



New Mexico Environment Department

New AST System Requirements in 20.5 NMAC
Joe Godwin, Program Manager





New AST Requirements – Part 105

Persons who test equipment on AST systems must demonstrate they are qualified to perform tests of the following:

- ❑ Spill prevention equipment
- ❑ Secondary containment sumps
- ❑ Interstitial and sump sensors
- ❑ Overfill prevention equipment
- ❑ Automatic tank gauge systems
- ❑ Automatic line leak detectors



New AST Requirements – Part 105

Persons must demonstrate they are qualified to perform the following tests:

- ❑ Precision line tightness test
- ❑ Precision tank tightness test
- ❑ Cathodic Protection System test

No persons shall perform tests as described in 20.5.105.504 NMAC on AST systems if they are the owner or an employee of the owner of the storage tank system.



New AST Requirements – Part 105

Persons performing tests pursuant to 20.5.105.504 NMAC may either demonstrate their qualifications by submitting them to the Tank Operations and Support Program or in the report for each test they perform in New Mexico.



New AST Requirements – Part 109

- ❑ Owners and operators shall provide approval from the New Mexico State Fire Marshal's Office to the department for any exceptions to the requirements of the international fire code. New ASTs prior to installation and existing ASTs by July 24, 2021.
- ❑ The use of a tank manufactured as a UST used in an aboveground application is prohibited.
- ❑ A single walled AST system that has not met the secondary upgrade requirements by July 1, 2013 must have met the permanent closure requirements in 20.5.115 NMAC by July 24, 2018.



AST Systems not Upgraded





New AST Requirements – Part 109

- Single walled AST systems installed inside secondary containment that were previously exempt from spill and overfill prevention requirements have until July 24, 2021 to install spill and overfill prevention equipment pursuant to 20.5.109.910 NMAC.
- Spill and overfill prevention equipment must be listed in accordance with a national standard or code of practice.



New AST Requirements - Part 109

- Aboveground steel piping with an internal diameter of greater than two inches must be welded or flanged together.
- Loading racks must be at least 25 feet away from ASTs, building, or property lines containing class I liquids and 15 feet away from ASTs containing class II and III liquids.
- Loading racks at aviation facilities must comply with NFPA Standard 407.



New AST Requirements – Part 110

- ❑ Spill prevention equipment where the sides and bottom of the equipment are not visible have to be tested no later than July 24, 2021.
- ❑ Monthly monitoring of single walled spill prevention equipment where the sides and bottom are visible may be used in lieu of periodic testing. The monthly monitoring must be documented in an inspection log.



New AST Requirements – Part 110

- ❑ Owners and operators with spill prevention equipment that is an integral component of a double walled tank system may meet the monthly monitoring requirement if they monitor the interstice of the tank every 30 days. Monitoring must start prior to July 24, 2021.
- ❑ Overfill prevention equipment must be inspected and tested no later than July 24, 2021 and every three years, thereafter.



New AST Requirements – Part 110

- ❑ Drop tube style or automatic shutoff overflow prevention equipment must be removed from the tank for the periodic inspection.
- ❑ Single walled secondary containment sumps used for interstitial monitoring of underground piping must be tested no later than July 24, 2021 and every three years thereafter.
- ❑ Double walled secondary containment sumps may be interstitially monitored in lieu of periodic testing, but documentation of the monitoring must be maintained, or integrity testing will be required.



New AST Requirements – Part 111

- Mechanical or electronic equipment used to monitor an AST system every 30 days must be tested or inspected annually. The inspection or testing must be conducted either in accordance with the equipment manufacturer's published instructions or national code of practice.
- If an automatic tank gauge ("ATG") system is used as the method of release detection for an AST system, the ATG system must be third party certified for use on aboveground tanks and listed on the National Workgroup on Leak Detection Evaluation website.



New AST Requirements – Part 111

- Mechanical and electronic equipment used to interstitially monitor an AST systems must be tested annually. If an ATG system is used as part of the interstitial monitoring method, it must be inspected annually, starting July 24, 2018.
- Underground double walled piping, whether pressurized and unsafe suction, on AST system installed or replaced after July 18, 2018 must be interstitially monitored every 30 days.



New AST Requirements – Part 111

- Integrity and tank tightness testing of AST systems must meet the following:
 - Detect a (0.2) gallon per hour leak rate from any portion of the tank that routinely contains a regulated substance.
 - Conducted in accordance with a nationally recognized code of practice or standard.



New AST Requirements – Part 111

- An automatic line leak detector is not required to be installed if all of the following are met:
 - The entire piping run is aboveground;
 - A solenoid valve is installed on discharge piping of the submersible turbine pump (“STP”);
 - A manually activated control is installed that will permit the STP to operate only when the nozzle is removed and will stop the STP when the nozzle is returned to the bracket.



New AST Requirements – Part 112

- ❑ AST Emergency generator systems installed prior to July 24, 2018 must implement a method of release detection no later than July 24, 2021.
- ❑ AST emergency generator systems installed on, or after, July 24, 2018 must have implemented a method of release detection upon installation.
- ❑ Sub-Base or Belly tank AST emergency generator system must meet all requirements in 20.5 NMAC, except the installation requirements for piping does not have to be met.



New AST Requirements – Part 112

- Automatic line leak detectors on pressurized underground piping are required to trigger an alarm, they are not required to restrict or shut off flow.
- Sensors used for interstitial monitoring of underground piping are required to trigger an alarm when a liquid is detected, they are not required to automatically shut off flow.



AST Emergency Generator Systems





Closure Requirements – Part 115

- ❑ Owners and operators of an AST system in temporary closure must apply for an extension of temporary closure prior to the 12th month of being in temporary closure.
- ❑ Owners and operators of an AST system in temporary closure must either apply for an extension of temporary closure every 12 months pursuant to 20.5.115.1501 NMAC, or permanently close the AST system pursuant to 20.5.115.1502 NMAC.



Closure Requirements - Part 115

In order to apply for an extension of temporary closure, owners and operators must, prior to applying, meet the following:

- ❑ Payment of tank fees and associated penalties pursuant to 20.5.103 NMAC;
- ❑ Financial responsibility requirements in 20.5.117 NMAC;
- ❑ Site assessment requirements in 20.5.115.1504 NMAC;
- ❑ Demonstrate that the tank systems in temporary closure are empty pursuant to 20.5.115.1501(B) NMAC.



New Requirements – Part 118

When spill prevention equipment, secondary containment sumps, or release detection equipment have failing results for the required periodic testing it must be reported to PSTB as a suspected release within 24 hours. PSTB has the Initial Incident Report form on our website to aid in the reporting of suspected releases.

Owners and operators must investigate the suspected release and submit a Seven-day Report to PSTB within seven days of discovery.



New Requirements – part 118

Owners and operators must demonstrate that a release to the environment has not occurred within 30 days of reporting a suspected release.

Owners and operators who fail to demonstrate that a release to the environment has not occurred within 30 days will be required to meet the requirements for a confirmed release pursuant to 20.5.118.1802 NMAC.