AULICK

Nitra-Nox | Odor Control for Hydrogen Sulfide Prevention

A Leader In The Fight Against Hydrogen Sulfide (H_2S)

Odor/corrosion control and H_2S prevention represent one of the biggest problems facing the wastewater industry today. Aulick has combined the chemistry of H_2S encapsulation and prevention creating an improved and more effective Nitra-Nox.

Nitra-Nox is a naturally proven solution used to prevent the production of H_2S in wastewater. H_2S is produced when the anaerobic bacteria feeds on sulfates. Nitra-Nox is an alternative oxygen source, preventing future production of H_2S. With our latest encapsulation technology, Nitra-Nox can also be fed where H_2S is already present. Nitra-Nox will encapsulate the H_2S and prevent it from being expressed and enable future production to be prevented.

Features & Benefits of Nitra-Nox

- Non-hazardous
- Prevents corrosion to wastewater system and equipment
- Does not affect pH of wastewater
- Preventative chemistry
- Specialized dosing systems
- Reduces health threats to workers
- Cost-effective
- Reduces BOD
- Fights other odors found in wastewater

Key Feed Locations for Nitra-Nox in a Sewage Collection System with Odor Problems

It's not 'one size fits all' when it comes to odor control in the sewage collection system.

The odor itself and location of odor must first be identified. Next, the location where the odor is produced and concentration of the odor must be known. In the situation presented, odor complaints were originating at manholes receiving all flow prior to the wastewater treatment plant, and at the air release valve on the force main from Pump Station 1 in the diagram.

To alleviate the odors, Aulick evaluated the entire collection system.

For the hydrogen sulfide issue at manhole 1 prior to the wastewater treatment plant, the entire system was tested for hydrogen sulfide using an OdaLog gas detection logger.

For the odor issue at the release valve, the hydrogen sulfide level was measured at Pump Station 1.

The 0 ppm reading indicates a perfect location to feed Nitra-Nox and inhibit the production of hydrogen sulfide in the force main.

See diagram continued on next page.

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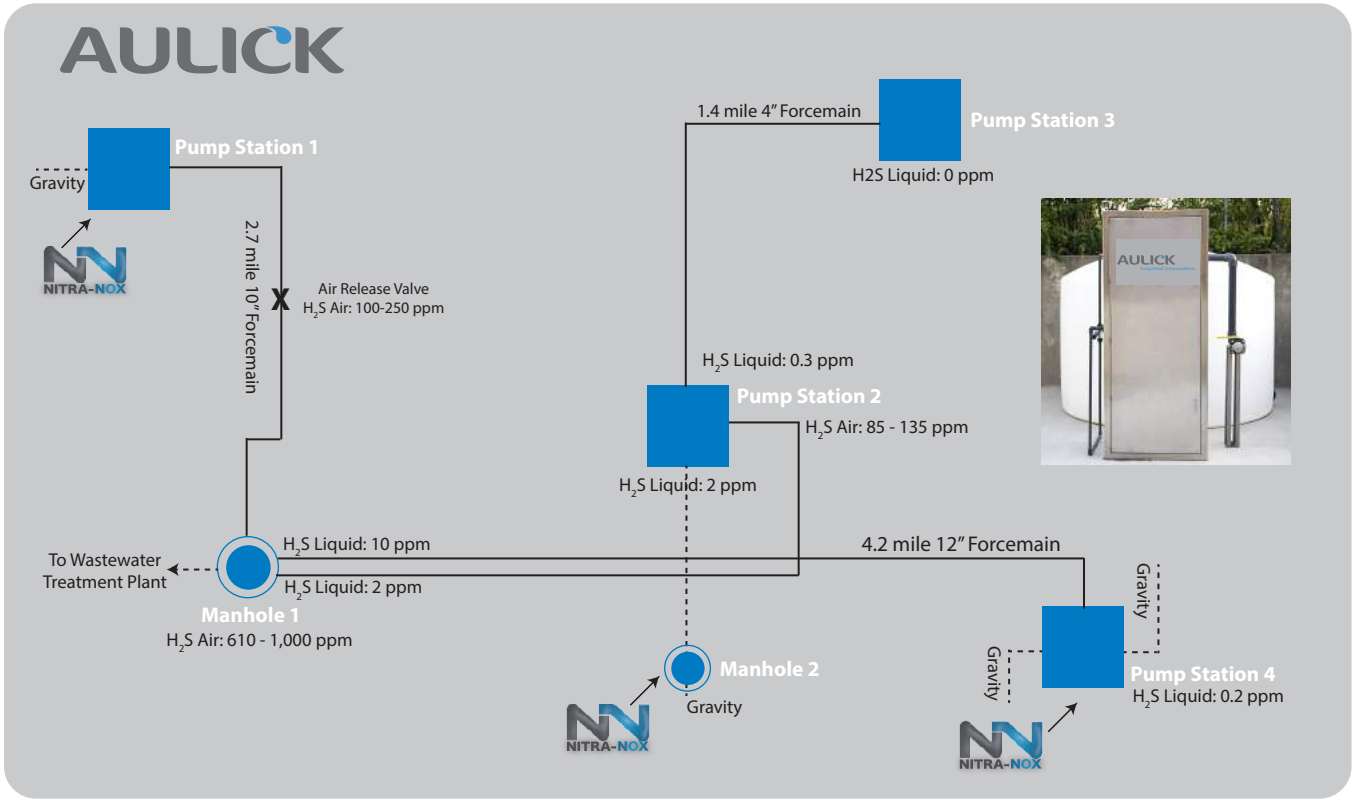

Discharge H_2S Liquid Levels

Pump Station 1	6.5 ppm
Pump Station 2	2 ppm
Pump Station 4	10 ppm
Pump Station 3	0 ppm

The hydrogen sulfide coming from Pump Station 1 will be inhibited by feeding at Pump Station 1. The hydrogen sulfide coming from Pump Station 4 will also have to be treated at Pump Station 4.

The hydrogen sulfide coming from Pump Station 2 is further evaluated and it's determined that the majority of the hydrogen sulfide is coming from the gravity flowing into Pump Station 2.

Feeding Nitra-Nox at Manhole 2 will inhibit the hydrogen sulfide at Pump Station 2 and discharge into manhole 1 prior to the wastewater treatment plant.

Nitra-Nox is available in 55 gallon drums, 330 gallon totes, and bulk truck loads of 3000 gallons or more.

NITRA-NOX