Odor and Corrosion Management



Wastewater collection systems and water resource recovery facilities throughout Texas convey and treat billions of gallons of domestic and industrial wastewater each day. The wastewater tends to be rich in sulfur compounds, which generate foul odors and result in corrosion of pipelines, equipment, and structures throughout the systems.

> Did you know?

The cost of corrosion within these systems across the United States—which includes repairs and replacement of assets, lost revenue, and environmental impacts—is estimated in the tens of billions of dollars annually. And between 15 and 35% of that could be saved using available corrosion-control practices.

Fully/ Sweet 1 2 Putrid/ Dead Anim 0000R 4 Fecal/Se

Fishy/

Hydrogen Sulfide, one of the most common odor compounds in wastewater systems, smells like rotten eggs, causes corrosion of metallic and concrete infrastructure, and can be deadly at high concentrations. It is detectable at concentrations as low as 1 part per billion...that's the equivalent of approximately half a teaspoon (2.5 ml) in an Olympic-sized swimming pool (660,000 gallons).

When we

identify a foul odor our olfactory system (more commonly referred to as our sense of smell) is warning us of potential danger in our environment. For example, the smell of spoiled food is a warning that bacteria present on the food may make us sick.



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