



**APPLICATION SPOTLIGHT**  
Toxic Gas Monitoring





## Toxic Gas Monitoring



### APPLICATION:

Toxic gases such as Hydrogen Sulfide (H<sub>2</sub>S) pose a potential hazard at well sites. In addition, oxygen levels can deplete to dangerous levels in confined spaces. Monitoring the levels of potentially toxic gases and O<sub>2</sub> is essential to protect the safety personnel who work on site.

### PRODUCT SUPPLIED:

- LLC-E-BA custom engineered batch control enclosure.
- Positive displacement spur gear flow meter
- Sensor and cable

### CHALLENGE:

Remote well sites pose a challenge in monitoring toxic gases and oxygen levels. In many cases, fixed gas detectors are utilized to detect the presence of gases in an area. When serving as a component of a remote safety system, they require both power and an interface that can remotely monitor output the detector.

### SOLUTION:

The SignalFire Sentinel-HART with C1D1 solar system coupled with a MSA toxic gas detector offers an easy-to-install, self-powered fixed gas detection point. The C1D1 solar system provides full time power to both the gas detector and Sentinel radio. The Sentinel-HART node is configured to take gas concentration readings from the gas detector at fixed intervals via HART. Data is forwarded to a Gateway typically connected through a backhaul network to SCADA system operators. If gas concentrations exceed a safety threshold, alarming can remotely alert operators of potentially dangerous situations.