



POSITION PAPER - UST COMPLIANCE

Date: May 23, 2018

Subject: (In-line Leak Detector) Monitoring section of piping connected to pump heads in accordance with SC UST Control Regulation, R.61-92, Sections 280.41 and 280.44.

Regulation background/history: Federal regulation CFR 280.44 and SC UST Control Regulation, R.61-92, Section 280.44, state that each method of release detection for pressurized piping used to meet the requirements of Section 280.41 must have automatic line leak detectors (ALLD) installed which alert the operator to the presence of a leak by restricting or shutting off the flow of regulated substances through piping or triggering an audible or visual alarm if they detect leaks of 3 gallons per hour at 10 pounds per square inch line pressure within 1 hour. Therefore, all facilities must have an ALLD installed to monitor all portions of pressurized piping.

Discussion: Some facilities installed prior to May 23, 2008 were permitted with mechanical line leak detectors in pressurized piping leading away from the submersible pump. These facilities do not meet the requirement of Section 280.44 (a) because they are not monitoring the section of piping between the pump head and the ALLD. The Department has worked closely with the EPA to determine that the above options meet the intent of both the Federal regulation CFR 280.44 and the South Carolina UST Control Regulation, R.61-92, Section 280.44.

Options: Therefore, for these facilities to be in compliance with Section 280.44(a), one of the following options must be selected:

1. Installation of either a mechanical or electronic line leak detector on the pump head or install a electronic line leak detector in-line, monitoring all directions.

[If the owner does not choose the first option and a liquid tight containment sump is present at the submersible pump, the following other two options may be used in conjunction with the in-line mechanical line leak detector.]

2. A sump sensor may be installed at the lowest point in the containment sump and must provide positive shutdown of the submersible pump if a leak is detected.
3. A sump sensor may be installed at the lowest point in the containment sump that will trigger an audible or visual alarm if a leak is detected.

The second and third options will require a facility to conduct integrity testing of all secondary containment sumps by May 26, 2020 and every 3 years thereafter.