



Underground Storage Tank Management Division  
Bureau of Land and Waste Management  
2600 Bull Street  
Columbia, SC 29201  
(This form may be used to comply with SC UST Regulation 280.72)

**STATE USE ONLY**

Date Received

**UNDERGROUND STORAGE TANK (UST) ASSESSMENT REPORT**

Is this a change in service? Yes \_\_\_\_ No \_\_\_\_  
(The change in storage to a non-regulated substance)

**I. OWNERSHIP OF UST(S)**

Owner Name (Corporation, Individual, Public Agency, Other)

Mailing Address

City

State

Zip Code

Area Code

Telephone Number

Contact Person

**II. SITE IDENTIFICATION AND LOCATION**

Permit I.D. #

Facility Name

Street Address

City

Zip Code

County

**III. INSURANCE INFORMATION AND SUPERB FUNDING**

**Please complete the following Insurance Statement:**

The petroleum release reported to DHEC on \_\_\_\_\_ at Permit ID Number \_\_\_\_\_ may qualify to receive state monies to pay for appropriate site rehabilitation activities. Before participation is allowed in the State Clean-up fund, written confirmation of the existence or non-existence of an environmental insurance policy is required. **This section must be completed.**

Pursuant to the State Underground Petroleum Environmental Response Bank (SUPERB) Act 44-2-130(E)(1): "An owner or operator of an underground storage tank or his agent seeking to qualify for compensation from the SUPERB account for site rehabilitation shall submit a written application to the Department." Please complete **DHEC Form 1300** regarding SUPERB compensation and the existence of an environmental insurance policy.

**IV. 24 HOUR RELEASE REPORT**

If free product is observed during closure activities, please submit **DHEC Form 1364** within 24 hours. Please note that this **DHEC Form 1364** should not be submitted for sampling analysis or other release designations. For the purpose of closure activities, this report form is solely for the observance of free product.

**V. CERTIFICATION (To be signed by the UST owner)**

**I certify that I have personally examined and am familiar with the information submitted in this and all attached documents; and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.**

\_\_\_\_\_  
Name (Type or print.)

\_\_\_\_\_  
Signature

**To be completed by Notary Public:**

Sworn before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
(Name)

Notary Public for the state of \_\_\_\_\_.  
*Please affix State seal if you are commissioned outside South Carolina*

**VI. UST INFORMATION**

Date of Permanent Closure (Month/Day/Year): \_\_\_\_\_

**Note:** Answer each question as completely as possible. For those questions that are yes or no , please indicate Y or N in the box. For all other questions, please provide the specific information.

<b>Requested Information</b>	<b>Tank 1</b>	<b>Tank 2</b>	<b>Tank 3</b>	<b>Tank 4</b>	<b>Tank 5</b>	<b>Tank 6</b>
Product ( Gas, Kerosene, etc.)						
Capacity in gallons (1K, 2K etc)						
Approximate age in years						
Construction material (Steel, Fiberglass, etc)						
Month/Year of last use						
Depth in feet to the base of the tank						
Spill prevention present (Y or N)						
Overfill prevention present (Y or N)						
Tanks removed (Y or N)						
Tanks filled in place (Y or N) If yes, indicate fill material in the box						
Visible Corrosion or Pitting (Y or N)						
Visible Holes ( Y or N)						

1. Indicate the method of disposal for any USTs removed from the ground (Do not forget to attach the disposal manifests): \_\_\_\_\_

2. Indicate the method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (Do not forget to attach the disposal manifests): \_\_\_\_\_

3. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST: \_\_\_\_\_

## VII. PIPING INFORMATION

Date of Permanent Closure (Month/Day/Year): \_\_\_\_\_

**Note:** Answer each question as completely as possible. For those questions that are yes or no , please indicate Y or N in the box. For all other questions, please provide the specific information.

