

## Arkema-Crosby Wireless Fact Sheet



### About the Site:

- Located in Crosby, Texas
- Construction began in late 1960s
- Produces liquid organic peroxides used primarily to produce plastic resins, polystyrene, polyethylene, polypropylene, PVC and polyester reinforced fiberglass, and acrylic resins. Organic peroxides sold under the trade name LUPEROX



### ISA100.11a Wireless Standard Applications:

- 500,000-Gallon Water Tank: Wireless level sensor ensures firewater tank is full at all times.
- Cold Storage: Wireless temperature and door sensors provide central reporting of exception conditions at cold storage warehouses.
- Wireless Adaptor: There is a wired level sensor on a waste water tank. The values are fed into a satellite control room close to the tank, but not the central control room. To provide central visibility to this information, an ISA100.11a adaptor connects in series to the 4-20 mA analog output of this sensor, reporting the result wirelessly through the ISA100.11a system to the central control room. This serves as a proof-of-concept for the general notion of using ISA100.11a to provide central visibility to existing sensors scattered across the plant.
- Gas-Sensing Opportunities: A single wireless sensor was installed alongside an existing wired sensor. Following successful pilot, wireless gas sensing can be expanded.

Application	Transmitter Type	Count	Range	Reporting Rate
Water Tank 500,000 gallon	Differential Pressure	1	0 – 400 in H <sub>2</sub> O	30 s
Waste Water Tank	Analog Input	2	4 – 20 mA	1 s
Cold Storage	Temperature	3	-20 to 140 deg F	10 s
Cold Storage	Discrete input	3	Open/closed	10 s
Gas Monitoring	Sensor type and location confidential	1	0-30 ppm	30 s

Supplier	Role/Components
Wilson-Mohr	System integration System installation Arkema liaison
Nivis	System manager Gateway OPC server System integration
Honeywell	Host system Backbone routers Temperature transmitter Discrete input transmitter Analog input transmitter
Yokogawa	Water tank pressure transmitter
Gastronics	Gas sensor transmitter