

MUNICIPAL WASTEWATER TREATMENT

## WYANDOTTE COUNTY

KANSAS CITY, KANSAS

### The Challenge/Problem

Odors and FOG accumulation in Lift Stations and sewers causing frequent complaints and maintenance issues.

- Odor issues at multiple lift stations and from sewer manholes.
- Fat, oil and grease causing frequent maintenance visits to lift stations.
- Solids accumulating in forcemains and gravity sewers.
- High cost of high-volume use of toxic inorganic chemical at pumping stations.
- Low performance efficiency of inorganic chemicals to control odors.
- Negative impact of odor control chemicals on biological performance of wastewater plants.

### Treatment Plan and Execution

Collection system engineers engaged SciCorp to solve odor and FOG issues.

**SciCorp recommended adding BIOLOGIC™ SR2 to the lift station wet wells to:**

- ✓ Stop generation of odors in Lift Stations and sewer networks.
- ✓ Breakdown accumulation of FOG in collection systems and lift stations.
- ✓ Reduce corrosion.
- ✓ Reduces ammonia in wastewater plant influent.
- ✓ Enhance wastewater treatment plant performance.

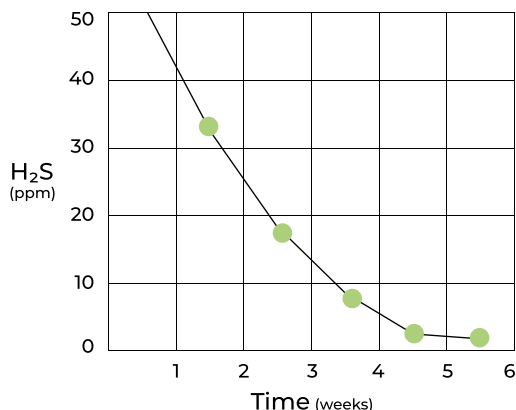
### Problems Avoided

**As a result of their partnership with SciCorp:**

- Odor complaints from adjacent property owners.
- Installation of bio/chemical scrubbers at lift stations.
- Negative health impact on employees caused by odors in the working environment.
- Corrosion to piping and equipment reduced in lift station.
- Negative impact on biological processes in wastewater plant elimination.

### Success

Shortly after implementing the SciCorp treatment process, testing confirmed that odors had been eliminated from the lift stations and FOG issues had been dramatically reduced in lift stations and sewers.



H<sub>2</sub>S measurements in wet wells reduced 80 – 90%.

H<sub>2</sub>S in wet wells reduced from 40ppm to below 1ppm in wet well.

FOG layer in wet well and trunk sewer/forcemain inverts significantly reduced.

A significant reduction in Lift Station maintenance costs.

Odor complaints from workers and neighbors living close to lift stations were eliminated.

Odor and FOG from incoming wastewater to treatment plant dramatically reduced.

Ammonia and dissolved phosphorus levels were also reduced.

**BIOLOGIC™ SR2** positively stimulated treatment at wastewater treatment plant.

Low dosage rate of **BIOLOGIC™ SR2** eliminates need for large storage tanks and pumping system associated with inorganic chemicals used for odor control.

Scooped out sludge from wet well dead zones and sewer inverts.