Requested Information	Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
Approximate age in years						
Construction material (Steel, Fiberglass, etc)						
Distance in feet from UST to Dispenser(s)						
Number of Dispensers						
Type of System (Pressure or Suction)						
Was piping removed from the ground (Y or N)						
If piping was not removed were both ends of the piping capped off (Y or N)						
Visible Corrosion or Pitting (Y or N)						
Visible Holes ( Y or N)						

1. If any corrosion, pitting, or holes were observed, describe the location and extent for each piping run.

---



---



---

## VIII. BRIEF SITE DESCRIPTION AND HISTORY

---



---



---



---



---



---

## IX. SITE CONDITIONS

**Note:** Answer each question as completely as possible. For those questions that are yes or no , please check Y or N. If the information is unknown or cannot be obtained, check unknown. For all other questions, please provide the specific information.

Requested Information	Yes	No	Unk
<p>Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells?</p> <p><b>Note:</b> If yes, indicate depth and location on the site map.</p>			
<p>Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells?</p> <p><b>Note:</b> If yes, indicate location and describe the odor (strong, mild, etc.) on the site map.</p>			
<p>Was water present in the UST excavation, soil borings, or trenches?</p> <p><b>Note:</b> If yes, how far below land surface (indicate location and depth on the site map)?</p>			
<p>Did contaminated soils remain stockpiled on site after closure?</p> <p><b>Note:</b> If yes, indicate the stockpile location on the site map.</p> <p><b>Note:</b> If yes, Indicate the name of DHEC representative that authorized the soil removal: _____</p>			
<p>Was a petroleum sheen or free product detected on any excavation or boring waters?</p> <p><b>Note:</b> If yes, indicate location and thickness on the site map.</p>			

### X. SAMPLE INFORMATION

SCDHEC Lab Certification Number \_\_\_\_\_

Date that samples were taken: \_\_\_\_\_

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

\* = Depth Below the Surrounding Land Surface

## XI. SAMPLING METHODOLOGY

Provide a detailed description of the methods used to collect and store the samples. Also, include the preservative used for each sample. Please use the space provided below.

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

## XII. RECEPTORS

**Note:** Answer each question as completely as possible. For those questions that are yes or no , please check Y or N. If the information is unknown or cannot be obtained, check unknown. For all other questions, please provide the specific information.

Requested Information	Yes	No	Unk
<p>Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?</p> <p>If yes, indicate type of receptor, distance, and direction on site map.</p>			
<p>Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?</p> <p>If yes, indicate type of well, distance, and direction on site map.</p>			
<p>Are there any underground structures (e.g., basements) located within 100 feet of the UST system?</p> <p>If yes, indicate type of structure, distance, and direction on site map.</p>			
<p>Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination?</p> <p>If yes, indicate the type of utility, distance, and direction on the site map.</p>			
<p>Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete?</p> <p>If yes, indicate the area of contaminated soil on the site map.</p>			



### XIII. SITE MAP

You must supply a scaled site map. It should include all buildings, road names, utilities, tank and dispenser island locations, labeled sample locations, extent of excavation, and any other pertinent information.

(Attach Site Map Here)

**XIV. SUMMARY OF ANALYSIS RESULTS**

Enter the soil analytical data for each soil boring for all COC in the table below and on the following page.

CoC	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8
Benzene								
Toluene								
Ethylbenzene								
Xylenes								
Naphthalene								
Benzo(a)anthracene								
Benzo(b)fluoranthene								
Benzo(k)fluoranthene								
Chrysene								
Dibenz(a,h)anthracene								
TPH (EPA 3550)								

CoC	SB-9	SB-10	SB-11	SB-12	SB-13	SB-14	SB-15	SB-16
Benzene								
Toluene								
Ethylbenzene								
Xylenes								
Naphthalene								
Benzo(a)anthracene								
Benzo(b)fluoranthene								
Benzo(k)fluoranthene								
Chrysene								
Dibenz(a,h)anthracene								
TPH (EPA 3550)								

**SUMMARY OF ANALYSIS RESULTS (cont'd)**

Enter the ground water analytical data for each sample for all CoC in the table below. If free product is present, indicate the measured thickness to the nearest 0.01 feet.

