

**Virginia Department Of Environmental Quality (DEQ) Storage Tank Program
Fact Sheet: Regulated Underground Storage Tank (UST) Closures**

Steps to Follow:

1. Contact the local building official (or designated fire official) and obtain a building permit. The building official **usually will be on site** during the removal of the tank system.
2. The tank and associated pipes must be drained, cleaned, and completely emptied. Precautions must be taken to mitigate vapor hazards (e.g. use of dry ice to purge vapors from the tank).
3. If the UST is closed in place (with prior approval from the building official), it **must** be drained of product, cleaned, and filled with an inert substance (e.g. cement slurry, sand). DEQ recommends that tanks be removed from the ground where possible.
4. Do **not over-excavate** the soil in the tank basin. Remove only the volume of soil needed to extract the tank from the subsurface.
5. A closure assessment is required in all cases (except where the UST has verifiable external vapor or ground water monitoring - see 9 VAC 25-580-330).
A closure assessment includes the following:
 - a. A site map containing:
 - ▶ scale, north arrow, and legend;
 - ▶ all buildings and roads (labeled);
 - ▶ the entire UST system (this includes pipes and pump islands);
 - ▶ soil or water sample locations and depths; and
 - ▶ other important features including monitoring wells, drinking water wells, streams, etc.
 - b. Sample collection and analysis:
 - ▶ If obvious signs of contamination are present (e.g. free product, contaminated ground water, stained soil, etc.) the collection of samples is not necessary. Contact the Regional Office and report the release within 24 hours of discovery of a regulated substance in the environment.
 - ▶ If contamination is not obvious, **samples must be collected from locations where a release would most likely be detected if one occurred.** Soil samples must be collected from: the bottom of the UST basin, beneath the pipelines; under each pump dispenser; and any other area where contamination would be suspected. If ground water is encountered, soil samples should be collected from just above the soil - ground water interface.
 - ▶ All samples must be collected from discrete locations. Composite samples (mixtures of soil from different locations) are not acceptable.
 - ▶ Samples must be analyzed using EPA or DEQ **approved** methods.
 - ▶ If the tank contained petroleum, lab results for soil samples that equal or exceed 100 mg/kg TPH or water samples that equal or exceed 1 mg/l TPH must be reported to DEQ. If the tank contained a regulated substance (CERCLA listed substance) other than petroleum, analytical results that exceed the detection limit for that substance must be reported to DEQ within **24 hours**.
 - ▶ Results from vapor or ground water monitoring performed in accordance with section 330 of the UST Technical Regulation are acceptable in lieu of soil or ground water samples during UST closure. If the results of monthly ground water or vapor monitoring are used in lieu of sample collection during UST closure, the monitoring results must be submitted along with the closure package.
 - c. Any additional information (photos, maps, notes from the building inspector concerning the closure, or any other documentation) that may help evaluate the closure.
6. A closure packet must be filed within 30 days of the tank closure. This closure packet must be sent to the DEQ Central Office, DEQ UST Program, P.O. Box 10009, Richmond, VA. 23240-0009.
The closure packet consists of:
 - a. the completed and signed Notification Form 7530-1;
 - b. a copy of the building permit;
 - c. the closure assessment;
 - d. lab sheets from all analyses; and
 - e. copies of all disposal manifests (sludge, contaminated soil and/or water, UST).

PROJECT NARRATIVE

BASED ON THE NEED TO UPGRADE AGING INFRASTRUCTURE, PROVIDE ADDITIONAL FUELING CAPABILITIES DURING SNOW REMOVAL OPERATIONS OR OTHER EMERGENCY SITUATIONS, THE TOWN OF LEESBURG HAS DECIDED TO UPGRADE THEIR CENTRAL MAINTENANCE FACILITY'S FUEL STATION. THIS PROJECT PROPOSES THE REMOVAL OF TWO UNDERGROUND FUEL STORAGE TANKS THAT WILL THEN BE REPLACED WITH TWO 6,000 GALLON TANKS ABOVE GROUND. DEMOLITION OF EXISTING FUEL ISLAND INFRASTRUCTURE AND ACCESSORY STRUCTURES WILL BE REQUIRED. IN ADDITION TO A CONCRETE PAD, CONCRETE ISLAND, TANKS, AND DISPENSERS, ADDITIONAL PROPOSED FEATURES INCLUDE BMP STRUCTURES. AN OVERHEAD CANOPY WILL HELP PREVENT RAINFALL FROM TRANSPORTING FUEL DROPLETS FROM BEING TRANSPORTED OFFSITE. A TRENCH DRAIN EXTENDING AROUND PORTIONS OF THE DOWNSTREAM PERIMETER OF THE CONCRETE ISLAND WILL COLLECT ANY SPILLED FUEL THAT DOES RUN OFF AND CHANNEL IT INTO A PRECAST WATER QUALITY COLLECTION MANHOLE THAT WILL TREAT THE RUNOFF BEFORE BEING DISCHARGED INTO A TRIBUTARY TO TUSCARORA CREEK. BOLLARDS SURROUNDING THE FUEL ISLAND WILL AFFORD THE ABOVE GROUND STORAGE TANKS PROTECTION AGAINST POTENTIAL PUNCTURE FROM VEHICLES.

