

The following are approved methods of leak detection:

Automatic Tank Gauging (ATG) Systems (for tanks only)	
Description Of Release Detection	An automatic tank gauging (ATG) system consists of a probe permanently installed in a tank and wired to a monitor to provide information on product level and temperature. ATG systems automatically calculate the changes in product volume that can indicate a leaking tank.
Secondary Containment With Interstitial Monitoring (for tanks & piping)	
Description Of Release Detection	Secondary containment is a barrier between the portion of an UST system that contains product and the outside environment. Examples of secondary containment include an outer tank or piping wall, an excavation liner, and a bladder inside an UST. The area between the inner and outer barriers — called the interstitial space — is monitored manually or automatically for evidence of a leak.
Statistical Inventory Reconciliation (SIR) (for tanks only)	
Description Of Release Detection	SIR is a method in which a trained professional uses sophisticated computer software to conduct a statistical analysis of inventory, delivery, and dispensing data. You must supply the professional with data every month. The result of the analysis may be PASS, INCONCLUSIVE, or FAIL.
Manual Tank Gauging (for tanks 2,000 gallons or less only)	
Description Of Release Detection	<u>This method may be used only for new or used oil tanks of 2,000 gallons or less capacity or tanks of 550 gallons or less for any product.</u> Manual tank gauging involves taking your tank out of service for the testing period (at least 36 hours) each week, during which the contents of the tank are measured twice at the beginning and twice at the end of the test period. The measurements are then compared to weekly and monthly standards to determine if the tank is tight.
Vapor Monitoring** (for tanks & piping)	
Description Of Release Detection	Vapor monitoring measures product vapors in the soil at the UST site to check for a leak. A site assessment must determine the number and placement of monitoring wells that make sure a release is detected. NOTE: Vapor monitors will not work well with substances that do not easily vaporize (such as diesel fuel).
Groundwater Monitoring** (for tanks & piping)	
Description Of Release Detection	Groundwater monitoring looks for the presence of liquid product floating on the groundwater at the UST site. A site assessment must determine the number and placement of monitoring wells that make sure a release is detected. NOTE: This method cannot be used at sites where groundwater is more than 20 feet below the surface.

****Vapor Monitoring and Groundwater monitoring used as the SOLE method of leak detection will not be allowed after December 31, 2005.**

Pressure piping is in place when a device (pressure pump) “pushes” the gasoline from the tank to the dispenser. The device is located in a sump close to the tank.

Pressure piping leak detection must meet the following requirements.

Automatic Line Leak Detection – Electrical or Mechanical (for pressurized piping only)	
Description Of Release Detection	Automatic line leak detectors (LLDs) are designed to detect a catastrophic release from pressurized piping. Automatic LLDs must be designed to detect a leak at least as small as 3 gallons per hour at a line pressure of 10 psi within 1 hour. When a leak is detected, automatic LLDs must shut off the product flow, restrict the product flow, or trigger an audible or visual alarm. NOTE: Automatic LLDs need to be installed and operated as close as possible to the tank (LLDs are designed to detect a leak and restrict flow only between the detector and the dispenser).

Suction piping is in place when a device (suction pump) is located in the dispenser and “sucks” the gasoline from the tank to the dispenser.

No release detection is required if the following four items can be demonstrated:	Y/N	The underground piping is operated at less than atmospheric pressure;
	Y/N	The piping is sloped so that the contents of the pipe will drain back into the tank if suction is released;
	Y/N	Only one check valve is included in each suction line; <u>and</u>
	Y/N	The check valve is located directly below and as close as practical to the suction pump.

If you cannot answer yes to all of the above, then you must:

Perform a line tightness test every 3 years		Hire a UST tank tightness tester and do line tightness testing Keep a record of the results
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Or

Perform Monthly Monitoring		Monitor your vapor, groundwater wells, or interstitial (double walled) piping every 30 days Keep a record of the results
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Please note: Monthly monitoring by use of SIR may not be used in lieu of tightness testing.