<b>CoC</b>	<b>RBSL (ug/l)</b>	<b>W-1</b>	<b>W-2</b>	<b>W-3</b>	<b>W-4</b>	<b>W-5</b>
<b>Free Product Thickness</b>	<b>None</b>					
<b>Benzene</b>	<b>5</b>					
<b>Toluene</b>	<b>1,000</b>					
<b>Ethylbenzene</b>	<b>700</b>					
<b>Xylenes</b>	<b>10,000</b>					
<b>Total BTEX</b>	<b>N/A</b>					
<b>MTBE</b>	<b>40</b>					
<b>Naphthalene</b>	<b>25</b>					
<b>Benzo(a)anthracene</b>	<b>10</b>					
<b>Benzo(b)flouranthene</b>	<b>10</b>					
<b>Benzo(k)flouranthene</b>	<b>10</b>					
<b>Chrysene</b>	<b>10</b>					
<b>Dibenz(a,h)anthracene</b>	<b>10</b>					
<b>EDB</b>	<b>.05</b>					
<b>1,2-DCA</b>	<b>5</b>					
<b>Lead</b>	<b>Site specific</b>					

## **XV. ANALYTICAL RESULTS**

**You must submit the laboratory report and chain-of-custody form for the samples. These samples must be analyzed by a South Carolina certified laboratory.**

(Attach Certified Analytical Results and Chain-of-Custody Here)

**Did You Remember to Include the Following?**

- **Permit ID Number**
- **Sample Collection and Storage Methods**
- **Preservative used in the sample containers**
- **Scaled Site Map with ALL Requested Information**
- **Laboratory Chain-of-Custody Form**
- **Certified Analytical Results**
- **Completed and Notarized Insurance Statement**
- **A Copy of Your Environmental Insurance Policy  
(if applicable)**
- **Samples from all Dispenser Islands and Piping Runs**
- **Photographs (if available)**



**Underground Storage Tank  
Assessment Instructions  
for  
Permanent Closure and Change-In-Service**

**Underground Storage Tank Management Division  
Bureau of Land & Waste Management  
2600 Bull Street  
Columbia, SC 29201  
Phone (803) 898-0589 Fax (803) 898-0673**

*Revision Date: March 22, 2018*

**Underground Storage Tank Assessment Instructions  
for  
Permanent Closure and Change-In-Service**

I	INTRODUCTION	3
II	FOR YOUR INFORMATION	3
III	BASIC SITE ASSESSMENT INFORMATION	4
IV	RECOMMENDED SAMPLE LOCATIONS	5
V	UST CLOSURE ACTIVITIES	7
VI	SOIL/GROUNDWATER LABORATORY ANALYSIS	9
VII	REPORTING	10
VIII	QUESTIONS	10
IX	AVOID THESE COMMON MISTAKES	10
X	COMPLETING THE ASSESSMENT FORM	11

\* **The 2017 revision changed the reporting requirement from 72 hours to 24 hours.**

## **I. INTRODUCTION**

- A) The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (Department) has developed this technical guidance at the request of the regulated community to help UST owners and operators assess their sites. South Carolina UST Control Regulations (SCUSTCR) require, before permanent closure or a change-in-service is completed, that owners or operators must measure for the presence of a release where contamination is most likely to be present at the UST site. In selecting sample types, sample locations, and measurement methods, the method of closure, the nature of the stored substance, the type of backfill, the depth to ground water, and other factors appropriate for identifying the presence of a release must be considered.
- B) To provide better service and response times, a standardized assessment report format has been developed. The use of this format will provide the Department with all information needed to evaluate the report without additional requests for information. The assessment report can be submitted as a stand-alone document or included as an appendix in a more comprehensive report. All closure and change-in-service reports are required to be submitted in this format.
- C) If you have any questions regarding these guidelines, or would like a copy of the South Carolina UST Control Regulations or other UST related documents, please contact the Underground Storage Tank Management Division at (803) 898-0589, FAX (803) 898-0673.