SWM/BMP NARRATIVE

BASED ON DCSM SECTION 5-630.1.A.2(a), STORMWATER MANAGEMENT IS NOT REQUIRED SINCE THIS PROJECT CALLS FOR THE DISTURBANCE OF LESS THAN 1 ACRE OF LAND. BMP IMPLEMENTATION IS REQUIRED SINCE THIS SITE IS A BMP "HOT SPOT" AS DEFINED IN ARTICLE 5-640 OF THE TOWN OF LEESBURG DCSM. A CONTECH STORMFILTER IS PROPOSED TO FILTER 0.20 ACRES OF IMPERVIOUS COVER FLOWING FROM AREAS UPLAND OF THE CONCRETE PAD AS WELL AS THE PROPOSED FUEL ISLAND CANOPY. PER COORDINATION WITH VA DCR, OTHER MEASURES TAKEN TO ADDRESS BMP HOT SPOT CONCERNS INCLUDE IMPLEMENTATION OF A CANOPY OVER THE FUEL ISLAND AND PERIMETER TRENCH DRAINS AROUND THE CONCRETE PAD. TRENCH DRAIN AND WATER QUALITY BMP DETAILS HAVE BEEN INCLUDED ON SHEETS C012 AND C013. SUPPORTING CALCULATIONS ARE ON SHEETS C014 AND C015.

Locations of trench drain and water quality BMP details; as well as supporting calculations changed.

Fuels	TPH Analytical Methods	Applicable Medium ¹
Gasoline and JP-4	California LUFT Method	w & s
	Wisconsin DNR - GRO	w & s
	SW 846 8015b (modified TPH - GRO)	w & s
Diesel, Fuel Oil #1 and #2, Jet Fuel ² , Kerosene	California LUFT Method	w & s
	Wisconsin DNR - DRO	w & s
	SW 846 8015b (modified TPH - DRO)	w & s
Crude Oil, Fuel Oil #4, #5, and #6, Used Oil, Hydraulic Oil	EPA 413.1	w
	EPA 413.2	s
	EPA 418.1	w & s
	Wisconsin TRPH	s

¹ Applicable medium refers to the sample matrix that may be analyzed by the subject test method.
² JP-4 is a wide-cut fuel made by blending gasoline and kerosene fractions in a 65 to 35 ratio.

References:
 EPA 100 - 400 Series - Methods for Chemical Analysis of Water and Wastes, EPA - 600/4-79-020, March 1983
 EPA SW-846 - Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846). Revision 5, April 1998
 Publ. - SW - 140. Modified GRO, Method for Determining Gasoline Range Organics, Wisconsin DNR, September 1995.
 Publ. - SW - 141. Modified DRO, Method for Determining Diesel Range Organics, Wisconsin DNR, September 1995.
 Publ. - SW - 143. Wisconsin DNR, 1992

If you have additional questions, persons in the storage tank program may be reached at the numbers listed below.

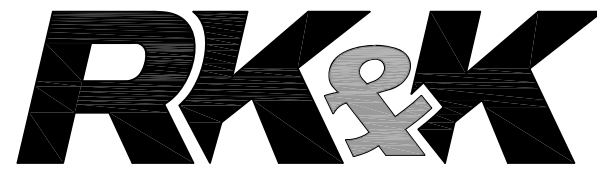
Central Office (Richmond)	(804) 698-4269
Tidewater Regional Office (VA. Beach)	(757) 518-2000
Northern VA. Regional Office (Woodbridge)	(703) 583-3800
Piedmont Regional Office (Richmond)	(804) 527-5020
Valley Regional Office (Harrisonburg)	(540) 574-7800
West Central Regional Office (Roanoke)	(540) 562-6700
Southwest Regional Office (Abingdon)	(540) 676-4800
South Central Regional Office (Lynchburg)	(804) 582-5120

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NO.	REVISIONS	DATE

DWG. TITLE

NOTES AND
NARRATIVES

DATE	04/29/11
SCALE	N/A
DWN.	KAB
CHK.	WSS
PROJ. No.	
DWG. No.	

C002



CONTRACTOR IS REQUIRED TO COORDINATE WITH ENGINEER (RKK) DURING UNDERGROUND STORAGE TANKS CLOSURE.