The Phase II

reported that soil analytical results for the soil samples collected in the vicinity of the three below-ground hydraulic lifts indicated that an apparent release of petroleum product from the lift mechanisms or other activities at the gas station. In addition, the Phase II reported that no PCBs were reported in the soil samples collected. Soils in the area of the below-ground hydraulic lifts can be managed as petroleum-impacted material during redevelopment. Laboratory analysis of the groundwater samples collected as part the Phase II indicated that tetrachloroethene (PCE), a chlorinated compound and a common dry cleaning solvent widely used in the U.S. since the early 1940s, was reported in one of the groundwater samples collected above the DC DOE groundwater standards. No other halogenated volatile organic compounds were reported above the DC DOE groundwater standards.

Based on the prior environmental reports, petroleum impacted soil is expected to be encountered during excavation and this Impacted Soil Management Plan has been developed as a specification for managing impacted site media. Based on the current redevelopment plans, excavation at the site is planned to reach a maximum depth of 12 – 15 feet below the ground surface. Therefore, dewatering during construction activities is not anticipated based on the reported depth to groundwater of approximately 30 feet bgs. Although groundwater is not anticipated to be encountered, perched groundwater and surface runoff encountered during construction activities shall be handled as specified by this ISMP. However, perched groundwater may be encountered and surface water runoff that accumulates within. Additionally, this ISMP has been developed to provide guidance for management of underground structures, such as USTs, oil/water separators, hydraulic lifts, etc, that are expected to be encountered during excavation activities at the site.

PART 2 GENERAL

2.1 SUMMARY

- A. This specification section outlines criteria for the proper removal of the UST systems, oil water separator, below ground hydraulic lifts, and the handling and off-site disposal of petroleum impacted soil that is encountered during construction activities.

The Contractor shall provide a unit rate cost premium for removal, management, transportation, and disposal of USTs in accordance with this document. The Contractor will be responsible for the removal of the USTs, with the approval and monitoring by the Environmental Engineer. The Contractor shall remove any USTs encountered on the site in a manner that ensures the protection of health, safety, public welfare, and the environment. The Contractor shall remove, handle, load, and transport USTs with the provisions of all applicable federal, state, and local laws and regulations and bylaws, and the criteria of this Section, including but not limited to:

1. District of Columbia UST Regulations, 20 DCMR Chapters 55-70.
2. United States Environmental Protection Agency UST Regulations, Title 40 of the Code of Federal Regulations Part 280, 40 CFR Part 281 and 40 CFR Parts 282.50-282.105.

- B. The Contractor shall provide a unit rate cost premium for handling, management, loading, transportation, and disposal of impacted soil in accordance with this document. The Contractor will be responsible for the disposal of impacted soil, with the approval and monitoring by the Environmental Engineer. The Contractor shall manage impacted soils encountered on the site and in the excavation in a manner that ensures the protection of health, safety, public welfare, and the environment. The Contractor shall handle, store, load, and transport impacted soils in compliance with the provisions of all applicable federal, state, and local laws and regulations and bylaws, and the criteria of this Section, including but not limited to:

1. District of Columbia Hazardous Waste Regulations, 20 DCMR Chapters 40-54.

2. United States Environmental Protection Agency Hazardous Regulations, Title 40 of the Code of Federal Regulations.
- C. Management of surface water runoff that is collected, stored, treated, or discharged at the site as part of construction shall be in compliance with all applicable provisions of the federal, state, or local laws, regulations, or bylaws. The Environmental Engineer will apply for a permit to discharge temporary construction dewatering effluent (surface water runoff) with the District of Columbia Water and Sewer Authority (WASA). The Environmental Engineer will be responsible for all testing of discharged water and treatment prior to discharge if required by WASA. The contractor is responsible for providing all equipment and materials for construction dewatering in accordance with the permit, including sediment basins, pumps, hoses, meters, etc. The Contractor is responsible for any discharge fees associated with dewatering that may be issued by the presiding regulatory authority. The Environmental Engineer is responsible for providing equipment for the treatment of water.
- D. The Contractor is responsible for the loading and transportation of impacted soil according to the criteria contained herein. The Contractor is responsible for the legal off-site disposal of impacted soil with the approval and monitoring by the Environmental Engineer. The Contractor is not responsible for the collection and/or laboratory analysis of soil samples. If impacted soil is encountered, the Environmental Engineer will provide the laboratory analyses required by the disposal facilities for impacted soil acceptance. The Environmental Engineer will complete all required forms for submittal to impacted soil disposal facilities. The Contractor shall coordinate and make all necessary arrangements for transportation of the material to the disposal facilities approved by the environmental engineer.
- E. If required, excavated material may be temporarily stored in designated stockpile areas, and separate stockpiles for the classified materials will be created and maintained as required by the Environmental Engineer. The Contractor must ensure that all impacted stockpiled material is placed on and under plastic sheeting at the end of each work day.
- F. The Owner and/or the Environmental Engineer will be responsible for preparation of Bills-of-Lading for impacted soils and all regulatory interaction. The Environmental Engineer will supply non-hazardous material shipping manifests for impacted soil transport and disposal. The provisions specified in this section may be subject to alterations by the Environmental Engineer based on actual field conditions encountered during excavation activities.
- G. Previous investigations indicate the presence of UST(s) of unknown size and location at the site. The unknown USTs (if encountered) will be removed as part of building demolition and site excavation activities in accordance with Section A of 2.1. In addition, previously unknown structures such as oil/water separators or hydraulic lifts may be encountered during excavation activities. The previously unknown structures (if encountered) will be removed as part of building demolition and site excavation activities in accordance with Section A of 2.1.

