



Process Technology, Inc.

MSA *The Safety Company* NFPA 820 Compliant Monitoring for Municipal Wet Wells

OBJECTIVE

To regulate Wet Well Monitoring for Combustible Gases (LEL), Hydrogen Sulfide (H2S), and Oxygen (O2)



Municipal water and wastewater customers' monitoring safety challenges are addressed with technology from MSA *The Mine Safety Company*.

Along with PTI in-house engineering MSA provided a cost-effective monitoring solution following NFPA 70 and NFPA 497 guidelines for sample draw design associated with handling hazardous samples.

CHALLENGE

Wet Wells in the Denver Metro WWTP and City of Aurora municipalities are confined space areas that make it difficult to maintain sensor calibrations. The environment is corrosive inside the wet wells causing frequent sensor failures. Wet wells are rated explosive environments and equipment must meet Class 1, Division 1 explosion-proof.

APPROACH

MSA meets the NFPA 820 combustible gas detection requirements and LEL/H2S/O2 gas monitoring from a sample draw system:

- Ultima X5000
- Red strobe and alarm buzzer
- Sample pump module
- 120 VAC power supply
- End-of-line water stop filter
- Common terminal strip
- Flashback arrestors

TriGas Monitoring System options

- Dual zone capability to provide two independent systems
- Heated enclosures
- Capability to install in NEC Class 1, Division 1 areas or handle samples from NEC Class 1, Division 2 areas
- Alarm relay contacts
- Additional water separator filters

MSA follows NFPA 70 and NFPA 497 guidelines for sample draw design associated with handling hazardous samples.



MSA TriGas Monitoring System combustible gas detection (CGD) sensors meet the NFPA 820 Standard for Fire Protection.