



# NEW TANKS RULES

August 2015

[dnr.mo.gov/env/hwp/ustchanges.htm](http://dnr.mo.gov/env/hwp/ustchanges.htm)

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## New Regulations are Coming!

*10 CSR 26-2*

### Secondary Containment aka Double-Walled Systems

To satisfy The Environmental Protection Agency (EPA) requirements of the 2005 Energy Policy Act, as of July 1, 2017, all new underground storage tank (UST) systems will have to be double-walled. This will include double-walled tanks, double-walled piping, leak-tight containment sumps, and sump sensors. For more information, see page 2.

### New Testing Requirements

The new federal regulations require testing of your overfill prevention equipment, spill basins, containment sumps and leak detection equipment. Read more about it inside.

### State Specific Changes

The Department is proposing changes to the spill basin repair options and interior lining requirements.

## Changing Compliance Dates

EPA will be allowing states to include phase-in times upon implementation of the state rule. If EPA's new rules give owners and operators three years to comply (for example, Oct. 13, 2018), when the states promulgate their new rules, the states can make their own compliance date within the same "window" (meaning, within three years of promulgating their regulation). As such, you will see that many of the currently proposed Missouri dates have changed— giving you more time to comply!

## July 1, 2017– New Changes for New Systems

If you install a new tank, new piping, and/or a new dispenser after July 1, 2017, you will have a new set of requirements to follow:

- ⇒ Double-walled systems
- ⇒ Containment sumps
- ⇒ Post-installation testing
  - ☑ Tanks
  - ☑ Piping
  - ☑ Sumps
  - ☑ Spill buckets
  - ☑ Overfill equipment
  - ☑ Release Detection Equipment



Secondary containment is simply a double-walled tank, double-walled piping, and containment sumps, with interstitial monitoring.



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Interstitial monitoring can be a sensor between the walls of the tank, between the walls of the piping and/or in the liquid-tight containment sumps.

New tanks will require double-wall and tank top sumps. If you install new piping or replaced more than 50% of piping, all piping must be double-walled with tank top *and* dispenser sumps (this is tank system specific and does not necessarily apply to the entire site). If a dispenser and the sub-dispenser piping is replaced, a sub-dispenser containment sump will be required.

Once containment sumps are re-quired, they must be maintained, repaired, kept clean and free of liquids. In addition, the new EPA regulations require testing of the containment sumps (see below).



Existing tanks will be ‘grandfathered’ in, unless piping or dispenser replacement occurs as described above.

Before bringing a new system into use, the tank and lines must pass tightness testing. A new system installed after July 1, 2017, also requires a post-installation containment sump test, overflow prevention equipment test, spill bucket test and operability tests of the leak detection system.

### Spill Bucket and Containment Sump Testing

10 CSR 26-2.030 and 10 CSR 26-2.036

The EPA regulation changes require testing of spill basins, as well as testing of any *required* containment sumps (see above). The first test will be due Jan. 1, 2020.

Frequency of the testing depends on the system (interstitial monitoring requires double-walls):

	Monitor or Test?	Frequency
Spill basins	Interstitially monitor	Monthly
	Tightness Test	Or Every 3 years
Containment sumps	Interstitially monitor	Annually
	Tightness Test	Or Every 3 years

Spill buckets and containment sumps may be tested using a NWGLDE certified method ([www.nwglde.org](http://www.nwglde.org)) OR the

Petroleum Equipment Institute’s Recommended Practice (PEI RP) 1200-2012.

Outlined here are just few of the steps (please note, this is not a complete edition of the RP and may not be used as the protocol):

- ✓ Check the liquid level in the backfill
- ✓ Close boots and remove sensors
- ✓ Fill sump or spill basin
- ✓ Test for one hour
- ✓ If the water level change is less than 1/8”, the equipment PASSES

### Spill Basins– To Repair or Not To Repair?

10 CSR 26-2.030

Spill basin repairs have long been a topic of debate. With the new spill bucket testing requirements, establishing what is and is not an acceptable repair for a spill basin seems warranted.

Field applied epoxies, caulks and other “bubble-gum” repairs do not typically bond or adhere well, and fail rather rapidly.

These repairs are not permanent. Per EPA, one leaking spill bucket can result in 195 tons of contaminated soil in a year.



#### The Insert

The proposed regulation would allow liners that are manufactured specifically for spill basins to be inserted into a spill bucket and then sealed. The final system must be tested to demonstrate that the finished product is leak-tight.

#### The Manufacturer Double-Wall Kit

Some spill basin manufacturers are now making a double-walled spill basin. If the inner spill bucket fails, it can be replaced without breaking concrete. Some of these spill buckets also come with special ports to allow vacuum testing of the spill basin’s integrity, instead of having to use the “water test” method described above.



#### No More Field-Applied Repairs

The proposed regulation change would eliminate field applied repairs (used alone, not as sealant as part of a pre-fabricated spill-liner kit).

## Overfill Prevention Equipment Testing

10 CSR 26-2.030

The EPA rules also require tests or inspections of the overfill prevention equipment every **three** years, with the first test due Jan. 1, 2020. The three year check must verify that all parts of the overfill prevention device still move freely, will still activate at the appropriate level, and still function as designed. This test may follow PEI RP 1200-2012. Please note, the manufacturer's inspection procedure may be used only if it verifies *all* components function properly. Some "self-checking" equipment may not meet this requirement.

