



POSITION PAPER - UST COMPLIANCE

Date: October 9, 2020

Subject: Dry Interstice Monitoring of Double Walled Underground Containment Sumps and acceptance to qualify for the three-year test exemption in accordance with SC UST Control Regulation, R.61-92, Section 280.35.

Regulation background/history: Federal regulation CFR 280.35 and SC UST Control Regulation, R.61-92, Section 280.35(a)(1), state that spill prevention equipment and containment sumps used for interstitial monitoring of piping must prevent releases to the environment by meeting one of the following: (i) the equipment is double-walled and the integrity of both walls is periodically monitored at a frequency not less than the frequency of the walkthrough inspections described in Section 280.36 or (ii) the spill prevention equipment and containment sumps used for interstitial monitoring of piping are tested at least once every three (3) years to ensure the equipment is liquid tight by using vacuum, pressure, or liquid testing.

Discussion: In accordance with South Carolina UST Control Regulation, R.61-92: Part 280, Section 35(a)(1)(i), double-walled sumps with periodic interstitial monitoring between both walls do not require hydrostatic testing at three (3) year intervals.

Double wall sump dry interstice monitoring system design meets the intent of Section 280.35(a)(1)(i). Therefore, triennial integrity testing of these types of double walled sumps would not be required at UST facilities in South Carolina as long as interstitial monitoring is conducted and records are maintained. In the event the physical integrity of the sump appears to be compromised during future UST compliance inspections, additional testing and/or repair may be required. For facilities utilizing interstitial monitoring as release detection for piping, proper monitoring of secondary containment must also be conducted inside all sumps.

Options: Double-walled secondary containment sumps with dry interstice may utilize the following for monitoring (printed reports or written logs) at least every thirty (30) days:

- 1) electronic method (float switch/optical sensor/discriminating interstitial sensor) between the sump walls; or
- 2) vacuum monitoring using a vacuum sensor between the sump walls; or
- 3) mechanical method (sensor/gauge/stick) between the sump walls with periodic log.

Note: In accordance with 280.35(c)(2), documentation showing that the prevention equipment is double-walled and the integrity of both walls is periodically monitored must be maintained for as long as the equipment is periodically monitored. In accordance with 280.35(a)(1)(i), owners and operators must begin meeting the requirements in 280.35(a)(1)(ii) and conduct a test within thirty (30) days of discontinuing periodic monitoring of this equipment and every three (3) years thereafter.

Note: Double wall sump brine filled interstitial monitoring systems also meet the intent of Section 280.35(a)(1)(i).