



Industry
AMMONIA MANUFACTURING

Vanguard: Ammonia Leak Detection in Temporary Storage Tanks



VANGUARD WirelessHART
FIXED POINT GAS DETECTOR



CHALLENGE:

Costly and Labor-Intensive Monitoring of Temporary Storage Tanks

The challenge currently facing the customer's Analyzer group is the monitoring of temporary storage tanks. Typically, when a temporary storage tank is setup, instrumentation for monitoring fugitive vapors needs to be wired for communication and power. This includes additional FEED (front end engineering and design), scheduling of tradesmen (electrician, excavation), and laying of the conduit. It is a costly and labor-intensive undertaking for a storage area that will only be used temporarily.

SOLUTION:

Flexible, Wireless Gas Detection Without Infrastructure Costs

The Vanguard WiHART Gas Detector is a truly wireless device that operates in an open protocol mesh network. This makes it ideal for temporary installations because it is installed without the upfront cost of planning and laying conduit, and has the flexibility and dependability that comes with an open protocol mesh network, like WirelessHART®. Particularly in a tank monitoring application, the tank is an impediment to wireless signal, making point-to-point communication impossible without multiple gateways. Whereas the mesh network will allow each device to communicate through each other to get back to the gateway, eliminating obstructions as a detriment. Additionally, Vanguard's patented FlexSense™ technology allows any gas sensor to be used with the transmitter. For the end user in this situation, the unit could be used to monitor around a tank for ammonia for three months, then by changing the sensor the unit can be moved to an area to monitor for natural gas leakage, with no reprogramming or configuration by the user.



Eliminated delays in FEED
and contractor scheduling



Cost savings from not
running conduit



Rapid Deployment installed
in days, not months