## Walk-Through Inspections

10 CSR 26-2.037

Every 30 days, the spill basin and fill area must be inspected and electronic release detection equipment must be checked. At least annually, the tank top areas and sub-dispenser areas must be checked for leaks or other signs of a problem. In addition, groundwater and vapor monitoring equipment, and manual measuring devices for release detection (measuring stick) must be checked annually. The first walkthrough inspection is due by Jan. 1, 2020.



## Marinas

10 CSR 26-2.019

Marinas have unique configurations, with the tanks above the dispensers and piping above and under ground. Marinas, of course, also store fuel close to surface water where releases would be difficult to contain and remediate.

The proposed regulations would incorporate the Petroleum Equipment Institute's Recommended Practice RP1000-2009. Any new marina being installed would need to comply with these installation guidelines. The guidelines include anti-siphon valves, shoreline breakaways, and valves that facilitate release detection. Marinas with USTs are already subject to all UST rules and regulations.



## Release Detection— Equipment Testing

10 CSR 26-2.040

While testing your line leak detector each year is nothing new in Missouri, EPA's new rule requires tank monitoring equipment to be checked annually to make sure it is still operating properly, first due by Jan. 1, 2020.

If you are using an automatic tank gauge (ATG), the console and the float or probe will be inspected. Floats can have buildup that might hinder movement. If you are using interstitial monitoring, the sensor



may be removed and submerged in water to ensure it alarms.

## Interior Linings— Not so Simple Anymore

10 CSR 26-2.021

All I need to line a tank is a mop and a bucket of paint, right? Wrong.

During the rash of upgrades in 1998, many "linings" were installed that did not meet any industry standard and failed rather quickly. Because of these 'bad linings' from fly-by-night companies, some states even eliminated lined tanks as an option.

Most lined tanks are over 30 years old and well beyond their original life expectancy/warranty. But during the last rule change, owners and operators argued that we should build rules that let lined tanks remain as long as they could show that the tank/lining systems were still functioning properly. So here in the "Show-Me" state, we agreed and passed regulations that allowed tank systems that could be shown to be functional to remain in use. But now, interior linings are not necessarily just a single wall of lining material painted or sprayed onto the inside of a tank. New products are available now that can make double-walled linings or even double-walled linings that are strong enough to contain product without the old outer tank. However, these new options do not fit neatly into the current regulations. Therefore, we are proposing new regulations to accommodate these new options. The proposed regulation would also provide owners an option to monitor between the two

walls of a double-walled lining system. This interstitial monitoring could be used to satisfy not only the monthly leak detection requirements, but would also allow owners/operators to skip the five-year lining inspection!



Finally, the proposed rule also details what is needed in a lining inspection report, as well as certification requirements for interior lining installers.

## Release Detection Methods

*10 CSR 26-2.043*

### Vapor and Groundwater Monitoring

EPA's new regulation requires a new site assessment for any site that wants to continue using vapor or groundwater monitoring, as well as certification for the well installation. Alternatively, Missouri may propose to eliminate these methods of release detection. The federal changes would be costly simply to maintain an outdated method. At this time, we are proposing to sunset use of these methods by July 1, 2020.

### Statistical Inventory Reconciliation (SIR)

EPA is finally incorporating this method into the federal regulations. With that regulation comes some additional requirements about thresholds and methodology. In addition, the Department is proposing to make this method consistent with other 3rd party evaluated equipment: it is only as good as the 3rd party test has demonstrated. For ATGs, you can only use it on tanks as large as the manufacturer has proven it can work. The same would be true for SIR. You can only use it on systems up to twice the throughput the manufacturer has demonstrated it works.

## Definitions

*10 CSR 26-2.012*

When you review the rules, you will notice changes to the definitions rule. Previously, federal definitions were "incorporated by reference," which means that the federal definitions applied in Missouri, but you had to look back

at the federal regulations to see them! To help with clarity and speed of use, the federal definitions will now be placed in the state regulations.

## EPA Regulations– When Will They Apply to You?

Missouri's UST regulatory program has "State Program Approval" from EPA. This makes a difference to you. Even when EPA finalizes, publishes and enacts their final UST regulations, they are not immediately effective here. The Department will have to adopt these new UST rules here before any of them are effective in Missouri. Which means, the federal deadlines may not be the Missouri deadlines.

Why enact these regulations at all then? Because EPA has the authority to withdraw our state program approval. With these new regulations, Missouri must enact the new requirements here and update our state program approval with EPA no later than Oct. 13, 2018; if we do not meet this deadline, EPA may withdraw our program, making their regulations effective here in Missouri.

## What We Need Is You!

We need your experience, knowledge and willingness to provide input on all of these proposed regulations. We want to make these regulations work for the Missouri UST community.

If you would like to receive e-mail update on these regulations changes, contact [heather.peters@dnr.mo.gov](mailto:heather.peters@dnr.mo.gov).

## Operator Training is On-line NOW!

The Petroleum Storage Tank Insurance Fund Board of Trustees has created an on-line operator training program, including a "test only" option.

The operator training rules require compliance by July 1, 2016. The Missouri UST Operator Training or Testing Program is available on-line now: [http://www.pstif.org/ust\\_operator\\_training.html](http://www.pstif.org/ust_operator_training.html)

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