

## FORCE MAIN GAS BINDING

### Problem Statement:

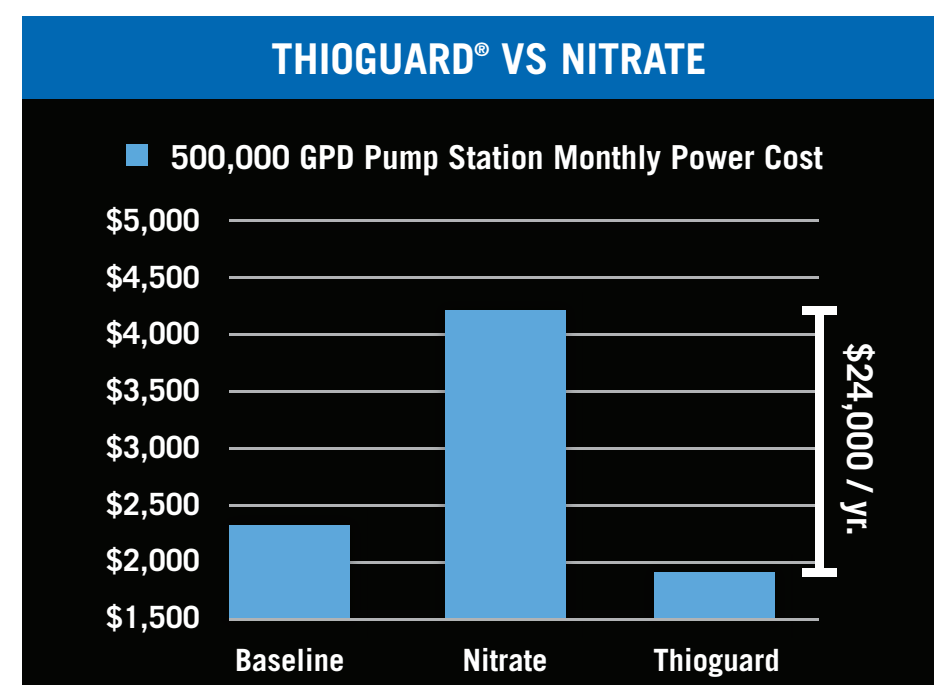
Pumping and conveying of wastewater from end user through the collection system to wastewater treatment plants can result in negative conditions including gas binding, blockages associated with fats, oils and greases (FOG), and system corrosion. There may be other contributing conditions, but these factors appear to be the greatest contributors to O&M costs including energy consumption, maintenance costs, and Sanitary Sewer Overflows (SSOs).

### Background:

A collection system line is a unique conveyance system. The transfer of wastewater can result in the release of gases such as O<sub>2</sub> – Oxygen, CO<sub>2</sub> – Carbon Dioxide, N<sub>2</sub> – Nitrogen Gas, H<sub>2</sub>S – Hydrogen Sulfide, CH<sub>4</sub> – Methane, VOCs – Volatile Organic Compounds, and VOSCs – Volatile Organic Sulfur Compounds among others. Some of these gases are drawn into the system through pumping and ventilation, while others are generated within the system either chemically or biologically. These gases can result in the development of gas binding in the system, as well as contribute to odors and corrosion.

### Choosing THIOGUARD® Will:

- Decrease maintenance
- Decrease operating power costs
- Decrease FOG related SSOs and ARV malfunction
- Improve efficiency due to reduced discharge pressure in manifolded force mains
- Save money



Save up to 50% per year in pump station power costs by choosing THIOGUARD® as your odor, FOG and corrosion control process in your collection system.

### Solution:

THIOGUARD® can overcome these issues by reducing or eliminating gas emissions from wastewater, dissolving FOG blankets and reducing corrosion to pumps and infrastructure. No other product can match THIOGUARD®'s ability to neutralize both collection system surface acid and wastewater acid over short and long distances to and through the wastewater treatment plant.

