

Ypsilanti WWTP Reduces H2S Monitoring Costs with Sensidyne

Situation

Wastewater treatment is crucial for safeguarding the environment and our communities. However, it also poses challenges due to hazardous gases. One such gas is hydrogen sulfide (H₂S), which naturally occurs in raw sewage and is a byproduct of anaerobic bacterial decomposition.



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At the Ypsilanti (Michigan) Community Utilities Authority, the initial wastewater treatment stage – known as the headworks – is where incoming raw sewage is screened for large particles such as sticks, rocks and large debris. During this stage, anaerobic bacteria already present in the sewage has produced H₂S gas which is released and must be removed with a gas scrubber to avoid accumulation in the facility.

This gas is highly toxic and corrosive, posing a significant hazard for both people and equipment. To ensure operational integrity and personnel safety in the headworks area, continuous monitoring of H₂S is essential.

Unfortunately, the corrosive nature of H₂S consistently and critically degraded YCUA's existing gas detection systems installed in the headworks, which required complete replacement of H₂S monitoring systems every six months costing \$10,000 for each replacement or \$20,000 per year.

Solution

To address this challenge, a reliable solution is essential. Enter the Sensidyne Sample Draw System combined with the SensAlarm FLEX Gas Detector. The gas detector is strategically placed in a non-corrosive location, and this system remotely monitors the affected area by continuously drawing air into the gas detector.



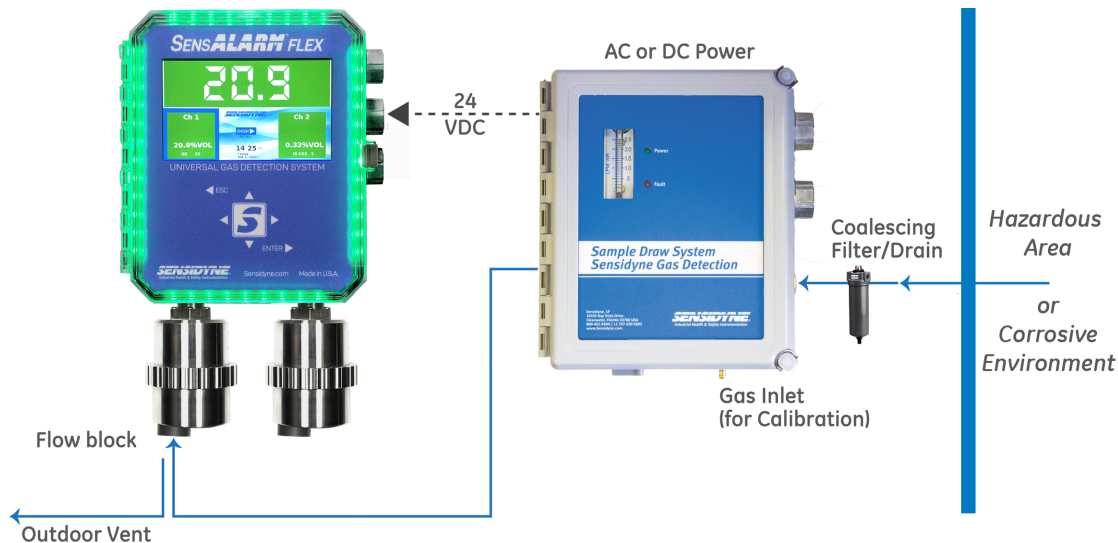


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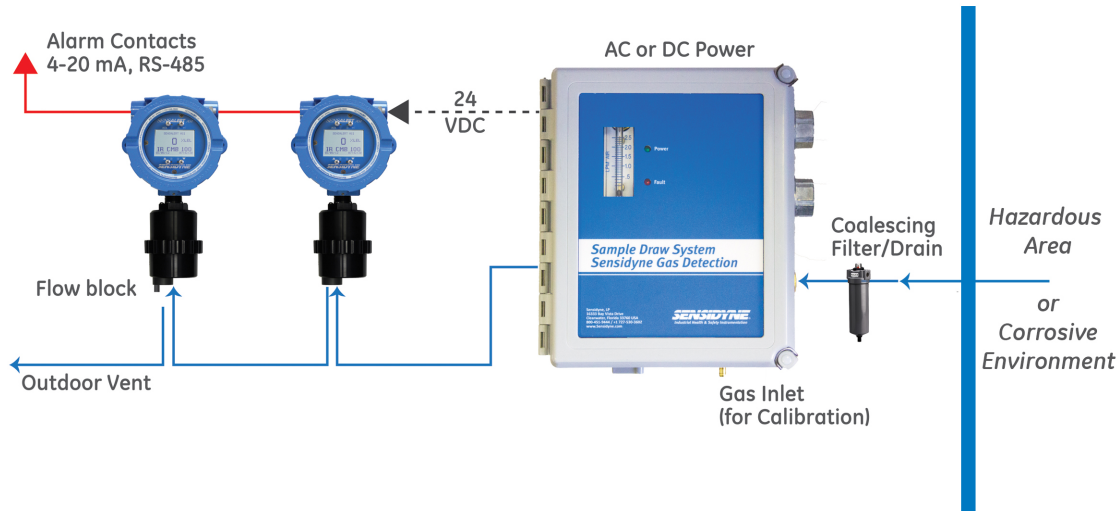
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This approach eliminates the need for frequent equipment replacement and lasts an estimated 5-10 years, leading to substantial cost savings and a safer work environment. "The Sensidyne Sample Draw System and SensAlarm FLEX Gas Detector have been a successful solution for us," said *Tony Priess, Plant Manager* at the Ypsilanti Community Utilities Authority. "The system has helped us to improve safety, reduce costs, and increase our operational efficiency."



Below is an alternative set up, utilizing the Sample Draw with the SensAlert ASI transmitters.



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For more information, please contact us to learn about how our gas detection products can help you.

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