2.2 DEFINITIONS AND REFERENCE STANDARDS

- A. ISMP: Impacted Soil Management Plan
- B. DCDOE: District of Columbia Department of the Environment
- C. DC WASA: District of Columbia Water and Sewer Authority
- D. RCRA: Resource Conservation and Recovery Act

- E. UST: Underground Storage Tank
- F. Owner: Perseus 1827 Adams Mill Investments LLC
- G. Environmental Engineer: Cardno ATC
- H. Contractor: TBD
- I. Impacted Soils: Soil classified as Group II soils, as determined by the Environmental Engineer through visual and olfactory inspection, PID response and/or other indicators
- J. PID: Photo-Ionization Detector
- K. Group I Soils: Non-impacted soil exhibiting a PID response less than 10 ppm (ref. Section 3.3)
- L. Group II Soils: Petroleum-impacted soil exhibiting a PID response greater than 10 ppm (ref. Section 3.3)
- M. Hazardous Waste: Wastes defined as hazardous by RCRA 40 C.F.R.261

2.3 QUALITY ASSURANCE

- A. The Environmental Engineer will monitor the Contractor's activities associated with the work under this section on behalf of the Owner and will provide on-site monitoring of excavation operations to assess:
 - 1. estimated quantities and appropriate destination of impacted material;
 - 2. that the material is consistent with the findings of prior subsurface investigations;
 - 3. if the material is not consistent with the findings of prior subsurface investigations, requirements for intermediate stockpile segregation and handling will be provided by the Environmental Engineer;
 - 4. stockpile disposition by category for off-site disposal based on observations, field instrument screening, and testing by the Environmental Engineer; and
 - 5. regulatory compliance of construction dewatering discharge water quality.
- B. If necessary, the Contractor shall perform excavation activities so as to segregate materials according to their classification determined by the Environmental Engineer's on-site monitoring program.

2.4 JOB CONDITIONS

- A. Based on the petroleum impact historically identified in on-site soils, the site will be subject to DCDOE regulations.
- B. The following reports are available for review:
 - 1. Gannett Fleming – Site Assessment Report, Former Chevron Facility No 122296, 1827 Adams Mill Road NW, January 2, 2008.
 - 2. Groundwater & Environmental Services, Inc. (GES) – Phase II Environmental Site Assessment Report, Exxon Service Station #32-7835, 1827 Adams Mill Road, N.W., December 19, 2008.

3. Gannett – Site Update Report, First Quarter 2010, 1827 Adams Mill Road N.W.
4. ATC Associates Inc. (ATC) – Phase I Environmental Site Assessment, August , 2012
5. ATC – Phase II Subsurface Investigation, August 9, 2012.

2.5 SUBMITTALS

Submittals will be accepted and reviewed by the Environmental Engineer prior to conducting any work. The Contractor shall forward submittals at least ten (10) days in advance, and longer if judged necessary by the Contractor considering that re-submittals may be required prior to acceptance.

