30-Day Piping Interstitial Monitoring Log for Underground Storage Tanks

Facility Name/Address: _____ **Facility DEQ ID:** _____ **Year:** _____

Fill in the date, inspector name, sump IDs, and whether a sump sensor is present. Continue recording your 30-day leak checks, including each date and the inspector's initials. If you are visually inspecting the sumps: record your observations (i.e., whether any fuel or water is found). If you are checking sump sensor status: record the sensor status (e.g., OK, Normal, Alarm) and, if possible, print a copy of the sensor status report from your ATG console.

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Date													
Inspector													
Sump ID *Ex: Reg STP, Dispenser 1*	**Sump Sensor** *(Y/N)*												

Record any issues found (date & action taken):

All sumps must be kept clean and dry. **If water or fuel is found, you have 24 hours to investigate a possible leak.** Remove the liquids and investigate the cause; consider contacting your petroleum service company for help. If there is no non-release explanation or if leaking equipment is found, you must report a suspected release to DEQ within 24 hours of discovering the issue (https://www.deq.virginia.gov/get-involved/about-us/contact-us).

Interstitial monitoring (IM) is a method of detecting leaks in the underground storage tank (UST) systems that have double-walled piping (see diagram →). It requires that the operator monitor the piping and dispenser sumps for evidence of leaks.

For continuous monitoring, sensors can be placed in the containment sumps, which will send an alarm to the automatic tank gauge if evidence of a leak has been detected. For manual monitoring, each containment sump must be visually inspected at least once every 30 days for evidence of a leak.

Use the front page of this form to record that the piping and dispenser sumps have been inspected every 30 days. Keep the previous 12 months of inspection records on file.

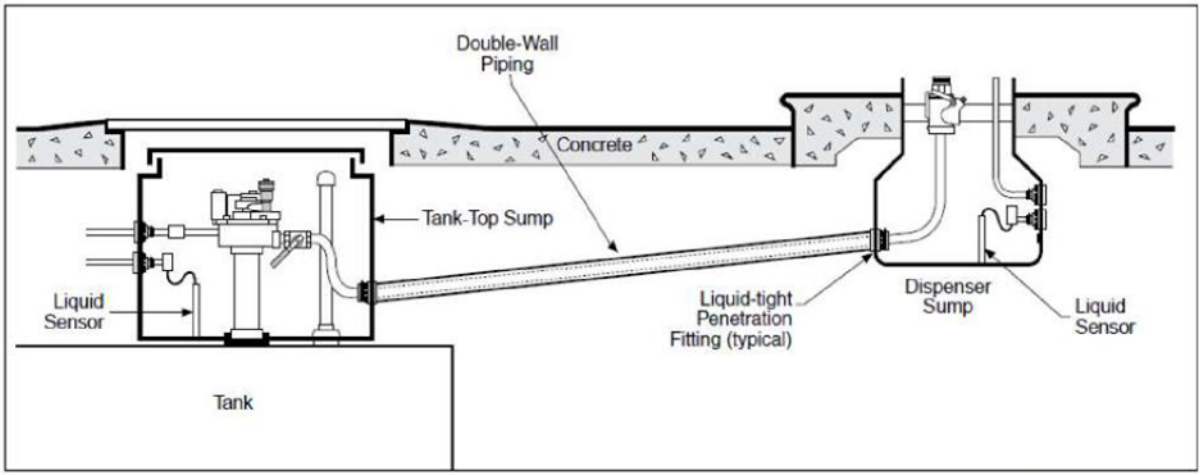

Diagram of a double-walled pressurized piping system. Any fuel leakage that occurs in the piping itself will flow down to the tank-top sump where the liquid sensor will trigger an alarm inside the facility. Leaks from piping components at the tank top are contained in the tank-top sump, while leaks from the dispenser are contained in the dispenser sump.

Continuous Monitoring (Sensors) – Monthly Process

1. Write *Y* in the "Sump Sensor" box next to any sumps that are being monitored continuously.
2. Record the date and your name/initials on the monitoring log.
3. Print the sensor status report from your automatic tank gauge.
4. On the monitoring log, record the status of each sensor as reported by the automatic tank gauge. If there are no alarms, the process is complete – remember to print and file your sensor status report, if possible!
5. **If any sensors are in alarm, you have 24 hours to investigate a possible leak.** Consider contacting your petroleum service company for help. Visually inspect the sumps, remove the liquids, investigate alternate explanations for their presence (e.g., rainwater), and monitor to see if liquids return. **If there is no non-release explanation or if leaking equipment is found, you must report a suspected release to DEQ within 24 hours of discovering the issue** (contact your regional office: https://www.deq.virginia.gov/get-involved/about-us/contact-us).

Manual Monitoring (Visual) – Monthly Process

1. Write *N* in the "Sump Sensor" box next to any sumps that are being monitored manually.
2. Record the date and your name/initials on the monitoring log.
3. Using safe inspection practices, visually check each sump and record your findings on the monitoring log.
   a. Must lift cover off tank-top sumps to visually inspect.
   b. Must open dispensers to visually inspect under-dispenser sumps.
4. During the inspection, remove any water or debris found. If liquid is found in the sump, record what type (water or fuel), how much, and the steps taken to fix it. Sumps must be kept clean and dry, otherwise signs of compromised piping (water or fuel in the sump) may be missed.
5. **If water or fuel is found in a sump, you have 24 hours to investigate a possible leak.** Consider contacting your petroleum service company for help. Remove the liquids, investigate alternate explanations for their presence (e.g., rainwater), and monitor to see if liquids return. **If there is no non-release explanation or if leaking equipment is found, you must report a suspected release to DEQ within 24 hours of discovering the issue** (contact your regional office: https://www.deq.virginia.gov/get-involved/about-us/contact-us).