

ANNUAL LINE TIGHTNESS TESTNG

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There are two types of systems used to pump fuel through underground storage tank (UST) product lines: Suction pumping systems and pressurized pumping systems. In a pressurized piping system, the pump moves the fuel through the piping under a pressure of approximately 30 pounds per square inch.

Because the pumps are located inside the tank and operate under positive pressure, even large leaks in the piping do not affect the operation of the fuel dispensing system, and without leak detection would go unnoticed. North Dakota UST rules require two types of release detection on pressurized piping:

- A mechanism or method to detect a "large" leak at a rate of 3 gallons per hour; and
- A mechanism or method to detect a "small" leak at a rate of 0.2 gallon per hour monthly OR 0.1 gallon per hour yearly.

Annual line tightness testing may be used in combination with mechanical line leak detectors (MLLD) to meet the release detection requirements for your piping. These tests are performed by a qualified technician or with an electronic line leak detector (ELLD) that is capable of detecting leaks at the rate of 0.1 gallon per hour and is performed at least once every 12 months.

You must keep records of tightness testing results at your facility for at least one year. If you use a permanently installed electronic line leak detection system to perform your line tightness test, you will need to have the system serviced on an annual basis.