- A. DC Building Permit Application Supplemental form
 1. Contractor will be responsible for submitting the DC Building Permit Application Supplemental form. The form shall be submitted in conjunction with the demolition permit.
- B. UST/LUST Activity Notification Form
 1. Contractor will be responsible for completing and submitting the UST/LUST Activity Notification form to the DDOE at least two weeks prior to the date of the scheduled UST removal activities.
- C. DDOE Notification
 1. Contractor will notify the DDOE 48 hours in advance of the removal activities to arrange for a representative(s) from the DDOE to be present during the removal activities.
- D. D.C. Fire Prevention Bureau (DCFPB) Notification
 1. Contractor will notify the D.C. Fire Prevention Bureau (DCFPB) 48 hours in advance of the removal activities to arrange for a representative(s) from the DCFPB to be present during the removal activities.
- E. Soil Disposal Facility Characterization Form
 1. Contractor will be responsible for the transportation of impacted soil to an acceptable disposal facility approved by the Environmental Engineer. Prior to accepting impacted material, the facility will require completion of a characterization form including laboratory analysis and generator information. Environmental Engineer will be responsible for completing the form and submitting to the disposal facility.
- F. Documentation of Soil Transportation
 1. Environmental Engineer will be responsible for preparing and obtaining all transportation documentation, including but not limited to, Bills of Lading, Materials Shipping Records, or Non-hazardous Waste Manifests. Contractor shall not transport petroleum-impacted soil without proper signed transportation documentation from the Environmental Engineer or the Owner.
- G. Documentation of Contingency Items
 1. In the event that previously unknown items such as buried containers, drums, USTs, oil/water

separators or hydraulic lifts are encountered, the Contractor is responsible for ceasing all activities and notifying the Environmental Engineer. The Environmental Engineer will provide recommended course of action as well as appropriate recommendation for resuming work. If items such as buried containers, drums, USTs, oil/water separators or hydraulic lifts are transported and disposed of off-site, the Contractor shall submit copies of all documentation, including but not limited to, Bills of Lading, Material Shipping Records, or waste manifests to the Environmental Engineer.

PART 3 EXECUTIONS

3.1 GENERAL REQUIREMENTS

- A. Construction workers, surrounding human populations, and environmental receptors shall be reasonably protected from exposure to oil or hazardous material (if encountered) during construction activities.
- B. The USTs shall be removed from the site in compliance with the provisions of applicable federal, state, and local laws.
- C. Impacted soil removed from the excavation and construction area shall be managed in compliance with the provisions of applicable federal, state, and local laws.
- D. **No fill material may be imported to the site without documentation of specific source (address), and documentation that it is non-impacted. In absence of appropriate documentation, characterization samples may be required. Environmental Engineer must approve all fill materials prior to placement on-site.**

3.2 UST REMOVAL – KNOWN AND UNKNOWN

- A. The Contractor will arrange for the contents of the USTs and associated piping to be emptied prior to any excavation associated with UST removal activities. After, and only after, the contents of USTs are emptied; the concrete and or asphalt pad(s) and the soil overburden\pea gravel shall be excavated exposing the top of the UST(s) and piping. The contractor shall disconnect associated product, vapor recovery and vent lines and drain the remaining liquid inside the product lines into the UST(s). Once the top of the USTs are exposed, the contractor shall purge the UST(s) of all flammable vapors and oxygen with inert gas. To evaluate the effectiveness of the purging procedure, the contractor shall use a combustible gas meter to determine if the atmosphere within the UST(s) exceeds ten percent of the lower explosive limit (LEL). If the atmosphere within the UST(s) is above ten percent of the LEL, the purging procedure shall be repeated and the effectiveness be reevaluated until the atmosphere within the USTs is less than ten percent of the LEL. Once the atmosphere within the UST(s) is below ten percent of the LEL, the USTs will be cleaned removing any residual liquids and all accumulated sludges.

After the UST(s) have been cleaned, additional excavation will expose the sides of the UST(s) and the UST(s) shall be removed from the ground and placed on at least 10 milli-inch (mil) plastic sheeting. Once placed on plastic sheeting the contractor shall remove all residual material and soil from the exterior of the UST(s) and the integrity of the UST(s) shall be inspected for signs of corrosion, cracks, structural damage, staining, or other evidence of leakage. The UST(s) inspection shall be documented by the contractor in writing and by photographs. The contractor shall render the UST(s) inoperable and then hauled offsite and dispose of at an approved disposal facility.

The Environmental Engineer shall prepare a UST Closure Assessment Report and complete a Facility Notification for Underground Storage Tanks. The UST Closure Assessment Report will include a site

description and brief site history, a summary of the UST closure activities. The Contractor shall provide the Environmental Engineer all supporting documentation for the UST Closure Assessment Report, which includes photographic documentation, liquid disposal receipts, and tank disposal receipts. The report must be submitted to the DDOE within 30 days after the removal of the USTs.

