NEW TANKS RULES

JULY 2015 dnr.mo.gov/env/hwp/ustchanges.htm

Inside:

New Regulations are Coming

10 CSR 26-2

Secondary Containment aka Double-Walled Systems

To satisfy the 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.

EPA Regulations– When Will They Apply to You?

Missouri's UST regulatory program has "State Program Approval" from the U.S. Environmental Protection Agency (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 has three years to enact the new requirements here or EPA will withdraw our program and their regulations will be 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 updates on these regulations changes, contact heather.peters@dnr.mo.gov to be added.

MISSOURI DEPARTMENT OF NATURAL RESOURCES

Hazardous Waste Program
Tanks Compliance & Technology Unit
PO Box 176
Jefferson City, MO 65101-176

573-522-5665

dnr.mo.gov/env/hwp/ustchanges.htm
heather.peters@dnr.mo.gov

Double-walled systems, sumps and sensors

Secondary containment is simply a double-walled tank, double-walled piping and containment sumps, with interstitial monitoring. Interstitial monitoring is a sensor between the walls of the tanks and either between the walls of the piping or, more commonly, in the liquid-tight containment sumps.

Any new tanks or new piping installed after July 1, 2017, will be required to comply with the secondary containment requirements:

- New tanks installed: double-walled tank and tank top sumps required
- New piping or more than 50% of piping replaced: all piping double-walled with tank top *and* dispenser sumps (this is tank specific and does not necessarily apply to the entire site)
- Dispensers and subdispenser piping replacement: dispenser sump installation required.

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

Interstitial monitoring (sump sensors) will be required for any new double-walled tanks, piping and associated containment sumps.

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

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 July 1, 2018.

Frequency of the testing depends on the system:

- Double-walled spill buckets may have interstice checked monthly, or

- Spill buckets must be tested every **three** years.

- Required containment sumps must be tested every **three** years.

Spill buckets and containment sumps may be tested using a NWGLDE certified method (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 1 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 upcoming spill basin testing requirements, establishing what is and is not an acceptable way to repair a spill basin seems warranted.

Field applied epoxies, caulks and other "bubblegum" 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.
(continued on next page)

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 earlier in this newsletter.

No More Field-Applied Repairs

The proposed regulation change would eliminate field applied repairs (used alone, not as sealant as part of a prefabricated 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 July 1, 2018. 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 subdispenser 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 July 1, 2018.

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 underground storage tanks 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 July 1, 2018.

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.

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. In addition, the regulations for these methods need to be clarified. Alternatively, Missouri may propose to eliminate these methods of release detection. The new changes would be costly simply to maintain an outdated method. If elimination is chosen, use of these methods would sunset Jan. 1, 2019.

Statistical Inventory Reconciliation (SIR)

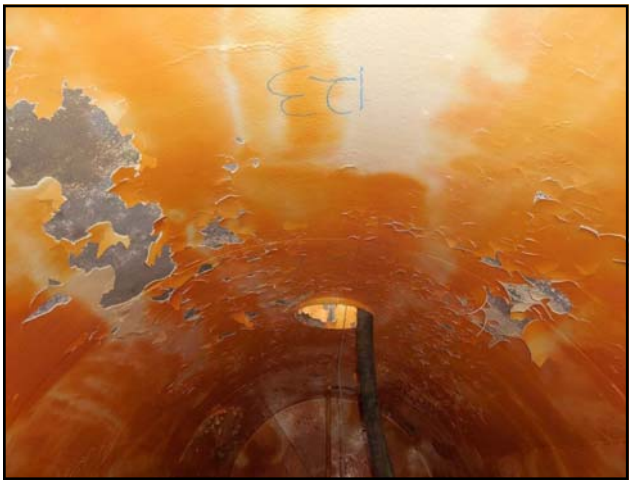
EPA is finally incorporating this method into the federal regulations. With that regulation comes some additional requirements about thresholds and methodology. In addi-tion, the department is proposing to make this method consistent with other third-party evaluated equipment: it's only as good as the third-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.

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. Underwriter's Laboratory has even published a new standard, UL 1856, that details how interior lining companies can demonstrate the integrity of their lining systems.

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.

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.

Operator Training is Online

The Petroleum Storage Tank Insurance Fund Board of Trustees has created an online 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 online: http://www.pstif.org/ust_operator_training.html.

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