

Annual Release Detection Equipment Testing: Arkansas Oil Marketers Association Canopy Article



Walter Wright, Jr.
wwright@mwlaw.com
(501) 688.8839

12/27/2018

Arkansas Department of Environmental Quality (“ADEQ”) staff authored an article in Issue 4 of the Arkansas Oil Marketers Association (“AOMA”) publication *The Canopy* titled:

Annual Release Detection Equipment Testing (“Article”)

ADEQ had authored a previous article in Issue 3 of *The Canopy* that described the new 30-day walkthrough inspection requirements (see previous post [here](#)).

In Issue 4 of *The Canopy* ADEQ staff describes changes to the “annual release detection equipment testing.”

Underground storage tanks (“USTs”) are utilized in hundreds of thousands of facilities nationwide to store petroleum and chemical products. A variety of design change and installation techniques have been developed over the years to minimize the chance of leaks or spills.

The United States Environmental Protection Agency published certain revisions to the petroleum UST regulations in 2015. These were the first comprehensive revisions of the federal UST rule since 1998.

The changes included:

- Added secondary containment requirements for new and replaced USTs and piping;
- Added operating training requirements;
- Added periodic operation and maintenance for UST systems;
- Added requirements to UST system capability before storing certain biofuel blends;
- Removed past deferrals for emergency generator tanks, field construction tanks, and airport hydrant systems; and
- Updated codes of practice

Arkansas has primacy and has been delegated UST regulatory authority for many years. Therefore, as a delegated state, Arkansas is required to amend its rules to meet the federal baseline requirements. Arkansas’s UST regulations are found in Arkansas Pollution Control and Ecology Regulation 12.

As ADEQ notes in the Issue 4 Article, the state agency revised its regulations to correspond with its federal counterpart.

ADEQ describes the revised annual release detection equipment testing requirements, noting electronic and mechanical components must be tested annually. Further, the state agency states that the testing must be conducted according to one of the following:

- Manufacturer's instructions
- A code of practice developed by a nationally recognized association or independent testing laboratory
- Requirements that ADEQ determines are no less protective of human health and the environment than the above two options

The three-year recordkeeping requirements are described and the availability of certain forms are noted. The Article further states that the most common methods of release detection used in Arkansas include:

- Automatic tank gauging
- Statistical inventory reconciliation
- Interstitial monitoring with secondary containment
- Groundwater/vapor monitoring

The specific tasks associated with testing automatic tank gauging are described. A similar analysis is made of automatic line leak detectors.

A general summary is provided in the Article which reads as follows:

- Automatic tank gauge and other controllers
- Test the alarm
- Verify the system configuration
- Test the battery backup
- Probes and Sensors
- Inspect for residual buildup
- Ensure any floats move freely
- Ensure shafts are not damaged
- Ensure cables are free of kinks and undamaged
- Test the alarm operability and communication with the controller
- Ensure probes and sensors are positioned properly
- Automatic line leak detector
- Test operation to ensure the device activates alarms, restricts flow, or shuts off flow within an hour when simulating a release equivalent to 3 gallons per hour at 10 pounds per square inch
- Vacuum pumps and pressure gauges
- Ensure there is proper communication with sensors and the controller
- Hand-held electronic sampling equipment associated with groundwater and vapor monitoring
- Ensure the device is calibrated and operates properly

A copy of the Article can be found [here](#).