7150.0340 METHODS OF RELEASE DETECTION FOR PIPING.

Subpart 1. **Applicability.** Each method of release detection for piping used to meet the requirements of part 7150.0300, subpart 6, must be conducted according to this part.

Subp. 2. **Automatic line-leak detectors.**

A. An automatic line-leak detector must be able to detect leaks of three gallons per hour at ten-pounds-per-square-inch line pressure within one hour.

B. At facilities where an operator is present during business hours, the leak-detection system must alert the operator of a leak by restricting or shutting off the flow of a regulated substance through piping or by triggering an audible or visual alarm.

C. At unattended card-lock facilities, the leak-detection system must alert the operator of a leak by shutting off the flow of a regulated substance.

D. The operation of any line-leak detector must be tested annually according to part 7150.0216. Testing must:

(1) be conducted by an agency-approved tester;

(2) create a physical leak or simulate a leak in the pipe system; and

(3) verify the leak-detection threshold of three gallons per hour at ten-pounds-per-square-inch line pressure within one hour.

Subp. 3. **Line tightness testing.** A periodic test of piping must be conducted:

A. annually by an agency-approved tester, if it can detect a 0.1 gallon per hour leak rate at one and one-half times the operating pressure; or

B. monthly, if it can detect a 0.2 gallon per hour leak rate at standard operating pressure.

Subp. 4. **Interstitial and sump monitoring.**

A. Interstitial monitoring of secondary-containment piping must be conducted:

(1) continuously, by an automatic leak-sensing device that signals the operator of the presence of any regulated substance in the interstitial space or sump; or

(2) monthly, by a procedure, such as visual monitoring, capable of detecting the presence of any regulated substance in the interstitial space or sump.

B. The interstitial space or sump must be maintained free of water, debris, or anything that could interfere with leak detection capabilities.

C. Sumps and leak-sensing devices must be inspected and tested annually according to part 7150.0216, subpart 3.

Subp. 5. **Other methods.** Any other type of release-detection method, or combination of methods, may be used if:

A. the method can detect a 0.2 gallon per hour leak rate or a release of 150 gallons within a month with a probability of detection of 0.95 and a probability of false alarm of 0.05; and

B. owners and operators can demonstrate to the commissioner that the method can detect a release as effectively as any of the methods allowed in subparts 2 to 4 and obtain the commissioner's prior written approval of the method. In comparing methods, the commissioner must consider the size of release that the method can detect and the frequency and reliability with which a release can be detected. If the method is approved by the commissioner, owners and operators must comply with any conditions imposed by the commissioner on the method's use to ensure the protection of human health and the environment.

Statutory Authority: *MS s 116.49*

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