

**Sump Sensors (SS)**  
**(For Double-Wall Pressurized Piping Only)**  
(Big Leak: 3.0 GPH/continuous & Little Leak 0.2 GPH/monthly)

**Description of Release Detection: [280.44]**

Big Leak: (3.0 GPH) Some UST systems were permitted with sump sensors (SS) serving as the automatic line leak detector to detect a catastrophic leak in a double-wall piping system within one hour. In order to detect a catastrophic leak within the one-hour time frame, the sump sensor must be sitting on the bottom of the sump at the lowest point within the submersible turbine pump sump and the sump must be maintained to prevent water intrusion. The piping interstice must also be continuous throughout and only convey any piping release back to the nearest sump sensor such that it meets the standard and can actually alarm with the introduction of 3 gallons into the nearest sump with interstice access.

Little Leak: (0.2 GPH) If the sump sensor is being used to conduct Interstitial Monitoring by watching for the Little Leak, the double wall piping containment system must also be designed such that it cannot hold 144 gallons introduced anywhere within the system without a sump sensor going into alarm.

**Operating and Maintaining Sump Sensors:**

- At least once a year, have a qualified contractor service the sump sensor components and conduct a function check according to the manufacturer's instructions. [280.44(a)]
- Use the owner's manual for operation and maintenance procedures. [280.40(a)(2)]
- Make sure employees who run, monitor, or maintain the Sump Sensor system know exactly what they have to do and to whom to report problems. [280.35]

**Record Keeping:**

- For at least a year, keep the record of the annual function check that demonstrates that the sump sensor is performing properly. [280.45(b)(1)]
- Keep a record, (log), of visually checking all SS proper vertical position sitting on the bottom of the sump and sump condition at least monthly. [280.35]
- Keep the monthly monitoring results for at least one year. At a minimum, a written log must be kept indicating monitoring results at least once every 30 days.  
Some monitoring equipment may provide printouts that can be used as records. [280.41(b)(1)(ii), 280.44(c)]
- Keep all records of calibration, maintenance, and repair of release detection equipment for at least one year. [280.45(c)]

**If the Sump Sensor alarms or otherwise indicates a release has occurred, call the UST Management Division within 72 hours at (803) 898-0589.**