REGULATORY LEAK DETECTION CHANGES

The Bureau of Underground Storage Tank Regulations (BUSTR) amended several release prevention rules last year that will affect coverage with the Financial Assurance Fund. Perhaps the most significant is rule 1301:7-9-07(B)(1)(c) which eliminated the use of vapor monitoring and ground water monitoring as a sole method of leak detection effective December 31, 2005.

Based upon BUSTR's database, the Board has identified 203 owners with 644 tanks that currently use these techniques as the sole method of leak detection. Those owners must convert to an approved method of leak detection immediately to remain eligible for Fund coverage. For all practical purposes, the release detection methods remaining for tanks after December 31, 2005 are:

"Manual Tank Gauging" is allowed for those tanks which have a storage capacity of 550 gallons or less and can be left idle (no liquid is added to or taken out of the tank) for a 36 hour period. This method involves taking two consecutive level measurements at the beginning and ending of the 36 hour idle period. Liquid level variations are then compared to the table in OAC 1301:7-9-07(D) to determine if a suspected release has occurred. Manual tank gauging is also allowed for tanks with a capacity of 551 to 2,000 gallons that contain new or used oil provided a tank tightness test is performed every five years.

"Automatic Tank Gauging" uses equipment to conduct gauging by incorporating a specialized probe which is inserted into the liquid portion of the tank and measures liquid levels. The equipment must be able to detect a two-tenth of a gallon per hour leak rate from any portion of the tank and perform inventory controls with the requirements as specified in OAC 1301:7-9-07(D)(2).

"Interstitial Monitoring" requires a secondary barrier be established immediately around or beneath the tank. This is the only method available to owners/operators for tanks that are being installed within BUSTR designated sensitive areas. The three methods specified by the rule are:

1. Double walled tank in which the barrier between the two walls (interstice) is monitored for failures from both the inner wall and the outer wall of the tank;
2. Installation of an artificially constructed impermeable barrier that immediately surrounds the tank. The liner must be compatible with the substance stored in the tank with a designated monitoring point immediately surrounding the tank; and
3. Internally fitted liners incorporated with a device that can detect a failure of either the liner or the tank.

"Statistical Inventory Reconciliation (SIR)" is one of the alternatives not specified by rule. SIR analyzes inventory, delivery, and dispensing data collected over a period of time (not to exceed thirty days) to determine if the tank and associated piping is leaking. Tank data can be gathered electronically or manually. The most common choice of gathering the inventory data is through manually gauging the tank for product levels, recording meter readings from the dispenser and documenting the fuel delivery amounts. A tank owner must use a company that provides this type of release detection service (SIR vendor) in Ohio. Prior to implementing this method, the tank owner/operator must supply BUSTR with certain information, including the facility ID number, tanks that will be involved with the SIR method, name of the SIR vendor, and the method of SIR that will be incorporated. The tank owner/operator can contact BUSTR to obtain a list of SIR vendors currently offering their services in Ohio. This method must be approved on a site by site basis by BUSTR before implementing.

An insert has been placed in this edition of the "Pipeline" to help identify those owners who, according to records, are still using vapor and ground water monitoring as a sole method of leak detection. If you believe that you have been incorrectly identified as such an owner, the information on file with BUSTR needs to be updated.