



H₂S Removal

SulfideFix

*Remove odors & safety hazards,
without chemicals*

Eliminate Hydrogen Sulfide Emissions



Improve Safety: Remove 99.9% of H₂S from wastewater tanks to improve health and safety



Lower Costs: Save money on multiple fronts – energy, operational and maintenance reductions – with Aquacycl servicing available for your needs



Reduce Corrosion: Avoid costly repairs and shortened lifespan of infrastructure by removing highly corrosive H₂S from wastewater



Eliminate Odors: Get rid of that foul rotten egg smell that negatively impacts your reputation and community



Chemical-Free & Low Energy: Say goodbye to chemical dosing and reduce energy needs to a fraction of alternative systems



Retrofit Into Any Tank: Seamlessly integrate our solution into your existing tanks without additional space requirements

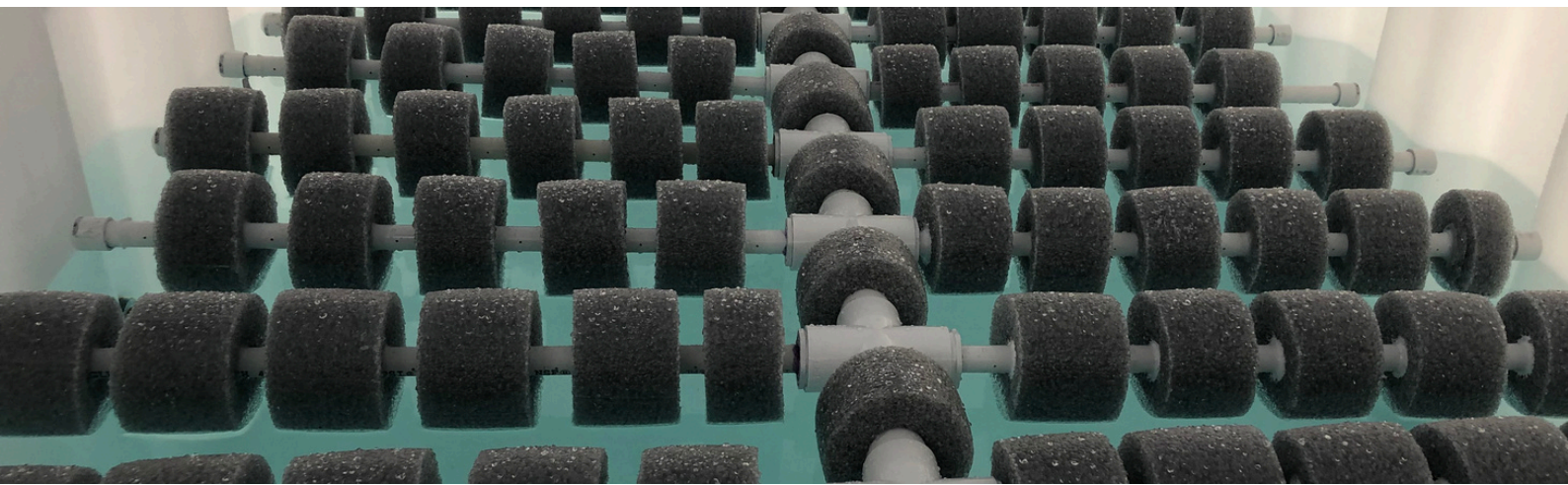


How It Works



Hydrogen sulfide, commonly known as **H₂S**, is a highly corrosive and toxic gas that naturally forms in wastewater tanks through the breakdown of organic material in the wastewater.

Not only does H₂S produce a foul odor, but it poses significant health risks and is even fatal at higher concentrations. Because of this, H₂S is highly regulated.



