

Hydrocarbon Pipeline

- Pipeline Leak Detection
- Pumping Station Monitoring
- Emergency Shut-off Station Monitoring

Pipeline Leak Detection

Some pipeline companies install “oil collection pots” in sensitive locations along the pipeline (e.g. near rivers and/or groundwater drinking wells) for oil leakage monitoring. If an ID-223 Oil Sheen Detector installed in these monitoring “pots” detects oil or oil on water, it sets off an alarm in a remote location. The ID-223 Oil Sheen Detector may be installed in unmanned remote locations where power and communication lines are seldom available. In such cases power can be supplied with the Leakwise solar packs, and communication can be made via modem through PTP, telephone lines, or wireless communication.

Pumping Station Monitoring

Most pipeline pumping stations have either oil-water separators or retention tanks for collecting oil spills, as well as storm water run-offs which may carry oil. Water is continuously discharged from the separator directly into the local public drainage system or into a sump and

from there into the drainage system. An ID-223 Oil Sheen Detector is installed near the separator outlet or in the sump in order to continuously monitor the water discharge. If an oil sheen is detected, an alarm is triggered. The water outlet valve can be closed or the water pump can be turned off by the Leakwise sensor.

Since the separator is covered, an ID-225 Oil Layer Thickness Monitor can be installed in the separator to monitor the thickness of the oil layer. This is especially important in unmanned locations since it will trigger an alarm in the pipeline control center in case of large spills or leaks. It can prevent the costly removal of oily water before enough oil has accumulated in the separator.

Emergency Shut-off Station Monitoring

Many shut-off valves are built along the pipeline for emergency and maintenance purposes. In some areas, due to certain environmental regulations, new shut-off valves have to be installed in concrete containment where leaks from equipment can be detected. ID-223 Oil Sheen Detectors installed in these containments can continuously monitor these unmanned shut-off stations and, in case of oil detection, send an alarm to a remote location.



Monitoring water discharge from covered separators in unmanned locations



Leakwise ID-223 installed in a sump collecting water from a separator at a pipeline pumping station

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