



Memo

To: UST Professionals
From: Elaine Douskey, Iowa DNR, Underground Storage Tank Section Supervisor
Date: June 10, 2014
Subject: Unattended Pressurized UST Sites

Most of us are familiar with the Unattended Sites rule by now. The deadline for implementation is July 1, 2014. Here is what you need to know and what you can pass on to your customers.

We are concerned about preventing releases at all UST facilities, but those that are especially vulnerable are unattended sites with pressurized delivery. If a break occurs in a pressurized product line at an unattended facility, and the leak is smaller than 3 gallons per hour, the mechanical line leak detector may not detect the leak and continue to pump product out the break. The mechanical line leak detector may stay in "leak sensing" mode a bit longer, but it will eventually build up to full pressure.

If the leak is larger than 3 gallons per hour the mechanical line leak detector will stay in "leak sensing" mode (8-10 psi) at around 3 gallons per minute pumping rate instead of the normal rate of 10 gallons per minute.

At an attended site, patrons would quickly recognize the delay, become impatient and report it to the Class C operator. The operator is taught to shut down the line and investigate.

At unattended sites, there is no one to oversee the dispensing of product. Point of sale is the dispenser only. Whom will the customer notify if the UST system is in slow flow? There is no one on site to respond to a leak by shutting down the submersible turbine pump.

That is why by July 1, 2014 all facilities that operate unstaffed during any part of their daily business hours will have to either employ electronic line leak detection that has positive shutdown capability or implement one of the following:

- 1) The Class A/B Operator conducts a daily visit to the site to observe and ensure everything is operating properly,
- 2) The Class A/B Operator is notified of a problem via remote electronic communication,
- 3) Signage must be posted directing the customer in the procedures to be taken in the event of a problem encountered during the dispensing of fuel, including a phone number to call, which connects to 24/7 response service.

These measures are intended to reduce the chances of a catastrophic leak at unstaffed pressurized sites. Positive shutdown is the most effective means but can be prohibitively expensive. With the other options at least the problem should be detected earlier avoiding a catastrophic release.

If you have customers with unattended sites (operating unattended for any period within 24 hours) you may have to assist them in deciding which of the above options is most suitable to them. Petroleum Marketers and Convenience Stores of Iowa (PMCI) and the DNR have developed signage that can be used for option 3) above. The signage requires the UST owner/operator to register with PMCI in order to receive a site ID code

for each dispenser. Go to PMCI's website to register: <http://www.pmcofiowa.com/unattended-site-monitoring.cfm>. There is a nominal charge for the Response Service hotline that operates 24/7. Here is the sign that will be used for option 3) above:



With this sign clearly in view by the patron, and cell phone available, he or she at least can make a call to a response service staffed by professionals who will take down the information and then contact the Class A and B operators.

The Unattended Sites rule is below. It can be found in 567—135.5(455B) under Release detection, 135.5(1) *General requirements for all UST systems*.

e. Any UST facility that uses pressurized piping and dispenses product in the absence of a Class A, B, or C operator shall comply with the following requirements:

- (1) Employ automatic line leak detectors that do one or more of the following:
 1. Shut down the submersible pump when a leak is detected.
 2. Restrict the flow of product when a leak is detected.
 3. Trigger an audible or visual alarm when a leak is detected.
- (2) At facilities implementing 135.5(1)“e”(1)“2” or “3,” the facility’s operator shall be notified or shall conduct a visit through one of the following methods:
 1. Notification of the Class B operator by immediate electronic communication.
 2. Signage directing the customer to contact the Class B operator or a designated contact person. The sign must be immediately visible to the customer and state that slow flow or an audible or visual alarm is an indication of a possible release. The sign must provide a 24-hour telephone number of the Class B operator or designee and direct the customer to stop dispensing product.
 3. Daily visit to the site by a Class A, B, or C operator or designee. Visits shall include observation of every automatic line leak detector for shutdown, alarm, or restricted flow conditions. Methods of observing for restricted flow conditions may include dispensing product into a proper container or personal vehicle, observing a customer dispense product into a vehicle, or another method approved by the department. Owners and operators shall maintain an onsite log of site visits to demonstrate compliance with this provision. The log shall include the name of the observer and method used to observe the status of the automatic line leak detectors.
- (3) All UST facilities subject to 135.5(1)“e” must comply with its provisions by July 1, 2014.