

Single Wall UST Systems: A Thing of the Past

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Along with the requirement for operator training, the *Energy Policy Act of 2005* requires that underground storage tank (UST) installations and upgrades meet the new secondary containment guidelines.

These guidelines include the installation of double wall tanks, double wall piping, and piping sumps (tank-top, intermediate, and under-dispenser containment). The only exception to the new secondary containment requirement is if the location of the UST system is greater than 1,000 feet from a community water supply (including distribution piping) or potable drinking water well. Contact a groundwater professional to see if you meet this criteria.

According to the DNR rules [567 IAC Subrule 135.3(9)], all new and replacement UST systems installed after **November 28, 2007** must have secondary containment. This includes tanks and piping. This means that all tanks installed after this date must be double walled. In addition, the primary method of monthly leak detection for these tanks must be monitoring of the interstice (space between the inner and outer tank walls). In most tanks, the interstitial space is monitored by a liquid sensor, but some tanks do allow for a manual or “sticking” process.

The same is true for the piping system. If you are installing a new system or planning an upgrade (replacing 10 feet or more), secondary containment must be installed. This includes double wall pipe and sumps at all piping connections. Again, monthly monitoring of the pipe interstice and sumps is required to be the primary method of leak detection. The sumps can be monitored with a liquid sensor or by physically checking the condition of the sump. This method of leak detection requires that the containment be liquid-tight, meaning all entry boots, conduits, and walls are not damaged and are intact. It also requires that the double wall pipe drains freely between dispenser sump and tank-top sump (i.e. piping test boots are open). Please refer to the following article, *Secondary Containment and Compatibility*, for more details on how to manage your containment system.

PMMIC provides discounts for preferred petroleum storage tank systems. Discounts that can be accumulated include a 5% premium credit for each of the following: sites where all piping sumps have intact containment; sites where all dispensing units have intact containment; sites that have secondary containment systems with interstitial monitoring; sites with spill protection of 15 gallons or greater; sites with electronic line leak detectors (instead of mechanical leak detectors); and sites that have third-party managed enhanced leak detection systems. The *PMMIC Notification UST System Upgrade for Premium Credits* form must be completed and/or signed by an Iowa licensed installer to certify that your system meets the PMMIC premium credit criteria, if it does not already qualify. You can obtain this form at <http://www.pmmicinsurance.com/index.cfm>.

Even though secondary containment is now required on most upgrades and new installations, it really does make good sense. Adequate secondary containment will capture a leak before it is released to the environment. You can find more information on the secondary containments requirements at http://www.epa.gov/oust/fedlaws/final_sc.htm.