

Note:

To prevent releases, above ground tanks located at an elevation so as to produce a gravity head on the dispenser system or piping shall be equipped with an anti-siphon or solenoid valve.

Alternate Method, 20.5.6.24 NMAC

If the owner wishes to use an alternate release detection method they believe will provide equivalent protection of the environment as the methods listed above they must submit their plans to the Department. The owner shall not begin installation until the Department approves the request.



For more information write or call:

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Release Detection Requirements for Aboveground Storage Tanks



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New Mexico requires that owners and operators of new and existing aboveground storage tank (AST) systems provide a method or combination of methods, of release detection that:

- 1) can detect a release from any portion of the tank, connected piping and ancillary equipment that routinely contains a regulated substance;
- 2) is installed, calibrated, operated and maintained in accordance with the manufacturer's instructions, including routine maintenance and service checks for proper operating condition; and
- 3) meets the applicable performance requirements in 20.5.6 NMAC following the current edition of an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory approved in advance by the department; or
- 4) meets all the requirements for visual inspections in Section 20 of 20.5.6 NMAC.

Methods of Release Detection for Piping

Each method of release detection for piping used to meet the requirements of 20.5.6 NMAC must comply with the equipment manufacturer's testing protocol, be appropriate for the type and length of piping, and comply with the current edition of an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory approved in advance by the department.

Owners and operators of piping that conveys regulated substances under pressure shall:

- equip piping with automatic line leak detectors that alert the operator to the presence of a leak, only if they detect leaks of three gallons per hour at 10 pounds per square inch line pressure within one hour.
- conduct an annual test of the operation of the leak detector;
- provide the department with a copy of the report for all leak detector testing;
- conduct an annual pressure test or conduct monthly monitoring by interstitial monitoring, visual inspection, or another approved method.

Underground piping that conveys regulated substances under suction shall either have an annual pressure test or conduct monthly monitoring.

Owners and operators of aboveground piping may use visual inspection as a method of release detection if the piping system meets the following:

- 1) All portions of the piping are completely visible and readily accessible;
- 2) Piping is not in contact with the ground or soil; and
- 3) A log must be kept at the facility, which includes the date, time, initials of the inspector, comments on the condition of the piping, and the results of each inspection.

Tank Monitoring

All ASTs must be monitored monthly for the potential loss of product. One (or a combination) of the following methods **must** be used to monitor the tanks:

- **Automatic Tank Gauging**

This equipment tests for loss of product and conducts inventory control. It must be capable of detecting at least a 0.2 gallon per hour loss of product. The system **may** require the tank system to be shut down for a period of time. Typically during hours of non-operation

- **Double-Walled Systems**

Manufacturers of double-walled aboveground storage tank systems provide access for monitoring systems that are field or factory installed. The monitoring systems may be either electronic or manual.

- **Interstitial Monitoring**

This method of monitoring can include sensors placed in between the wall of the tank or piping and an impervious secondary barrier, or construction of an impervious secondary barrier that will allow for monthly monitoring of the space in between the tank and the barrier.

- **Use Of Interstitial Monitoring for Tanks or Piping**

All sensors used in interstitial monitoring must be tested annually in accordance with manufacturer's requirements to ensure they're functioning properly.

- **Visual Inspection**

Visual inspection of an aboveground storage tank may be used to meet the requirement of monitoring the tank monthly. The following requirements must be met in order to use this method:

- 1) The tank must be completely visible and readily accessible;
- 2) The tank must not be in contact with the ground or soil.
- 3) A log must be kept at the facility, which includes the date, time, initials of the inspector, comments on the condition of the tank, and the results of each inspection.

Reporting Requirements

Owners and operators are required to provide a report of all testing required of AST systems in 20.5 NMAC. The typical testing covered under this requirement is line or tank tightness test conducted in order to assess the integrity of the storage tank system, or to meet release detection requirements. The report must contain the following:

- 1) Name of the facility and facility address;
- 2) Name of the technician who performed the test;
- 3) Training and equivalent experience of the technician in the type of testing performed, including certification numbers & national association where certification was obtained, or a detailed description of where and when the technician gained experience;
- 4) Brand name and model number of testing equipment used during the test, and date the testing equipment was last calibrated and by whom;
- 5) Date of the test;
- 6) Leak rate at which detector activated in gallons per hour;
- 7) Line pressure and functional element holding pressure in pounds per square inch;
- 8) Results of the test;
- 9) Type, diameter and length of piping tested;
- 10) Whether the turbine shuts down when an alarm is triggered with an electronic line leak detector or interstitial monitor.