

ADEM Guidance for Emergency Power Generator New Release Detection Requirements, Effective December 8, 2017

On October 13, 2015, EPA finalized the first significant changes to the federal UST regulations since 1988. All states will have to update their UST regulations to be “no less protective” than EPA’s regulations. Alabama’s revised UST regulations were final December 8, 2017. These regulations are equivalent to the EPA requirements.

Existing underground storage tank systems (UST systems) that store fuel solely for use by emergency power generators were exempt from release detection requirements when Alabama’s regulations were first established in 1989. In accordance with EPA requirements, a change was made to Alabama’s regulations on August 6, 2007 requiring all emergency power generator USTs installed on or after that date to use interstitial monitoring for release detection, while the existing emergency generator USTs installed prior to that date were still exempt from the release detection requirements. **By December 8, 2020, those existing emergency power generator UST systems must now have a form of leak detection.**

In addition, every inspection and testing requirement that applies to every other petroleum UST tank system, as of December 8, 2020, will apply to emergency power generator tanks.

What release detection methods can be used for emergency power generator tanks installed before August 6, 2007?

Owners and operators of emergency power generator USTs installed before August 6, 2007, must begin using at least one of these leak detection methods no later than December 8, 2020:

- Interstitial method – secondary containment with interstitial monitoring
- Internal methods – automatic tank gauging (ATG) systems; statistical inventory reconciliation (SIR); continuous in-tank leak detection; manual tank gauging
- External methods – monitoring for vapors in the soil; monitoring for liquids on the groundwater.

What release detection methods can be used to detect leaks from piping associated with emergency power generator USTs installed before August 6, 2007?

Pressurized piping installed before August 6, 2007 must meet the following requirements no later than December 8, 2020:

- The piping must have devices that will alert the operator to the presence of a leak by automatically shutting off or restricting the flow, or by triggering an audio or visual alarm.
- In addition, owners and operators must either conduct an annual line tightness test or use at least one of the following monthly methods:
 - Interstitial monitoring
 - Electronic line leak detectors
 - Groundwater monitoring
 - Vapor monitoring
 - Statistical inventory reconciliation.

If your emergency power generator UST has suction piping that operates at less than atmospheric pressure and is sloped so that the piping's contents will drain back into the storage tank if the suction is released and there is only one check valve in each suction line that is located directly below the suction pump, piping release detection is not required.

Suction piping that does not exactly match the characteristics above must use one of the monthly methods for pressurized piping, or tightness testing every three years.

Again, emergency power generator USTs installed on or after August 6, 2007 must use interstitial monitoring. Only emergency power generator UST systems installed before August 6, 2007 may use the other release detection methods listed above. Note that statistical inventory reconciliation may not be appropriate with some emergency power generator USTs because such systems may not have a way to accurately measure fuel use.

Finally, ADEM realizes the requirement to restrict or shut off flow of product in response to a piping leak may be problematic for emergency power generator tanks. Therefore, the above option allowing emergency power generator UST systems to use leak detection equipment that will alert the operator to the presence of a leak by triggering an audible or visual alarm without shutting off or restricting flow is included in the Alabama emergency power generator regulation.

If there are any questions regarding release detection for emergency power generator USTs please call us at 334 270-5655.

A list of forms and guidance regarding the implementation of these requirements can be found at the following location on the ADEM website:

<http://www.adem.state.al.us/programs/water/groundwater.cnt>

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