## **II. FOR YOUR INFORMATION**

- A) Include the Department's Permit ID Number on any correspondence concerning the site.
- B) An UST must be permanently closed if it has been temporarily closed for longer than 12 months and does not meet the performance standards for new systems or the upgrading requirements for existing systems.
- C) The Department does not license or certify contractors performing UST installation, upgrade, or closure activities. The regulations reference industry standards that may be used to ensure compliance with installation, upgrade, or closure requirements. UST owners and operators are solely responsible for ensuring that these activities are performed in accordance with referenced standards.
- D) To permanently close an UST, it must be emptied and cleaned of all liquids and accumulated sludges. Product lines must be purged of all liquids. The UST must also be removed from the ground or filled in place with an inert solid material such as sand, foam, or concrete. Water is not an inert solid material and cannot be used for in place closure. The physical closure of the UST (either by removal or filling in place) must conform to the established industry standards listed below:
  - 1. American Petroleum Institute Recommended Practice 1604, "Removal and Disposal of Used Underground Petroleum Storage Tanks";
  - 2. American Petroleum Institute Publication 2015, "Cleaning Petroleum Storage Tanks."



***CAUTION: USTs can contain large quantities of explosive vapors that may ignite if handled improperly. Individuals closing UST systems should follow the industry standards referenced above to reduce the risk of accidents.***

- E) Owners or operators must notify the Department at least 30 days prior to permanent closure or change-in-service. A change-in-service is the continued use of an UST to store a non-regulated substance.
- F) An assessment is required for the permanent closure or change-in-service of an UST system. It should include information for the USTs, product piping, and dispenser islands.
- G) Assessment reports should be submitted to the Department within 60 days of permanent closure or change-in-service.
- H) When evaluating potential contractors or consultants, UST owners and operators can do several things to ensure a quality job. Always ask for, and check, references. Request a list of the latest jobs the contractor has completed. Recent jobs should be specified, otherwise the owner or operator may only get a list of those customers who were satisfied.
- I) A written contract that clearly specifies what work is to be done and which party will be responsible for completing each step of the process should always be provided. For example, if the owner or operator wants the contractor to supply a copy of their report to the Department, that requirement should be included in the contract.
- J) All analytical data collected during the assessment should be reported in the assessment report. For analytical parameters (for specific petroleum products), analytical methods, and reporting limits, please refer to Part VI of this document, SOIL/GROUNDWATER LABORATORY ANALYSIS.
- L) If free product or contamination is discovered at a site, the UST owner or operator must report the release to the Department within 24 hours of discovery.
- M) Even if a full service firm is hired to handle all aspects of the project, the UST owner and operator are responsible for satisfying all regulatory requirements. If the work is not done properly, the owner and operator will be held responsible for correcting any problems.

### **III. BASIC SITE ASSESSMENT INFORMATION**

- A) If groundwater is encountered in any boring, at least one groundwater sample should be collected for analysis. If groundwater is expected to be encountered at a site, a monitoring well request (per R.61-71) should be submitted to the Department prior to beginning the assessment. All monitoring wells, whether temporary or permanent, must be approved by the Department.
- B) If groundwater is encountered in any excavation at least one groundwater sample should be collected for analysis. Document the presence or absence of a petroleum (iridescent) sheen or free product on the water in the excavation. Soil samples should be taken from the

excavation walls at or immediately above the static water level located at the ends of the USTs and/or in areas of contamination noted through sight, smell and/or organic vapor analyzer (OVA) measurements.

