



APPLICATION SPOTLIGHT
Tank Level Monitoring Solution



Wireless Remote Monitoring and Control Systems Offers Cost Effective Solution for Tank Level Monitoring System



APPLICATION:

When a chemical plant wanted to add level and temperature monitoring to a set of tanks on the edge of their property, the initial proposition was to run a HART cable from the control room to the tank site and, then, branch out to each tank and wire in the level and temperature sensors. The wire length would be several thousand feet between the two points and, then, more to wire sensors to each tank.

PRODUCT SUPPLIED:

- HART Wireless Nodes
- Gateway

CHALLENGE:

The cost and time associated with this wiring effort, however, was found to be enormous. In addition to the cost of expensive wire, trenching and running conduit was another large added cost. The proposed budget for this upgrade was close to \$100K for just the connection costs.

SOLUTION:

Taking a more cost effective route, the chemical plant decided to use a wireless solution offered by Signal Fire remote monitoring products. Multi-drop HART wireless nodes were installed on the top of each tank and connected – locally – to the sensors associated with each tank. (Nodes serve as the wireless, long-distance communication link in the remote monitoring and control of assets such as tank levels. The nodes extract then transmit data from sensors via a wireless mesh network to a Gateway where data is available via a Modbus RTU or TCP interface.) The total cost of the equipment and installation was a small fraction of the cost of running cable alone and the start-up time was a few hours as opposed to weeks. Additionally, because it was so easy to add additional wireless measurement points, other monitoring points can be easily added to the network in the future.