

H₂Scents®

Simplifies H₂S Monitoring and Helps Optimize Chemical Spend



Bio-reactions within a collection system generate Hydrogen Sulfide (H₂S), which causes strong odors and can also corrode pipelines over time, leading to reduced durability and strength.

H₂Scents® uses a specialized sensor designed to integrate with our proprietary SmartCover® platform to produce reliable, real-time measurement of H₂S levels over extended periods of time.

H₂Scents® delivers the ability to identify H₂S levels in real time, resulting in the ability to better control H₂S through more accurate dosing that minimizes chemical use, reduces the unpleasant odor, and increases asset life of collection system infrastructure.

H₂Scents® Utilized In:

- Force main discharges
- Pump station wet wells
- Gravity lines
- Siphons
- Headworks/bar screens
- Aerated grit basins
- Primary clarifiers
- Solids dewatering operations

H₂Scents® Features and Benefits:

- Quantifies hydrogen sulfide in real-time for faster decision-making
- Lowers labor and service requirements to operate and maintain monitoring
- Offers superior data management and reporting through an integrated web-based software platform
- Allows operators to quickly respond to high H₂S levels using adjustable alarms
- Retrofits to existing manhole cover providing ease of installation

TOTAL COST OF OWNERSHIP SMARTCOVER VS TRADITIONAL H₂S MONITORING

5 SITES TO MONITOR

■ SMARTCOVER
■ TRADITIONAL

ANNUAL FIELD HOURS
30 vs 195



ANNUAL FIELD VISITS
20 vs 130



UNITS REQUIRED
5 vs 10

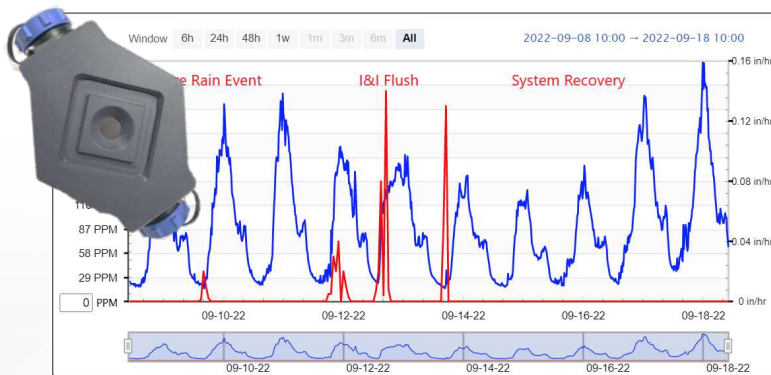


Real time data
Real time alarming
Data Management

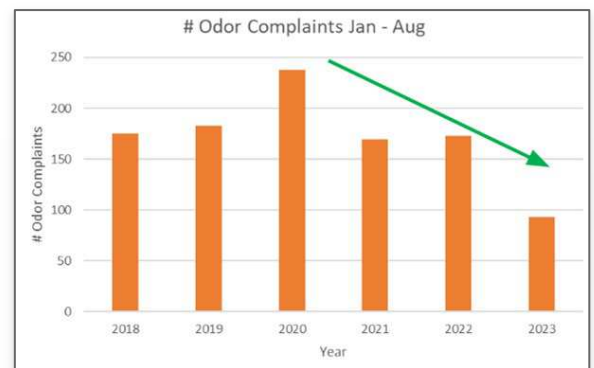


Pima County Regional Wastewater Reclamation District (RWRD)

- CHALLENGE:** High temperatures and an extensive sewer line network resulted in high H₂S levels throughout the RWRD collection system. RWRD wanted to monitor problematic sites to discover issues that could cause potential health hazards to employees and the public; nuisance due to smell; pipe corrosion and damaged infrastructure causing lower asset life and a threat to the system's environment.
- SOLUTION:** To take a more proactive and targeted approach, RWRD deployed a network of 40+ SmartCover satellite monitoring H₂S units to provide real-time, hydrogen sulfide monitoring at problematic sites across the collection system.
- RESULTS:** RWRD has been able to quickly identify and address problematic areas by evaluating reported conveyance system conditions to dose ahead of known daily high H₂S values. Smart sewer technology has allowed RWRD to minimize field visits, more efficiently allocate resources (staff and vehicle travel costs) based on work order evaluations, delivering a notable return on investment. RWRD was able to optimize chemical dosing, allowing three new CDU dosing sites to be added resulting in an additional 30 miles of sewer lines protected with the same budget. RWRD has also seen a 46% reduction in odor complaints since fully integrating real-time H₂S data with their asset management system.



Reporting capabilities allow the overlay of H₂S data with level, flow, or rain data



Historical RWRD odor complaints over the past six years

About SmartCover:

SmartCover© Systems offers cost-effective satellite manhole monitoring solutions to eliminate sewer overflows, optimize collection system cleaning, minimize odorous H₂S gas, and accurately identify inflow and infiltration (I&I). Our comprehensive dashboard with alarms and notifications allows you to efficiently manage real-time data to enhance performance, reduce costs, and optimize resources.

SmartCover Differentiators:



Satellite communication delivers constant visibility



No confined space entry reduces resources and safety hazards



Real-time alarms and notifications provide advanced notice



Mobile app delivers system insights wherever and whenever



Available data one hour after installation provides instant coverage



Data management and turnkey analytics improve decision making



Available API fully integrates multiple systems



Entry detection at every site provides instant notification of access