- C) Samples for laboratory analysis must be collected and stored using proper methods. **Groundwater and soil samples MUST be placed on wet or dry ice immediately upon sampling and maintained at 4 degrees Celsius/ 39 degrees Fahrenheit until relinquished at the laboratory.** See REFERENCES FOR SAMPLING PROTOCOL below. Please note: Most refrigerators will not maintain samples at the required temperature.
- D) An OVA may be used to assist in the selection of samples for laboratory analysis. Please note that OVAs are **not** as effective with higher boiling point products such as diesel fuel, kerosene, or waste oil.
- E) If groundwater is encountered in any excavation at least one sample should be collected for analysis. In many cases a groundwater sample may be taken in lieu of soil samples in the tank excavation. Contact the Department for guidance.
- F) Chemicals of concern (COC) are specific constituents that are identified for evaluation in the assessment process. Reporting limits for COCs in soil and water samples are provided in Part VI, SOIL/GROUNDWATER LABORATORY ANALYSIS. If detection limits must be elevated for highly contaminated samples, the dilution must be documented with the analytical results.
- G) Appropriate chain of custody forms must be maintained for the laboratory reports to be considered valid.
- H) Analyses must be performed by a laboratory certified by the Department (per R.61-81) using Environmental Protection Agency (EPA) analytical methods. The laboratory report of analyses results must include the SC Laboratory Identification number of the laboratory which performed the **actual** analysis. Contact the Department's Laboratory Certification Section at (803) 896-0970 to confirm a laboratory's certification.
- I) References for sampling protocol:
  - 1) EPA Publication #600/2-85/104, September 1985, "**Practical Guidance for Ground-Water Sampling.**"
  - 2) EPA Publication #OSWER-9950.1, September 1986, "**RCRA Ground-Water Monitoring Technical Enforcement Guidance Document.**"
  - 3) EPA Publication SW-846, Third Edition, 1986, Updates I, II, IIA, IIB, and III, "**Test Methods for Evaluating Solid Waste, Physical/Chemical Methods.**"
  - 4) EPA Publication #530/UST-90-003, September 1990, "**Field Measurements, Dependable Data When You Need It.**"

#### IV. RECOMMENDED SAMPLING LOCATIONS

- A) It is important that assessment information be representative of site conditions. The sampling program used should consider the method of closure. The two UST closure methods are treated differently since USTs that are removed from the ground enable the bottom of the excavation to be visually inspected. In this case, the visual inspection of the exterior of the UST and excavation is an important component of the closure activity and

can provide information to determine if a release has occurred. Holes in the UST and/or areas of stained soils should be noted in the assessment report. Using this information, sampling locations can be tailored to make an initial determination concerning the presence of contamination.

- B) The exterior of USTs that are closed in place cannot be visually inspected. Consequently, the presence or size of releases cannot be determined and a more comprehensive assessment is necessary.
- C) In addition to the USTs, the product piping and dispenser islands must also be assessed. The majority of releases associated with UST systems are a result of releases from product piping and dispenser islands. Regardless of the method of closure, it is imperative that the assessment include information for all components of the system - **the USTs, product piping, and dispenser islands.**

D) FOR UST CLOSURE BY REMOVAL

- 1) The recommended minimum number of soil samples to be collected from a single UST excavation is equal to the number of USTs, plus one. The samples should be collected from areas of the excavation judged most likely to be contaminated. The most likely sampling areas would include UST ends, the area directly beneath the USTs and in those areas of noted UST failure (discolored soils or petroleum odors). After excavating only enough soil to remove the USTs from the ground, soil samples should be taken from the undisturbed (native) soils at the bottom of the excavation. If the excavation walls appear contaminated, additional soil samples should be collected from these areas.
- 2) If groundwater is encountered in any excavation at least one sample should be collected for analysis. In many cases a ground water sample may be taken in lieu of soil samples in the tank excavation. Contact the Department for guidance.

E) FOR UST CLOSURE IN PLACE OR CHANGE-IN-SERVICE

- 1) The recommended minimum number of soil samples collected from each area where the USTs are located is equal to **twice** the number of USTs. Borings should be placed at or near each end of every UST. Samples should be taken at least two feet below the base of the UST.
- 2) If groundwater is encountered in any boring, at least ONE sample should be collected for analysis. If groundwater is expected to be encountered at a site, a monitoring well request should be submitted to the Department prior to beginning an assessment.

F) PRODUCT PIPING

Samples should be taken at every junction and change in direction as well as every twenty (20) feet along straight runs of piping which are thirty (30) feet or longer. Straight runs of piping less than thirty (30) feet in length should be sampled at the midpoint. Samples should be collected approximately two feet below the bottom of the piping from each location.

G) DISPENSER ISLANDS

All dispenser islands should be sampled. If the dispenser island is located above or immediately adjacent (**less than five feet**) to the UST, the sample for the island can be incorporated into the sample for that UST. Otherwise, dispenser islands should be individually sampled. Samples should be collected approximately two feet below the bottom of the associated piping.