Note: The following cleaning and closure procedures may be used to comply with this section:

- (A) National Fire Protection Association, Volume 30, "Flammable and Combustible Liquids Code (NFPA-30)";
 - (B) American Petroleum Institute Recommended Practice 1604, "Closure of Underground Petroleum Storage Tanks";
 - (C) American Petroleum Institute Publication 2015, "Safe Entry and Cleaning of Petroleum Storage Tanks, Planning and Managing Tank Entry From Decommissioning Through Recommissioning";
 - (D) American Petroleum Institute Publication 2016, "Guidelines and Procedures for Entering and Cleaning Petroleum Storage Tanks";
 - (E) American Petroleum Institute Recommended Practice 1631, "Interior Lining of Underground Storage Tanks"; and
 - (F) The National Institute for Occupational Safety and Health "Criteria for a Recommended Standard, Working in Confined Space".
- B. Excavation and dewatering shall be performed in a controlled manner, and the excavation shall be limited in depth and area, such that they do not result in cross-contamination of materials nor result in any material being re-classified as a "higher" (more impacted) group as a result of mixing with other materials during excavation, dewatering, and handling.
- C. If impacted soil is encountered, which is determined by the Environmental Engineer not to be consistent with previously characterized soil, it shall be segregated and stockpiled to await confirmation sampling and characterization. Additional segregation may be required during excavation based on field screening, visual and odor criteria. The Contractor will be responsible for the proper management of this material. If impacted soil is encountered, it is anticipated to be considered impacted compared to DCDOE standards, but is not anticipated to be hazardous as defined by RCRA - 40 C.F.R.261. The Contractor must transport this material to a facility approved by the Environmental Engineer that is permitted to accept impacted soil from the site.
- D. The Contractor will be responsible for cleaning all transport vehicles before they leave the site, protecting for dust or other soil loss during over-road transport, and transporting this material to its final destination.
- E. Previous investigations indicate the presence of UST(s) of unknown size and location at the site. The unknown USTs (if encountered) will be removed as part of building demolition and site excavation activities in accordance with Section A of 2.1. If a UST(s) is discovered during excavation activities, the Contractor will notify the Environmental Engineer, who will contact the DCDOE and coordinate removal activities.

3.3 CLASSIFICATION OF IMPACTED SOILS, REQUIREMENTS FOR OFF-SITE TRANSPORTATION AND DISPOSAL OPTIONS

- A. If impacted material is encountered, excavated material will be classified into two main groups (Group I and Group II) for purposes of off-site disposal according to criteria established by the Federal and/or State agency regulating the intended disposal facility. Group classification will be based primarily on the results of the previously completed subsurface investigation and the field screening (see section 3.4) program. If necessary, impacted material characterization will be confirmed by field observations and photoionization detector (PID) screening conducted during excavation and subsequent field or laboratory analytical testing for total petroleum hydrocarbons (TPH) diesel range organics (DRO), and TPH gasoline range organics (GRO).
1. Group I – Non-contaminated soil indicating a PID response indicative of background concentrations and exhibiting no other evidence of impact. This soil may be re-used on-site without restriction.
 2. Group II – Petroleum-impacted soil exhibiting a PID response greater than 10 ppm and/or odors or signs of contamination as defined by the Environmental Engineer. In addition, this soil will not exhibit highly elevated concentrations of volatile organic compounds (VOCs) except those associated with petroleum hydrocarbons. VOC concentrations must be within the range of typical disposal facility permit requirements for petroleum impacted soil. Laboratory analysis will confirm soil is characterized as non-hazardous petroleum-impacted. Soil in this category will be transported by the Contractor to a disposal facility approved by the Environmental Engineer that is permitted to accept petroleum-impacted material.

3.4 FIELD SCREENING

- A. If impacted material is encountered during the excavation activities, excavated soils will be monitored by the Environmental Engineer. Soils will be evaluated based on the following:
1. visual inspection for soil staining
 2. detection of a petroleum-like odor from exposed soil
 3. detection of elevated concentrations of VOCs using PID
 4. any other indicators of possible contamination.
- B. If the material excavated is similar to the representative soil sample for that area of the site, the soil will be classified based on the criteria set forth in Section 3.3 of this plan. If the material excavated is observed to be heavily stained or exhibits unusual odors, or is otherwise observed to be inconsistent with the criteria set forth in Section 3.3, the material may require temporary stockpiling, testing, and reclassification prior to off-site disposal. Field characterization of the soil will be the responsibility of the Environmental Engineer.