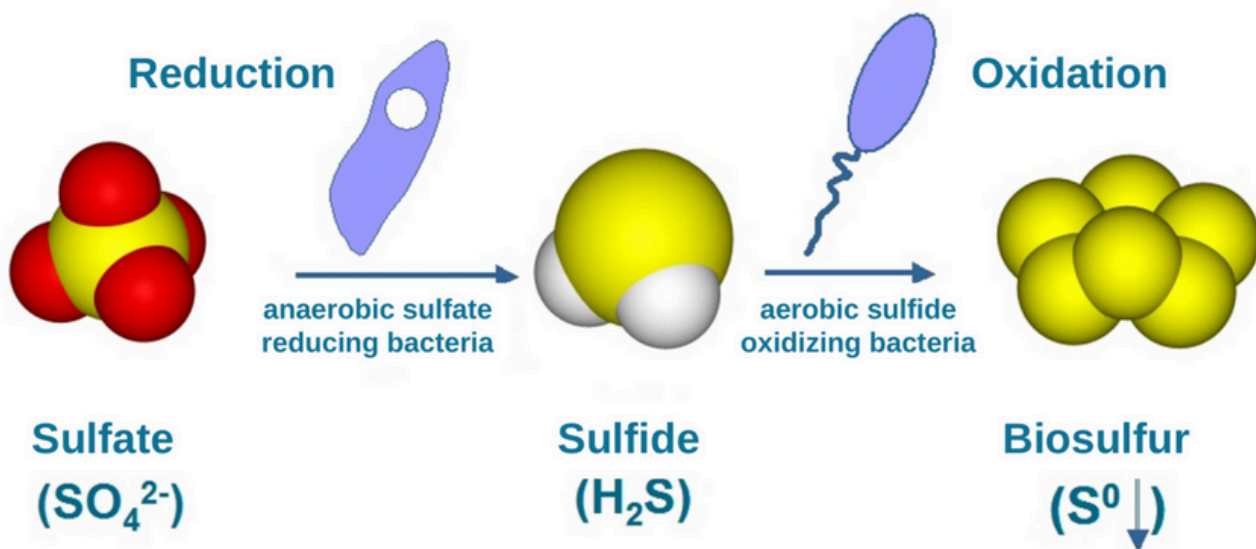
Aquacycl has brought our knowledge of biologically based wastewater treatment systems to help *solve this challenge*, without chemicals and with a low-energy footprint.



How It Works (cont'd.)

SulfideFix utilizes a patented Micro-Aeration technology to sustainably remove sulfides and sulfates in the wastewater and headspace of wastewater tanks through a biological process.

This design allows SulfideFix to operate under varying wastewater levels and with a fraction of the energy consumption of traditional air scrubbers. The solid sulfur is then captured in the biomass and removed as a part of our service contract.



The system floats on the surface of the wastewater within the wastewater tank to aerate the air/liquid interface. This creates anoxic conditions in the water column and oxic conditions at the liquid surface which facilitates the conversion of sulfates (within the liquid) and sulfides (in the tank headspace) into elemental sulfur.

Aquacycl's SulfideFix has shown effective total sulfur removal, up to 99.9%, across multiple applications and operating conditions, including brewery, beverage, and sewage applications. The system can be retrofitted into any existing tank or installed into new systems, providing a cost-effective solution to a challenging problem.



Case Study



KEY RESULTS

99%

Reduction in H₂S emissions

30%

Reduction in COD

0

Hours of downtime for installation

A global consumer packaged goods (CPG) company had an existing treatment system and was looking to implement new technologies that could reduce odor and eliminate hydrogen sulfide (H₂S) gas.

Incoming wastewater was held in an underground, 75,000-gallon equalization basin before discharge to sewer.

Prior to utilizing **Aquacycl**, they were aerating the basin but still had H₂S forming due to conditions in the tank.

Aquacycl installed SulfideFix to eliminate the H₂S emissions from the 75,000-gallon underground basin. The installation was completed with zero hours of production downtime and resulted in nearly complete elimination of H₂S emissions – with less than 0.4 ppm H₂S leaving the basin at any given time. This allowed the facility peace of mind with regulatory compliance, improved employee safety, and eliminated corrosion risks.