V. UST CLOSURE ACTIVITIES

A) BEFORE CLOSURE

- 1) Notify the Department in writing **30 days** before UST system closure. Written approval will be issued. To allow the Department's Inspection Staff an opportunity to attend the UST closure, please call at least 48 hours before the actual closure date. Other local agencies (fire marshal, etc.) may also need notification of closure activity. Contact the local governing agency for information.
- 2) All USTs must be emptied and cleaned by removing all liquids and accumulated sludge for a permanent closure. The cleaning methods, quantity of materials removed, and the disposal location must be attached (manifests, etc.) to the assessment report.
- 3) Contact the Department **prior** to any de-watering activities. De-watering activities are actions necessary for removing water from the excavation for permanent closure or installation of USTs.

B) CLOSURE BY REMOVAL

- 1) Waste products, sludges, contaminated water, and contaminated paving material must be disposed of at a Department permitted treatment or disposal facility. Additional information and assistance may be obtained from the Bureau of Land and Waste Management by calling (803) 898-2000.
- 2) Temporarily excavate only enough soil to remove the tanks and piping.
- 3) After a UST system removal, inspect and document all USTs and piping for indications of failure. Noticeable failures should influence soil/water sampling locations.
- 4) Conduct a closure assessment where contamination is most likely to be found. (See Part IV; RECOMMENDED SAMPLING LOCATIONS).
- 5) All excavated soils are to be returned to the excavation except where authorized by a Department representative. Unsecured stockpiled soils pose a significant health hazard and can result in surface run off. The need for further assessment and/or corrective action will be determined by the Department based upon the assessment report. The excavation should be filled to grade with clean material.

- 6) Contaminated paving material cannot be placed into the excavation and must be disposed of at a facility permitted by the Division of Mining & Solid Waste Permitting. Additional information and assistance may be obtained by calling (803) 896-4261. No paving material or construction debris should be placed into a contaminated excavation. If there are no indications of contamination, paving material generated on-site as part of closure activities may be placed into the excavation (at the landowner's option).
- 7) Follow all applicable transportation regulations if moving USTs off site. Please contact the local office of the Department of Transportation for additional information.

C) CLOSURE IN PLACE

- 1) Waste products, sludges, and contaminated water must be disposed of at a Department permitted treatment or disposal facility. Additional information and assistance may be obtained from the Bureau of Land and Waste Management by calling (803) 898-2000.
- 2) Conduct a closure assessment where contamination is most likely to be found. (See Part IV; RECOMMENDED SAMPLING LOCATIONS).
- 3) Fill the empty and cleaned UST and piping with an inert solid material (i.e., sand, concrete slurry or foam).

D) RECEPTOR SURVEY

The location and type of receptors that are, or may be, affected by a release must be identified. Receptors such as underground structures, utilities surface water, sensitive habitats, and water supply wells should be included.

E) AFTER CLOSURE

- 1) If free product is present at the site, the UST owner and/or operator must take **immediate** action regarding the release response and corrective action.
- 2) If free product or contamination is present at the site, the UST owner or operator must report the release to the Department within 24 hours of discovery. You must complete the UST 24 Hour Release Report form (DHEC 1364).

**VI. SOIL/GROUNDWATER LABORATORY ANALYSIS**

**A) FOR UST SYSTEMS THAT CONTAIN PETROLEUM PRODUCTS**

*ANALYZE SAMPLES FOR EACH OF THE FOLLOWING:*

PRODUCT: GASOLINE, DIESEL, FUEL OIL, KEROSENE					
SOIL SAMPLES			WATER SAMPLES		
Analyte	Method	RL*	Analyte	Method	RL*
BTEX	5035/8260B	5 µg/kg	BTEX	5030B/8260B	5 µg/L
Naphthalene	5035/8260B	5 µg/kg	Naphthalene	5030B/8260B	5 µg/L
PAH	3550C/8270D	660 µg/kg	MTBE	5030B/8260B	5 µg/L
			PAH	3510C/8270D	5 µg/L
			EDB	8011	.05 µg/L
			1,2-DCA	5030B/8260B	5 µg/L