3.5 SOIL/EXCAVATED IMPACTED MATERIAL STOCKPILING

- A. When feasible, impacted soil, as determined by the Environmental Engineer, shall be directly loaded onto the trucks provided by the Contractor for transportation to the disposal facility.
- B. Excavated impacted material requiring temporary stockpiling shall be temporarily stockpiled in

intermediate areas located on-site. The temporary stockpiles shall be located on-site and away from the on-going construction activity, pending the results of the screening or laboratory analyses if required. If the material is subsequently classified into Group II based on the results of confirmation sampling or field screening, it shall be removed from the site under a Bill of Lading or non-hazardous waste manifest.

- C. Stockpiles of Group II impacted material shall be placed on 6 mil polyethylene plastic and securely covered with polyethylene plastic.

3.6 BILLS OF LADING /NON HAZARDOUS WASTE MANIFESTS

- A. The Contractor shall provide the name and address of the transporter necessary to complete the Bill of Lading prior to the start of excavation. The Contractor and the Owner will provide all other necessary information, opinions and certifications.

3.7 TRANSPORTATION AND DISPOSAL OF EXCAVATED MATERIAL

- A. The Contractor shall not load trucks and/or remove impacted soil from the site without approval of the Environmental Engineer. The materials shall be shipped under a "Bill of Lading" or "Non-Hazardous Waste Manifest" to be signed by the Environmental Engineer or Owner's representative.
- B. The Contractor is responsible for loading and transporting of Groups I and II soils.
- C. Materials removed from the site shall be loaded within the site limits. All trucks leaving the site shall be covered and cleaned of spilled debris that might fall from the trucks during transport. Every attempt shall be made to prevent debris from being spilled from trucks or tracked from the site onto local streets. Each work day the Contractor shall clean local streets which contain site debris, and comply with any other City requirements.
- D. Non-impacted soils (Group I) may be transported off-site without notice or regulatory approval.
- E. The Contractor is solely responsible for proper and legal transport of all material removed from the site to the disposal facility approved by the Environmental Engineer. Copies of all records of shipment and disposal shall be provided to the Owner or Environmental Engineer. Owner's receipt of or comment on such information shall in no way relieve the Contractor of his sole responsibility.

3.8 DEWATERING/SEDIMENTATION CONTROL AND GROUNDWATER TREATMENT

- A. If dewatering from within the excavation will be required, the Contractor is responsible for providing all equipment, manpower, and materials for construction dewatering installation and maintenance in accordance with the permit, including pumps, hoses, meters, etc. The Contractor is responsible for any discharge fees associated with dewatering. The Environmental Engineer will provide treatment for the discharge water (if required) in combination with the existing dewatering system supplied and maintained by the Contractor.
- B. The sediment control system will require the use of a "frac tank" to remove sediment prior to treatment (if required) and discharged. The Contractor shall design the sediment control system to reduce the concentration of Total Suspended Solids (TSS) in accordance with the criteria given in the permit issued by the controlling agency and install it according to the approved shop drawings.
- C. The Environmental Engineer shall perform chemical testing of the discharge water to assess if the discharge criteria stipulated in the permit is met.

- D. The Environmental Engineer shall submit all documentation in the proper format to WASA necessary for compliance with the permits required for discharge.
- E. The water pumped from within the site is expected to require on-site treatment to remove petroleum-related contaminants prior to discharge to the nearby sewer system. If required, the components of the groundwater treatment system and all labor required for its setup, operation and maintenance shall be furnished by the Environmental Engineer.
- F. The Environmental Engineer shall be responsible for demobilization and removal from the site the treatment system including the cleaning of the frac tank, and proper disposal of all sediments and related materials. The Environmental Engineer shall be responsible for demobilization and removal of any treatment system components.

3.9 CONFIRMATION SOIL SAMPLING

- A. Upon completion of excavation of impacted material areas, the Environmental Engineer shall collect the confirmation soil samples. Contractor is responsible for notifying the Environmental Engineer of the excavation completion date. Contractor shall not install the concrete floor slab, or any other structure that would hinder collection of soil samples from the excavation floor, prior to confirmation sampling.

3.10 WATERPROOFING OF FOUNDATION

- A. Contractor is solely responsible for insuring that the waterproofing is compatible with the on-site groundwater conditions. If needed and at the request of the Contractor, Cardno ATC can provide laboratory results of the groundwater.

