

Case Study: Gasoline Terminal Leak Detection



VANGUARD WirelessHART
FIXED POINT GAS DETECTOR



CHALLENGE:

The function of the VRU is to capture the vapors so that they are not released into the atmosphere. Unfortunately, these vapors (mostly propane, butane, and pentane) are volatile process fluids that are quick to escape through any small leaks. This application has in-process instrumentation, pipe joints, and valves subject to varying pressure and vibration that over time can develop leaks. In this case, an in-process gauge had formed a leak that went undetected. This led to the initiative to install gas detection on location to monitor for vapor leaks. Not only assets were at risk, but personnel safety as well. The system would need to be installed in a brownfield application where wiring was not already available, there is lots of foot and vehicle traffic, and the system needed to function as an Independent Protection Layer (IPL).

SOLUTION:

The customer decided that wireless gas detection would be a preferential approach to augment as an additional IPL to the existing fire and gas system. Wireless made sense because the cost of wiring an independent gas detection system where there was no wiring available would be costly and time consuming. The Vanguard was chosen as an ideal candidate for this application to solve the problem over other wireless gas detectors due to its long battery life, use of an open wireless protocol (WirelessHART®), and general ease of use for the installers and maintenance personnel.



Ease of Maintenance



Seamless Integration
with WirelessHART



Easy, One-Button Calibration