PRODUCT: USED OIL					
SOIL SAMPLES			WATER SAMPLES		
Analyte	Method	RL*	Analyte	Method	RL*
BTEX	5035/8260B	5 µg/kg	BTEX	5030B/8260B	5 µg/L
Naphthalene	5035/8260B	5 µg/kg	Naphthalene	5030B/8260B	5 µg/L
TPH	9071B	10 mg/kg	TPH	9070A	40 mg/L
PAH	3550C/8270D	660 µg/kg	PAH	3510C/8270D	10 µg/L
Metals			Metals		
Arsenic	3050 B w/ 6020A or 7010	250 µg/kg	Arsenic	3005A, 3010A	50 µg/L
Barium	3050B w/ 6010C or 6020A	250 µg/kg	Barium	3005A, 3010A	5 µg/L
Cadmium	3050B w/ 6010C, 6020A or 7010	250 µg/kg	Cadmium	3005A, 3010A	5 µg/L
Chromium	3050B w/ 6010C, 6020A or 7010	250 µg/kg	Chromium	3005A, 3010A	1 µg/L
Lead	3050B w/ 6010C or 6020A	250 µg/kg	Lead	3005A, 3010A	5 µg/L
Mercury	7471A	10 µg/kg	Mercury	7470A	0.2 µg/L
Selenium	3050 B w/ 6020A or 7010	250 µg/kg	Selenium	3005A, 3010A	5 µg/L
Silver	3050B w/ 6010C, 6020A or 7010	250 µg/kg	Silver	3005A, 3010A	5 µg/L

PRODUCT: OTHER PETROLEUM	Sample for Representative Parameters
--------------------------	--------------------------------------

- BTEX** = Benzene, Toluene, Ethyl-benzene, Xylene
- PAH** = Polynuclear Aromatic Hydrocarbons (Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, Dibenz(a,h)anthracene)
- MTBE** = Methyl Tertiary Butyl Ether
- TPH** = Total Petroleum Hydrocarbon
- METALS** = Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver
- AA or ICP** = Atomic Absorption or Inductively Coupled Plasma
- \*** = Reporting Limit (RL)
- EDB** = Ethylene Dibromide
- DCA** = Dichloroethane

## B) FOR UST SYSTEMS THAT CONTAIN HAZARDOUS SUBSTANCES

When assessing an UST system that has contained a hazardous substance listed in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), all analyses must be performed by a laboratory certified by the Department. Analytical methods should be for representative parameters. Questions concerning appropriate analytical methods should be directed to the UST Division.

## VII. REPORTING

Please do not submit assessment reports for multiple sites bound under one cover. Since each site assessment is addressed individually, delays may result while the report is separated and may result in the possible loss of data. Incomplete assessment reports may not be reviewed until all necessary information is submitted.

## VIII. QUESTIONS

On correspondence related to the site, please reference the Facility Permit ID Number. Questions should be addressed to the Underground Storage Tank Division at (803) 898-0589 or (803) 898-2544; FAX (803) 898-0673.