3.11 OIL/WATER SEPARATORS

- A. Based prior environmental reports and the historical use of the property (former gasoline station), at least one oil/water separator is located at the site. Reportedly, the oil/water separator is located near the southern portion of the service station.
- B. Prior to the removal of the oil/water separator, the Contractor will notify the Environmental Engineer, who will contact the DCDOE and coordinate removal activities. The Contractor will arrange for the contents of the oil/water separator to be emptied prior to any excavation associated with oil/water separator removal activities. The contractor shall disconnect associated lines and drain the remaining liquid inside the service lines into the oil water separator. The oil/water separator will be cleaned removing any residual liquids and all accumulated sludges. Once the oil/water separator is cleaned and free of liquid, the structure can be removed from the ground. The Contractor is responsible for the removal of oil/water separators, or subcontracting for this work, to be completed in accordance with DCDOE regulations. If additional oil/water separators are discovered during excavation activities, the Contractor will notify the Environmental Engineer, who will contact the Owner and DCDOE and coordinate removal activities.

3.12 HYDRAULIC LIFTS

- A. Based prior environmental reports and the historical use of the property (former gasoline station), at least three hydraulic lifts are present at the site.
- B. Prior to the removal of the hydraulic lifts, the Contractor will notify the Environmental Engineer, who will contact the DCDOE and coordinate removal activities. The Contractor will arrange for the contents

of the hydraulic lifts to be emptied prior to any excavation associated with hydraulic lift removal activities. Once the contents of the hydraulic lifts and associated lines are emptied, the structures may be removed. The Contractor is responsible for the removal of hydraulic lifts, or subcontracting for this work, to be completed in accordance with DCDOE regulations. If additional hydraulic lifts are discovered during excavation activities, the Contractor will notify the Environmental Engineer, who will contact the Owner and DCDOE and coordinate removal activities.

3.13 CONTINGENCIES

- A. If during the work, the presence of potentially hazardous conditions is evident, work in the area shall be terminated. These conditions include, but are not limited to, encountering buried containers, drums, USTs, oil/water separators or hydraulic lifts.
- B. The area will be secured to minimize the potential of a health risk or release into the environment. The sources of the event causing the material to be considered suspect will be evaluated by the Environmental Engineer. In the event that buried containers, drums or tanks are encountered or if a release of oil or potentially hazardous materials has occurred, the Contractor shall notify the Environmental Engineer immediately.
- C. Should any sudden, continuous or intermittent release of oil or hazardous material occur during the course of the Work, the Contractor shall notify the Environmental Engineer immediately and shall immediately begin actions to contain and abate the release. The Contractor shall immediately arrange for clean-up activities under the direction of the Environmental Engineer.
- D. The use of vapor mitigation and aeration equipment, including fans for removing petroleum vapors from the excavation area, may be required. The Contractor is responsible for supplying vapor control and aeration equipment (i.e., fans) at the site.

PART 4 MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

- A. The transportation and disposal costs listed below shall be inclusive of coordination, providing required documentation, and other work incidental to removal of petroleum-impacted material at the site. No separate measurement or payment will be made for on-site handling, rehandling, reuse, filling, management, stockpiling, equipment, police details, surveying, or other associated items or work considered incidental to the conduct of the Base Contract Bid Price. Measurement methods follow:
 - 1. Four 10,000-gallon USTs: Removal and disposal by the Contractor. For the purpose of this bid, a cost is to be provided for removal and disposal of four 10,000-gallon USTs (one diesel UST and three gasoline USTs).
 - 2. Group II: Off-site disposal per ton, as transported and disposed at offsite facility approved by Environmental Engineer, by scale at receiving facility measured to nearest 0.1 ton.
 - 3. Oil/Water Separator: Removal and disposal per separator. This cost shall include all necessary notifications, documentation, and coordination in order to comply with any local, state, and federal regulation. For the purposes of this bid, a cost is to be provided for the removal and disposal of one oil/water separator.
 - 4. Hydraulic Lifts: Removal and disposal per lift. This cost shall include all necessary

notifications, documentation, and coordination in order to comply with any local, state, and federal regulation. For the purposes of this bid, a cost is to be provided for the removal and disposal of three dual-cylinder hydraulic lifts.

4.2 PAYMENT

A. The costs for items listed in 4.1 above shall be paid in accordance with unit prices established in the Contract. The Contractor shall provide bid costs below.

Item	Unit Price (per item)
Group II Contaminated Soil	---
Transportation	/ton
Disposal	/ton
Four 10,000-gallon USTs Removal and Disposal	
Oil/Water Separator Removal and Disposal	
Hydraulic Lift Removal and Disposal	