

Are You Really Performing Leak Detection?

Well, here we are in the fall of 2000, over one and a half years after the upgrading deadline. For those owners who chose to expend the money to upgrade or replace their systems with all the new automatic "bells and whistles", you can sit back and smell the roses, right? Guess again!

It seems like on a monthly basis a trade magazine reports a major release from an upgraded tank system with automatic leak detection. Why? Because some owners do not heed the manufacturer's instructions on the proper operation of automatic leak detection systems or fail to maintain the systems in proper working order.

Equipment that automatically tests for leaks in tanks must meet performance standards for minimum leak detection rates. Check the third-party evaluation for your ATGS to make sure your system will detect a leak of 0.2 gallons per hour with 95% probability of detection and 5% probability of false alarm. Equipment used for automatic testing of pressurized piping must be designed to detect a leak at least as small as 3 gallons per hour at a line pressure of 10 pounds per square inch within one hour by shutting off the product flow, restricting the product flow, or triggering an audible or visual alarm. In addition a line tightness test must be able to detect a leak as small as 0.1 gallon per hour when the line pressure is 1.5 times its normal operating pressure. This test must be performed each year.

Some permanently installed automatic tank gauging systems can meet the requirements of a line tightness test.

The Bureau of Underground Storage Tank Regulations' ([BUSTR](#)) rules state that automatic leak detection systems must be installed, calibrated, operated, and maintained in compliance with the manufacturer's instructions, including routine maintenance and service checks for operability or running conditions. The Board's rules require that you are in compliance with all UST regulations, including leak detection, in order to make a claim against the Fund.

Owners who do not heed the manufacturer's instructions on the proper use of the leak detection systems or fail to operate and maintain the systems in proper working order can be cited and fined for improper leak detection. More importantly, Fund coverage may be jeopardized.

Make sure your automatic leak detection installer gives you an operation manual, schedules and documentation for calibration and maintenance, third-party evaluation, phone numbers for technical support, and schedules maintenance with you as required by the manufacturer's instructions.

The Board realizes that many owners have spent thousands of dollars for automatic leak detection systems. However the improper use and maintenance of them nullifies that investment. Protect your investment and Fund coverage by adhering to the manufacturer's instructions and properly operating and maintaining the automatic leak detection systems.

There are other means of leak detection available to UST owners. Soil vapor monitoring, groundwater monitoring and interstitial monitoring are approved leak detection methods. In addition, statistical inventory reconciliation (SIR) may be used if approved by [BUSTR](#) on a site by site basis. For additional information regarding all approved leak detection methods for tanks and piping contact [BUSTR](#) at 614-752-7938.