The Liquid Fuels Handling Code has the following requirements for the monitoring of sumps:

“4.5.2.9 All sumps where product can collect shall be electronically monitored.”

“4.5.2.7 An under-dispenser sump shall be leak tight and equipped with a liquid sensor that will signal the attendant and shut down the dispenser when any product or high level of liquid is present in the sump.”

“4.6.8 The sensor in submersible-pump and dispenser sumps shall be located as close to the bottom of the sump as possible.”

Sumps are installed underneath the dispensers, on top of the tank to contain the submersible turbine pump and in locations where underground piping transitions to aboveground piping.

There are a few sites that have pans underneath the dispensers. Dispenser pans are 7” to 11” deep (whereas sumps are typically deeper) and are used to retrofit sites that have rigid pipe and existing dispensers. Pans have the pipe entry boots in the bottom instead of at the side, so the sensor must be located at the bottom of the pan to detect any fuel/liquid as soon as possible to prevent the entry boot from being exposed to fuel or a similarly deteriorating condition (e.g. from water/ice) for any length of time.

Both sumps and pans are approved to the ULC/ORD-C142.19-94, ‘Spill Containment Devices for Aboveground Flammable and Combustible Liquid Storage Tanks’, and as such, are equivalent pieces of equipment.

In all the above cases, the sump or pan must be electronically monitored.

Fuels Safety will accept either CSA/ULC approved hard-wired or stand-alone, discriminating or non-discriminating sensors as an acceptable means of electronic monitoring to comply with clause 4.5.2.7.