## IX. AVOID THESE COMMON MISTAKES...

- A) Some assessment reports are incomplete or submitted with deficiencies. These reports delay the entire reviewing process and you may be asked to provide additional sampling which means spending more money. To avoid being asked to resubmit work, please review the following list before starting your site assessment.
- B) Incorrect reporting limits - The reporting limit for benzene, toluene, ethyl benzene, xylene, (BTEX) and naphthalene is 5 ug/kg. The reporting limit for polynuclear aromatic hydrocarbons (PAHs) is 660 ug/kg. You should inform the laboratory performing the analysis of the required reporting limits. If the result of analysis (BTEX, naphthalene, or PAHs) for the sample is below the detection limit for that analyte, then the required reporting limit must still be met. Otherwise, you may be required to resample.
- D) Failure to take the correct number of samples - The assessment guidelines provide sampling requirements for USTs closed by removal or filling in place. For closure by removal the number of samples is equal to the number of tanks plus one sample. When filling in place the number of samples is twice the number of tanks.
- E) Failure to submit sampling methodology and sample depths - A brief description of how the samples were taken, precautions that were taken to prevent cross contamination and the method by which the samples were stored prior to being taken to the laboratory is required. Note: Ensure that samples are packed in ice. Blue ice packs or refrigerators are usually not adequate to maintain samples at the required temperature of 4 degrees Celsius.
- F) Failure to sample the dispenser islands and piping runs - If the distance between the dispenser and UST is greater than 5 feet, a sample is required at a depth of 2 feet under the dispenser. Piping samples should be taken every 20 feet along straight runs exceeding 30 feet. Piping runs under 30 feet should be sampled at midpoint.
- G) Standardized report format- Use the standardized report format to avoid delays in processing your report.

## X. SPECIFIC INSTRUCTIONS FOR COMPLETING THE ASSESSMENT REPORT

NOTE: Underground Storage Tank Release Report: Complete this only if a release has occurred or there is free product visible. Answer all questions by indicating yes or no or completing the blank as applicable.

I. Ownership of the UST(s): Enter the name, mailing address, telephone number and contact person for the tank owner.

II. Site Identification and Location: Enter the name, physical street address, and permit identification number of the facility where the tank(s) are located. The address must include the name of the county in which the facility is to be located.

III. Insurance Information and SUPERB Funding: Please complete all blanks as applicable. If you have environmental insurance please attach a copy of the environmental insurance policy. Please complete DHEC Form 1300 to indicate if you would like to participate in the SUPERB Program.

IV. 24 Hour Release Report: If free product is observed during closure activities, please complete and submit DHEC Form 1364. NOTE: this form should not be submitted for normal sampling analysis.

V. Certification: The application must be signed by the owner or an authorized representative of the owner. In addition, the signature portion must be completed in front of a Notary Public.

VI. UST Information: Complete all applicable boxes or spaces found under each heading. In that the design, construction, and installation details may vary for individual tanks, a column for each individual tank (up to six tanks) has been provided. Provide as detailed a description as feasible for methods of disposal and attach associated manifests (receipts showing adequate disposal at a disposal facility).

VII. Piping Information: Complete the empty boxes or spaces found under each heading. In that the design, construction, and installation details may vary for individual piping runs, a column for each individual piping run (up to 6) has been provided.

VIII. Brief Site Description and History: Provide as complete a description in the space provided.

IX. Site Conditions: Complete all sections in the table by indicating yes or no. If yes, please indicate more specific information as required by documentation on the site map or providing additional written information. If the information cannot be obtained or details are unknown, indicate unknown in the table.

X. Sample Information: Complete all required sampling information for each sample in the table. Please be sure to indicate the SCDHEC lab certification number in the blank at the top of the page.

XI. Sampling Methodology: Provide a detailed description of all methods used to collect and store the samples in the space indicated. Please remember to include information on the preservative used for each sample.

XII. Receptors: Complete all sections in the table by indicating yes or no. If yes, please indicate more specific information as required by documentation on the site map or providing additional written information. If the information cannot be obtained or details are unknown, indicate unknown in the table.

XIII. Site Map: Please provide a **to scale** site map that includes all buildings, roads, utilities, tank and dispenser island locations, labeled sample locations, extent of excavation and any other pertinent information. If you answered yes to any questions in Section IX or XII please indicate this on the site map.



XIV. Summary of Analysis Results: Please enter all soil analytical data for each soil boring in the table provided. If ground water samples were taken, please enter all analytical data in the table as indicated with "W-1" and so on.

XV. Analytical Results: You must attach the analytical results from a certified laboratory and associated chain-of-custody sheets.

Please review the report to ensure that everything is completed and all supplemental information has been attached.

**Office Mechanics and Filing**: This form and the required supplemental information must be submitted to the address on the form within 60 days of a UST closure. This form becomes part of the permanent file.

**Contact Information**: Please contact the UST Release Coordinator at (803) 898-0647 for further information.